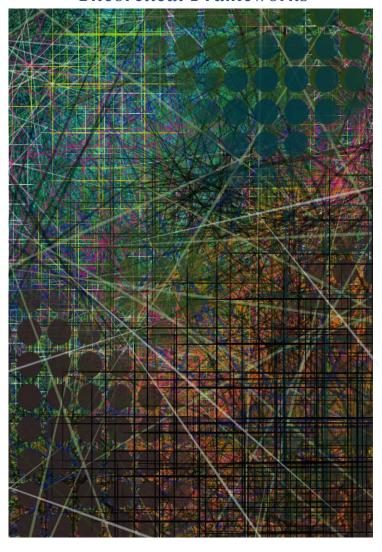
ALTERNATION

Interdisciplinary Journal for the Study of the Arts and Humanities in Southern Africa Volume 26, Number 2 (2019)
Print ISSN 1023-1757; Electronic ISSN 2519-5476

Reconfiguring Foundational Pedagogies through Theoretical Frameworks



- * *Alter*nation is an international journal which publishes interdisciplinary contributions in the fields of the Arts and Humanities in Southern Africa.
- * Prior to publication, each publication in *Alter*nation is reviewed by at least two independent peer reviewers.
- * *Alter*nation is indexed in The Index to South African Periodicals (ISAP) and hosted online on the UKZN platform, on OJS, and by EBSCO
- * Alternation is published every semester. Special editions may be published p.a.
- * Alternation was accredited in 1996.

EDITOR

ASSOCIATE EDITOR

Johannes A. Smit (UKZN)

Nobuhle P. Hlongwa (UKZN)

ASSISTANT EDITOR: Denzil Chetty; ASSISTANT EDITOR: Beverly Vencatsamy

Alternation Editorial Committee

Catherine Addison (UNIZUL); Nyna Amin (UKZN); Urmilla Bob (UKZN); Denzil Chetty (UNISA); Rubby Dhunpath (UKZN); Judith Lütge Coullie (UCanterbury); Brian Fulela (UKZN); Nobuhle Hlongwa (UKZN); Rembrandt Klopper (UKZN/ UNISA); Sadhana Manik (UKZN); Jabulani Mkhize (UFH); Nhlanhla Mkhize (UKZN); Sikhumbuzo Mngadi (UJ); Shane Moran (UFH); Thabo Msibi (UKZN); Maheshvari Naidu (UKZN); Thengani Harold Ngwenya (DUT); Johannes A. Smit (UKZN); Graham Stewart (DUT); Beverley Vencatsamy (UKZN)

Alternation Research Board

Salim Akojee (Nottingham, UK); Robert Balfour (North-West University, SA); Lesiba Baloyi (Sefako Makgatho Health Sciences University, SA); Jaco Beyers (Pretoria, SA); Stephen Bigger (Worcester, SA); Victor M.H. Borden (Indiana, USA); Vivienne Bozalek (UWC, SA); Renato Bulcao de Moraes (Paulista, Brazil); Ezra Chitando (Zimbabwe); Hamish Coates (Melbourne, Aus); Ampie Coetzee (UWC, SA); Scarlett Cornelissen (Stellenbosch, SA); Chats Devroop (UKZN, SA); Simon During (Melbourne, AUS); Farid Esack (UJ, SA); Noel Gough (La Trobe University, Aus); Rosalind I.J. Hackett (Tennessee, USA); Jeanne-Marie Jackson (Johns Hopkins, USA); Tony Jackson (Skyline College, Oakland, NZ); Russell H. Kaschula (Rhodes, SA); Langa Khumalo (UKZN; SA); Elmar Lehmann (Duisberg-Essen, Germany); Janine Lewis (Tshwane University of Technology, SA); Sam Lubbe (Milpark, SA); Sibusiso Masondo (UKZN, SA); Stephan Meyer (Basel, Switzerland); Suriamurthee Moonsamy Maistry (UKZN, SA); Pholoho Morojele (UKZN, SA); Herbert Moyo (UKZN, SA); Wade Nobles (San Francisco State, USA); Maurice Joseph Nutt (Xavier, University of Louisiana, USA): Francis B. Nyamnioh (UCT, SA): Beatrice Okyere-Manu (UKZN, SA); Bert Olivier (Free State University, SA); Charles O'Neill (British University in Egypt); Vivian Ojong (UKZN, SA); Kriben Pillay (UKZN, SA); Kathleen Pithouse-Morgan (UKZN, SA); Julia Preece (DUT, SA); Geo Quinot (Stellenbosch, SA); Lesibana J. Rafapa (UNISA, SA); Auwais Rafudeen (UNISA, SA); Mogobe Ramose (Sefako Makgatho Health Sciences University, SA); Erhard Reckwitz (Duisberg-Essen, Germany); Dan Remenyi (UWC/ Dublin); Cornelia Roux (Stellenbosch, SA); Hemduth Rugbeer (UNIZUL, SA); Michael Samuel (UKZN, SA); Federico Settler (UKZN, SA); Anand Singh (UKZN, SA); Lilian C. Siwila (UKZN, SA); Tholene Sodi (Limpopo, SA); Crain Soudien (HSRC, SA); Lesley Stainbank (UKZN/DUT, SA); Kamilla Swart (American University, Dubai); Nisbert T. Taringa (Zimbabwe); Wilfred Isioma Ukpere (UJ, SA); Goolam Vahed (UKZN, SA); Gina Wisker (Brighton, UK)

COVER ARTWORK

Nike Romano

CORRESPONDENCE ADDRESS

The Editor: Alternation, Univ. of KwaZulu-Natal, Priv. Bag X10, Dalbridge, 4041, DURBAN, South Africa; Tel: +27-(0)31-260-7303; Fax: +27-(0)31-260-7286; Web: http://alternation.ukzn.ac.za e-mail: smitj@ukzn.ac.za; hlongwan1@ukzn.ac.za; chettd@unisa.ac.za; yencatsamyb@ukzn.ac.za

Print ISSN 1023-1757; Electronic ISSN 2519-5476

Copyright Reserved: Alternation

*Alter*nation

Interdisciplinary Journal for the Study of the Arts and Humanities in Southern Africa

Reconfiguring Foundational
Pedagogies through
Theoretical Frameworks

Guest Editors

James Garraway

and

Vivienne Bozalek

2019

CSSALL Durban

Acknowledgement of Reviewers

We wish to acknowledge the participation of the following reviewers in the production of this issue of *Alter*nation.

Moeain Arendse, Language Development Group, University of Cape Town

Ronelle Carolissen, Educational Psychology, Stellenbosch University

Delphi Carstens, Faculty of Arts, University of the Western Cape

Karen Ellery, Extended Studies Unit, Rhodes University

Daniela Gachago, Centre for Innovative Educational Technology, Cape Peninsula University of Technology

Evelyn Geerts, Institute for Cultural Inquiry, Utrecht University

Chantelle Gray, Philosophy Department, University of North West

Lorraine Hassan, Fundani Centre for Higher Education, Cape Peninsula University of Technology

Catherine Hutchings, Language Development Group, University of Cape Town

Cecilia Jacobs, Faculty of Health Sciences, Stellenbosch University

Delia Marshal, Physics and Astronomy Department, University of the Western Cape

Sioux Mckenna, Centre for Higher Education Research Teaching and Learning, Rhodes University

Shannon Morreira, Humanities Education Development Unit University of Cape Town Naomi Msusa, Centre for Educational Testing for Access and Placement (CETAP) at the University of Cape Town

Karen Murris, Faculty of Education, University of Cape Town

Gideon Nomdo, Language Development Group, University of Cape Town

Lynne Quinn, Centre for Higher Education Research Teaching and Learning, Rhodes University

Monwabisi Ralarala, Fundani Centre for Higher Education, Cape Peninsula University of Technology

Tom Reeves, Professor Emeritus of Learning, Design, and Technology College of Education, The University of Georgia

Michael Rowe, Department of Physiotherapy, University of the Western Cape

Siya Sabata, Fundani Centre for Higher Education, Cape Peninsula University of Technology

Sean Samson, Language Development Group, University of Cape Town.

Desire Scholtz, Faculty of Business and Management Sciences, Cape Peninsula University of Technology

Birgit Schreiber, Senior Director, Student Affairs, Stellenbosch University

Nathan Snaza, Director of the Bridge to Success Program and member of the English Department at the University of Richmond, USA.

Stephanie Springgay, Department Curriculum, Teaching and Learning, University of Toronto

Diane Steyn, Faculty of Informatics and Design, Cape Peninsula University of Technology

Carol Taylor, Education Faculty, University of Bath

Lucia Thesen, Language Development Group, University of Cape Town.

Caroline van den Berg, Department of Information Systems, University of the Western Cape

Belinda Verster, Faculty of Informatics and Design, Cape Peninsula University of Technology

Jo-Anne Vorster, Centre for Higher Education Research Teaching and Learning, Rhodes University

Iris van der Tuin, School of Liberal Arts, Utrecht University

Christine Winberg, Professional Education Research Institute, Cape Peninsula University of Technology

Karin Wolff, Engineering Faculty, Stellenbosch University

Michalinos Zembylas, Curriculum Studies, Open University of Cyprus

Alternation Volume 26, Number 2, 2019 Print ISSN 1023-1757; Electronic ISSN 2519-5476

Interdisciplinary Journal for the Study of the Arts and Humanities in Southern Africa

ARTICLES

| James Garraway and Vivienne Bozalek Editorial: Reconfiguring Foundational | |
|--|-----|
| Pedagogies through Theoretical Frameworks | 1 |
| James Garraway and Vivienne Bozalek Theoretical Frameworks and the | |
| Extended Curriculum Programme | 8 |
| Kathy Luckett A Critical Self-reflection on Theorising Education Development as | |
| 'Epistemological Access' to 'Powerful Knowledge' | 36 |
| Nike Romano Just(ice) Do It! Re-membering the Past through co-Affective | |
| Aesthetic Encounters with Art/ History | 62 |
| Aditi Hunma, Moeain Arend, Gideon Nomdo, Catherine Hutchings, and | |
| Sean Samson Revisiting Writer Identities in Discomforting Spaces: | |
| The Envisioned Self in Writing | 89 |
| Corinne Knowles Access or Set Up? A Critical Race Feminist, Black | |
| Consciousness, and African Feminist perspective on Foundation Studies in | |
| South Africa | |
| Delphi Carstens New Materialist Perspectives for Pedagogies in Times of Movement | t, |
| Crisis and Change | 138 |
| Shannon Morreira Disruption by Curriculum Design: Using Steve Biko's | |
| I Write What I Like as a Tool for Participatory Parity in post-Apartheid | |
| Higher Education | 161 |
| Honjiswa Conana, Delia Marshall and Deon Solomons Supporting Student | |
| Learning in Foundation Programmes and Beyond: Using Legitimation Code | |
| Theory as a Theoretical Lens to Think about Transition | 183 |
| Karen Ellery Congruence in Knowledge and Knower Codes: The Challenge of | |
| Enabling Learner Autonomy in a Science Foundation Course | 213 |
| Billy Meyer What is a Gospel? Reflections on Developing an Integrated Literacy | |
| Lesson Cycle in a First Year Tertiary Module Using Legitimation Code Theory | 240 |
| Naomi Msusa Semantic Waves: Writer Performance Ranges on the | |
| National Benchmark Tests (NBT) Academic Literacy Test | 267 |
| Sindiso Zhou and Nhlanhla Landa Translanguaging as Foundational | |
| Pedagogy: Disrupting Hegemonies for Academic Access in Multilingual Spaces | 290 |
| Contributors | 311 |

PRINT CONNECTION Tel (031) 202-7766; 202-7766

Editorial: Reconfiguring Foundational Pedagogies through Theoretical Frameworks

James Garraway Vivienne Bozalek

Throughout the years there have been regular national and regional colloquia on foundation provision teaching, learning and curriculum development, in order to promote scholarship in the field and also to get those teaching in foundation provision together to enhance a collective awareness and solidarity. In 2015, based on such regional and national colloquia, and subsequent writing for publication retreats, there was a special edition of the South African Journal of Higher Education (SAJHE 2015, 29:1). Dhunpath's and Vithal's 2012 book on Alternative Access to Higher Education: Underprepared Students or Underprepared Institutions?, which was published some years prior to this special issue, focused attention on the nature and success of foundation provision. Though there has been some theorisation of teaching and learning in these and other volumes, this has often been quite restricted to debates around, for example, 'active learning', 'literacies' and 'epistemological access'. Although these have proven to be useful lenses through which to understand teaching and learning, they have also tended to be under-theorised. Thus the purpose of this volume is to encourage the emergence of and discussion of theorisations of teaching and learning in foundation provision, including more recent ones, which can expand on and influence our understandings.

Teaching and learning initiatives in foundation provision have the potential to improve teaching practices more generally across the university¹.

1

¹ Foundation studies include all forms of curriculum extension/ enrichment which fall under this term constructed by the Department of Higher Education and Training.

The innovative practices and imaginative teaching approaches which are used in these programmes in order to engage with students in transition into higher education are, however, not always underpinned by deeper theoretical understandings about how knowledge is structured, how pedagogies are enacted and how new ideas come to be understood and developed. Such understandings matter as they inform, support and strengthen the teaching initiatives, and can be used to further engage with others attempting similar initiatives. Theory, in some instances, enables practices to be lifted from their contexts so that they are more easily transferable to different subjects or levels, and, in other circumstances, to alert higher education teachers to the importance of including epistemology, ontology and ethics in their thinking. As Kurt Lewin's ([1943/1951] 2003) maxim reminds us: 'There is nothing more practical than a good theory'.

Where theorisations of foundation practices have occurred in the literature, there has often been much focus on active, constructivist approaches but these have themselves been under theorised. More recently there has been some shift to Margaret Archer's social realism theorisations and other realist theories such as activity and legitimation code theory. Social justice theories and legitimate participation of students, drawing on the work of Nancy Fraser, were furthermore highlighted at the 2016 HELTASA conference, and have provided for a new and timely way to view theory or practices. There are many more emerging theorisations, for example from feminist new materialist and post humanist writers, that have opened up new spaces for enriching our understanding of teaching and learning.

This special edition of *Alter*nation seeks to provide a platform for these fresh theorisations of teaching and learning in foundation provision, and thus also in higher education more generally. In so doing it is hoped that readers may gain insights into improvements for the benefit of their students.

The opening article of the volume by *James Garraway* and *Vivienne Bozalek*, is titled, 'Theoretical Frameworks and the Extended Curriculum Programme'. It provides an overview of what has been written on Foundation Provision, or extended curriculum programmes, particularly by looking at recent special issues of books/ booklets and journals. The article uses examples from current writings to exemplify epistemic access and academic literacy approaches to teaching and learning, and theorisations such as legitimation code theory, social realism, activity theory and constructivism. It then calls for more varied theorisations and, where this has occurred, invites readers to

engage with recent and fresh theorisations such as those in the posthumanist tradition.

Many of the papers in this special issue make reference to or grapple with the consequences for foundation provision of 2015 - 2017 # student protests, which swept across South African universities, using different theoretical lenses in their analyses of these events. There are four articles specifically focused on this matter, or which engage aspects of the matter, as follows.

Kathy Luckett's article refers to Mignolo's term 'epistemic decolonisation' by which she means the contradictions of modernity and coloniality which Black students experience in extended curriculum programmes (ECPs) located at historically white higher education institutions. In her 'A Critical Self-reflection on Theorising Education Development as 'Epistemological Access' to 'Powerful Knowledge'', she argues that separate ECPs are no longer tenable in tertiary education, after the protests. Theoretically, she considers the work of Basil Bernstein, in particular the concepts of 'epistemological access' and 'powerful knowledge' which have their roots in Bernsteinian theory, and speculates on what a decolonial critique of these concepts would be. She uses these insights to re-imagine the undergraduate curriculum for South African higher education and other postcolonial contexts.

The second paper, 'Just(ice) Do It! Re-membering the Past through co-Affective Aesthetic Encounters with Art/ History' by Nike Romano, refers to the student protests, with an attempt to decolonise the Design of ECP. She proposes critical arts-based pedagogical encounters founded in theoretical approaches of critical posthumanism and feminist new materialism to offer possibilities for affecting both the students' and the teacher's becoming, in the higher education classroom. She draws on the work of feminist philosophers and theorists, Karen Barad, Donna Haraway and Bracha Ettinger, which she reads diffractively through one another to come to new understandings of subjectivity as co-affecting and co-emerging in the art history ECP curriculum. Romano uses a case study of a lesson based on the removal of the Rhodes statue at the University of Cape Town, which was diffracted through two additional artworks – the ancient Greek sculpture Winged Nike or the Victory of Samothrace, and the artist Sethembile Msezane's performance, entitled, Chapungu – the day Rhodes fell –, which she performed when the statue was removed. She draws on students' situated knowledges in relation to the lesson,

considering the ethico-onto-epistemological effects of the lesson on the students and herself.

The third paper which refers to the aftermath of the student protests and fallist movements is that by *Aditi Hunma*, *Moeain Arend*, *Gideon Nomdo*, *Catherine Hutchings*, and *Sean Samson*, and is titled 'Revisiting Writer Identities in Discomforting Spaces: The Envisioned Self in Writing'. The article is an attempt to re-envision writer identities in turbulent times in South African higher education, as a consequence of the fallist movement. They make use of Zembylas and Boler's notion of a pedagogy of discomfort, which destabilises the notion of a coherent self by using texts and concepts which help to defamiliarise taken-for-granted views, using the tool of reflexive writing. Their paper refers to a Humanities ECP course on foundational academic literacy, where they see their central function as ECP teachers to provide students with spaces where they can experience a sense of belonging, at the same time as providing epistemological access to disciplines.

The fourth paper, *Corinne Knowles*'s 'Access or Set Up? A Critical Race, Feminist, Black Consciousness, and African Feminist perspective on Foundation Studies in South Africa' directly addresses the student protests, and the ongoing concerns of gender, race and class inequalities to which these movements alerted the higher education community. Knowles uses Critical Race and African Feminism and Black Consciousness as theoretical lenses to consider notions such as 'success' in Foundation Provision, and to understand needed transformation in universities around race, class and gender. The poor, black student is placed at the centre rather than the periphery of the university, the focus of which should be the public good, as well as the mind, body and spirit of such students.

Like Romano, *Delphi Carstens*, in his article 'New Materialist Perspectives for Pedagogies in Times of Movement, Crisis and Change', proposes new materialist perspectives as useful to ECP pedagogies. He shows the reader how new materialist theories enable us to rethink ECP teaching practices in entangled ethical, epistemological and ontological ways to make teaching more alive for students. His article also outlines the current crisis of life facing the earth in the form of the Anthropocene or Capitalocene, where the human and other biological life is threatened with extinction. These are the sorts of issues he brings to the attention of the ECP students in his classroom. His contribution also usefully outlines four major *topoi* or principles which inform new materialist pedagogies in the ECP – *one*, that materialities are

important and should be given attention, rather than just linguistic or the cultural aspects of existence; *two* that education needs to pay more attention to what is happening in the life sciences; *three*, that matter has some form of agency; and *four*, that entities do not precede their relations but rather emerge from them. Carstens sees these as important issues both for ECP students to engage with and to inform the pedagogical practices of the ECP teacher.

With her article, 'Disruption by Curriculum Design: Using Steve Biko's *I Write What I Like* as a Tool for Participatory Parity in post-Apartheid Higher Education', *Shannon Morreira* continues the topic of decolonisation, but now from a different perspective. Morreira draws on resources from legitimation code theory (LCT) to focus attention on issues of decolonisation in the curriculum in the social sciences. The author poses the important curriculum design question of: 'Is it (curriculum design) 'transformation' and 'decolonisation' of our curricula to improve parity of participation; or is it 'schooling'/ 'disciplining' students into the university environment so that they succeed on the university's terms? Is it possible to do both?' This remains an important question and balancing act for all those involved in foundation curriculum design.

The article by *Honjiswa Conana*, *Delia Marshall*, and *Deon Solomons*, 'Supporting Student Learning in Foundation Programmes and Beyond: Using Legitimation Code Theory as a Theoretical Lens to Think about Transition', further introduces the reader to legitimation code theory as a lens to examine teaching Physics in the extended curriculum. The article alerts the reader to representational tools necessary for understanding and working with Physics discourse. The LCT tools allow for the plotting of 'semantic profiles' that characterize the movement between the concrete and the abstract, as well as the use of semantically dense representations in the pedagogical practices of this physics course and in students' approaches to problem tasks. This type of theorisation can alert teachers to what kind of knowledge they are presenting to students, and in what form.

As with Conana and Marshall, Ellery also draws on LCT to examine pedagogy in foundation science provisions. In her 'Congruence in Knowledge and Knower Codes: The Challenge of Enabling Learner Autonomy in a Science Foundation Course' *Karen Ellery* draws on LCT's knowledge and knower codes to analyse congruence of the foundation courses with more mainstream science studies. She finds that, whereas there is congruence in knowledge codes, this is less evident in the case with knower codes. The author

concludes that the more dispositional aspects of science education have often not been addressed (for example independent learning in science) and that this is a necessary component of epistemic access.

In his 'What is a Gospel? Reflections on Developing an Integrated Literacy Lesson Cycle in a First Year Tertiary Module Using Legitimation Code Theory', *Billy Meyer* also draws on the tools of LCT to help analyse pedagogical practices in Theology Studies. His particular interest is textual analysis, using the LCT concepts of epistemic semantic density and epistemological condensation. The analysis is further enriched with theorisations from systemic functional linguistics, in particular the work of the Australian linguist J. Martin. The author also works within the pedagogical ambit of David Rose's 'Reading to Learn' approach, and provides a number of tools drawn from these theories/ pedagogies to aid students in unpacking the often dense academic discourses of the university.

In many universities, the National Benchmark Test (NBT) is used as an additional tool (with the Senior Certificate) for placement of students onto the extended curriculum. In her 'Semantic Waves: Writer Performance Ranges on the National Benchmark Tests (NBT) Academic Literacy Test', *Naomi Msusa* draws on the tools of LCT to examine the nature of the knowledge underpinning the test items, and test-takers' responses to these questions in order to better understand students' preparedness for university study.

In their 'Translanguaging as Foundational Pedagogy: Disrupting Hegemonies for Academic Access in Multilingual Spaces', *Sindiso Zhou* and *Nhlanhla Landa* challenge the predominance of a single language of instruction at most universities. Using the theoretical tool of translanguaging the authors propose that a more multilingual approach to learning can support students in gaining access to university knowledge. The authors aim to subvert current language practices and rather utilise the rich tapestry of student linguistic diversity as a pedagogic tool rather than regard it as an impediment to learning.

James Garraway Professional Education Research Unit (PERI) Fundani Centre for Higher Education Cape Peninsula University of Technology garrawayj@cput.ac.za

Editorial

Vivienne Bozalek Director of Teaching and Learning University of the Western Cape <u>vbozalek@gmail.com</u>

Theoretical Frameworks and the Extended Curriculum Programme

James Garraway Vivienne Bozalek

Abstract

Teaching and learning initiatives in foundation provision have the potential to more generally improve teaching practices across the university. The innovative practices are, however, not always underpinned by deeper theoretical understandings about how knowledge is structured, how pedagogies are enacted and how students learn new ideas. Such understandings matter as they support and strengthen the teaching initiatives. Theory, in some instances, enables practices to be lifted from their contexts so that they are more easily transferable to different subjects or levels, and, in other circumstances, to alert higher education teachers to the importance of including epistemology, ontology and ethics in their thinking. Furthermore, and importantly, theories help us to identify blindspots, dominant assumptions and common sense. There has recently been an upsurge in research into teaching and learning on foundation reported in the literature. The purpose of this article is, firstly, to present and synthesise more mainstream social realist theorisations of teaching and learning, as well as newer theoretical approaches which some articles in this special edition use, which are based on posthumanism, new materialism and non-representational theory, all of which are predicated on relational ontology and process philosophy.

Keywords: Foundation provision, extended curriculum programmes, theories, teaching and learning, curriculum

Introduction

What are now known as 'foundation provision', (FP), or 'extended curriculum programmes' (ECPs) in South Africa arose primarily as a means to give black students access to university (Department of Higher Education 2012), mostly in the then historically white universities (HWUs) in the 1980s and 1990s (Dhunpath & Vithal 2014). These programmes now exist in some form in 24 universities across South Africa, with a total budget of R336 Million for 2017/2018 (Ministerial Statement on University Funding 2017/ 2018).

In its current form FP was a direct response, not so much to addressing concerns of access to higher education (HE), but rather to the disturbingly high drop out and failure rates of students entering first year. In general, only about 35% of students who began their studies in early 2000 actually graduated five years later, putting great strain on the fiscus and the need for skilled graduates in a developing economy, but also having social impact on those whose dreams of success have been shattered (Scott, Yeld & Hendry 2007). At that time the throughput rate was strongly racially skewed, with the ratio of white to African throughput standing at 2:1. Throughput statistics are notoriously difficult to ascertain however, more recent research (2009 - 2015) from the University of Stellenbosch (Broekhuizen, Van der Berg & Hofmeyr 2016) indicates a similar trend, but alerts us to two additional trends. Firstly, throughput after 4 years is 36.9% but after 6 years 58% and, secondly, the ratio of white to African throughput is still racially skewed but less so than earlier, at 72%:54% respectfully.

FP or ECP thus focuses on students who meet the requirements for university, and gain access, but because of the initial educational and social disadvantage are less able to complete their studies than those students who have had access to schooling systems which prepare them more adequately for university (Department of Higher Education 2012).

FP is an attempted academic solution to student drop out (Scott 2014). It does this through providing students with an additional year of study, usually in the form of an extended year 1. The additional study time is expected to employ innovative and responsive teaching techniques to deliver an enriched and supportive curriculum that prepares students for their current and future studies. As such there is an expectation that teaching staff would be at the cutting edge of teaching in higher education. Yet FP teachers are often casualised through being on short to medium-term contracts and thus often do

not attend otherwise compulsory new staff teaching induction courses or other staff development initiatives. Where staff are do attend such courses, rapid staff turnaround may result in loss of skill (McKenna 2014).

It is not surprising, therefore, that FP teaching and learning practices and curriculum development, despite their importance and complex nature, remain largely under-theorised, with teaching staff often relying on common sense approaches rather than those based on research (McKenna 2014; Boughey 2014).

There are thus two main issues with theorising foundation. There is firstly the overall lack of availability of theorisation of FP, and, where this has been attempted, it may be relatively superficial. For example, over half the papers in the SAJHE 2015 special foundation edition and most of the papers in Case Studies of Epistemological Access (Bozalek, Garraway & McKenna 2011), two of the sources from which data is drawn in the first half of this paper, are descriptive, or in some instances reflective of cases or only partially theorised.

Secondly there is the issue of uptake of available research by teaching staff against the background of an often casualised staff contingent. This issue is not explored further in this article. But it is hoped that the formalisation of funding, such that it is part of the general university subsidy rather than in three-year cycles, will go some way to creating more permanent FP posts and so enable more systematic academic staff development.

The purpose of the article is then to seek better theorisation of foundation studies through examining critically theories which have been used to explicate pedagogy and scholarship in the field and also what is new on the horizon. Hopefully, this can enhance the teaching repertoires of lecturers and provide a more nuanced understanding of what students may contribute to teaching and learning, where opportunities for staff development are available and can be taken up,

From the outset, because of the focus on supporting disadvantaged students in their studies, FP has portrayed itself as a social justice project and has often been justified as such by staff who have fought for its continued existence and status as a necessary HE initiative over the years (Kloot, Case & Marshall 2008). Social justice has had two variations in this model, firstly in terms of access to the university and secondly, and more importantly in current writings, access to success in the university (Scott 2014). The latter has become known as 'epistemological access' (Morrow 2007; Muller 2014).

The concept of epistemological access is seen by many in the academic development field as a strongly sense making and appropriate lead theory to underpin student learning in foundation (Shay, Wolff & Clarence 2016; Bozalek, Garraway & McKenna 2011). This is partly because it calls on teaching staff to make clear to students the principles, values and ways of doing within their subjects and fields so that students may be more able to access these fields. Support for such an approach is reflected in FP policy (Department of Higher Education and Training 2012):

Foundation provision is the offering of modules, courses or other curricular elements that are intended to equip underprepared students with academic foundations that will enable them to successfully complete a university qualification that has been approved by the Minister of Higher Education and Training. Foundation provision focuses particularly on basic concepts, content and learning approaches that foster advanced learning.

Epistemological access (at least in the in the minds of academic developers) is currently the dominant or hegemonic theorisation for teaching and learning on foundation. To describe epistemological access as a theory or concept is perhaps misleading. The term as originally coined by Morrow (2007) was used to highlight the need for students, not just to gain physical access to university, but also access to their fields of study. However, what counts as epistemology in different knowledge fields is underpinned by Bernstein's theorisations of knowledge structures and Muller and Young's (2019) conceptualisation of 'powerful knowledge'.

The structure of the paper from here on is to firstly report on some of the more dominant attempts at theorisation of foundation teaching and learning, drawn from selected and significant recent publications. These predominantly realist approaches are outlined briefly below, and discussed and critiqued in more detail in the body of the article. Secondly, the article addresses some more recent and inventive approaches which are only recently emerging in the literature (for example in this volume).

Epistemological access, it can be argued, is a close companion to access to discourse theories (Gee 1996) of academic literacy. Furthermore, epistemological access underpins many of the realist theories as applied to HE. legitimation code theory (Maton 2014), for example, as a development of

Bernstein's knowledge theories, highlights the pre-existence of disciplinary knowledge fields, as well as ways of knowing about these, that are independent of the learner.

Likewise, in social realism approaches, there are causal powers (in structures and cultures) which condition (through they do not determine) what actors can do in the world (Carter & New 2004). In activity theory there is an understanding that historically developed systems pre-exist students' encounters with them. As with social realism, students may act to alter these systems through their agency, but generally within sets of pre-existing constraints. In constructivist approaches, at least those reported on in this article, the focus is often on active, group learning aimed at linking students prior knowledge to that of disciplines, thus helping them to co-construct their new understandings (Krige & Bezuidenhout 2015).

But there is an emergent shift in thinking about guiding theories that are critical of and go beyond social realism, including EA and related theorisations. Some scholars have begun to challenge the dominance of knowledge fields without giving space to affect or the diverse ideas, concerns and knowledge that students bring with them, for example, Leibowitz (2017) and Zipin, Fataar and Brennan (2015). These authors question the very basis of claims that EA is a socially just initiative. For example, Zipin et al. (2015) argue that even the so-called powerful knowledge of disciplines, accrued over time, is always at some point socially constructed. Accordingly, knowledge, including scientific knowledge, may reflect the interests of particular groups, often to the detriment of other knowledge which may have worth. Added to this is the growing call for a re-visioning of university curricula from students themselves, often under the mantra of decolonisation and transformation, which again challenges the idea of whose powerful knowledge is being represented within the university classroom. Is, for example, knowledge simply an economic asset to support business development or a means to support social justice in society? As Zipin, Fataar and Brennan (2015) suggest:

Social realist arguments to centre curriculum on 'powerful knowledge' as policy makers (mis)read this to address 'education needed for the global knowledge economy' Yet we find that SR arguments shunt aside important ways of thinking about knowledge, power and curriculum that matter for socially just educational work (Zipin, Fataar & Brennan 2015: 10).

Section 1: Current and Predominant Theorisations of Foundation

In order to illustrate the current theorisations of FP/ECP teaching and learning a selection of sources published prior to mid-2019 (when this article was written) which illustrate the state of play of teaching in foundation are called upon here. For this first section, articles selected were, firstly, in volumes dedicated specifically to foundation teaching and thus more likely to depict the situation in FP/ECP teaching and learning. In addition, there was a significant and recent application of legitimation code theory to FP emanating from Rhodes University which is also covered here:

- Ellery, K 2017. Conceptualising Knowledge for Access in the Sciences: Academic Development from a Social Realist Perspective. *Higher Education* 74, 5: 915 931.
- Shay, S., K. Wolff & J. Clarence 2016. *New Generation Extended Curriculum: The Flexible Degree Proposal.* DOI: 10.13140/RG.2.1.3135.5767. Pretoria: Department of Higher Education.
- Young, G. 2015. South African Journal of Higher Education. (Special Foundation Edition) 29, 1.
- Dhunpath, R. & R. Vithal. 2014. Alternative Access to Higher Education: Underprepared Students or Underprepared Institutions? Cape Town: Pearson.
- Bozalek, V., J. Garraway & S. McKenna 2011. Case Studies of Epistemological Access in Foundation/ Extended Curriculum Studies in South Africa. Higher Education Learning and Teaching Association of South Africa. Available at: http://heltasa.org.za/foundation/
- Hutchings, C. & J. Garraway 2010. Beyond the University Gates: Provision of Extended Curriculum Programmes in South Africa. Proceedings of the January 2009 Rhodes University Foundation Seminar hosted by Professor Chrissie Boughey. Higher Education Learning and Teaching Association of South Africa. Available at: http://heltasa.org.za/foundation/

Epistemological Access

One of the main thrusts in HE to achieve parity of outcomes for students from previously disadvantaged backgrounds is teaching for epistemological access

i.e. access to the ways of doing and thinking at the university in their particular fields, as opposed to simply physical access (Morrow 2007) so that students are able to operate more confidently and independently. In Shay, Wolff and Clarence's (2016) research, epistemological access is clearly the theoretical underpinning of foundation undergraduate teaching and so also, by default, foundation teaching and learning (for example, see reference to 'epistemic transitions', P. ii). This position is also accentuated in the McKenna chapter in Dhunpath and Vithal's collected volume 'Alternative Access to Higher Education' (2014: 51):

Foundation provision is frequently reduced to remedial attempts to teach generic skills rather than calling on the kinds of teaching and learning approaches which make the university's way of constructing knowledge accessible to all students ... The chapter ends with a plea for foundation work to be undertaken with the explicit agenda of providing access to the discipline-specific ways of knowing found in the university.

Mckenna's arguments are further elucidated in later chapters in the same volume, for example Kioko, Barnley and Jayani (2014) description of Foundation Science's underpinning theorisations.

The concept of epistemological access is rooted in students being schooled in what is understood in some schools of thought as the 'powerful knowledge' of university disciplines (Young 2008). Teaching for epistemological access focuses on elucidating the key underpinning concepts/theories of a discipline which are generalizable across different contexts. For example, in history teaching the lecturer may use a local historical example as a case to illustrate a principle, but would then subsequently abstract the underlying theory principle. Student learning is focussed on learning underlying principles. It is thus not limited to the context in which knowledge has been learnt but may be applicable to analyse any number of cases in the future across different contexts. This is what makes the knowledge powerful (Young 2008).

Muller and Young (2019) suggest that so long as there are willing and able experts to teach for epistemological access, any student, regardless of their background, has the potential to acquire the powerful knowledge of university disciplines. Such access is thus not predicated on prior privileged schooling

and upbringing, supporting Muller and Young's (2019) claim that teaching for EA in turn supports a social justice agenda within HE.

Muller and Young (2019) refer to the individual facts, concepts and methods which together make up a discipline; to be adept in any discipline students would need to know these propositions. But propositional knowledge is insufficient on its own if students are to gain access to the knowledge of the discipline, they also need to know how these propositions hang together into a comprehensible whole, what Muller refers to as 'knowing how' within a discipline. This is the level of knowing that enables students to explain events, produce legitimate text and even, possibly, use disciplinary knowledge in new ways. As Muller and Young (2019: 8) assert, it is knowledge of coherence rather than knowledge as a laundry list that matters, if students are to be given access. In a similar vein, Herbert et al (2011: 8) writing about foundation course design in Physics, suggest that:

Educators of Physics seldom succeed in students gaining the required deeper level of understanding that underlies key concepts and procedures ... (as) little attention is given to making explicit the links between concepts and the structure of knowledge in the discipline.

Shay, Wolff and Clarence (2016) further discuss different knowledge structures, drawing from the work of Bernstein (2000). Some fields are characterised by having a conceptual spine which carries through different years, and concepts are built sequentially, one after the other, with the early concepts enabling access to later ones. Such fields are typically in the so called 'hard' sciences (e.g. biology and economics). The humanities are more characterised by parallel languages rather than sequential concepts. Then there are many variations in between these two poles, but the point is that fields/disciplines have theories, concepts and bodies of knowledge and that it is the work of staff to induct students into these knowledges.

Such a forward looking approach is reflected in policy, as Shay, Wolff and Clarence (2016: 17 - 18) outline:

The (foundation) policy stipulates that the extra time must be used to provide additional curriculum time for foundational learning ... But the dominant logic is an attempt to strengthen the knowledge code with its emphasis on epistemic access through foundational provision.

Academic Literacies and Discourses

The concepts of academic literacies and subject discourses are closely intertwined with epistemological access. Whereas epistemological access involves distinguishing between different forms of knowledge, each with its own peculiarities, academic literacy is a more inclusive term involving both producing appropriate text as well as taking on identities associated with the different forms of knowledge.

For Boughey (2010), literacy is a multiple rather than unitary phenomenon, and that it is more than the ability to read and write (this is also the position put forward by other academic literacy academics, for example Gee and Lea and Street below). She identifies multiple academic literacies, and these literacies are related to disciplinary difference. Academic literacy is much concerned as a counterpoint and challenge to the idea of 'deficit' in students and how this can be best approached through teaching students general English language skills and generic skills. Through mobilising the idea that academic literacies are not natural but culturally produced discourses that can only be acquired through direct teaching. McKenna suggests that:

if we become increasingly aware of how literacy practices are socially constructed and far from common sense, we can begin to make them more accessible to our students (McKenna 2010: 14).

A similar argument is raised in epistemological access approaches in that access is generally forward looking to what needs to be learnt at university rather than backward looking to what students do not know or cannot do coming from school.

Much of the academic literacy writings draw on the work of James Gee and 'Discourse'. Gee distinguishes between the capitalised Discourse, referring to fields of knowledge, and discourse with a small d, referring to a stretch of text. For Gee (1996: 143 - 146), within Discourse, there are different social identities in the world, each characterised by, for example, different values and ways of speaking and more generally behaving, which are known as discourses. In a similar light, different disciplines have different ways of doing, knowing and being which are not natural but need to be overtly learnt. In essence the student is taking on a new identity or multiple identities according to what it is they are engaged in. Again, as Herbert *et al.* (2011: 9), writing about access to Physics in the foundation classroom, outline:

Discourse refers to the way in which a discipline represents itself – not just in words but in graphs, symbols and how its artefacts are used as well as the value commitments that underlie these representations \dots and which place a greater emphasis on learning as participation and identity development

On first reading there seems to be a sense that students simply need to learn the 'rules of the game' and so become academically literate. But academic literacy is much more than just understanding a field, it is also, according to the authors in the foundation texts, about producing legitimate text within that field. Students, then, as producers of text, may have the opportunity to generate new ideas within the subject so the possibility is there for some form of change to existing knowledge.

If we discuss academic literacy at a purely functional level, then we expose ourselves to a totally assimilationist position whereby students are required only to conform to the practices of the disciplinary tribe. Failure to take a critical stance in a reflection on academic literacy 'can lead to higher education students becoming "reproducers of knowledge" engaged in "knowledge telling discourse" rather than "knowledge producers" engaged in "knowledge generating discourse" (McKenna 2010: 14).

However, for some authors academic literacy focuses not so much on discourse models but rather on more generic language skills deemed necessary to work with university texts:

... since the majority of students enrolled on this programme are second language English speakers the language and study skills modules included in the curriculum address a well recognised barrier to learning that most of these students are facing (Potgieter *et al.* 2015: 111)

... note taking and academic literacy in English and Afrikaans (including listening, speaking, reading and writing) (Krige & Bezuidenhout 2015: 139).

The underlying reason for adopting the above approaches may be similar to

those suggested earlier in an attempt to understand limited uptake of EA pedagogies. Of note, also, is that a theoretical approach, academic literacy, has been reworked to support a more common sense approach to teaching, a point also raised by Boughey 2014).

Epistemological access and academic literacy are dominant theorisations of knowledge within the university as evidenced in the literature reviewed. They are essentially realist in the sense that there is knowledge that exists before people encounter and work with it (Maxwell 2011). However, the authors here are wary of equating academic literacy directly to the concept of epistemological access. Lea and Street (2006) pose two related models for AL. The enculturation model, in which students are schooled in their disciplines, comes close to what is understood as EA. The second model, which also includes enculturation, involves the development of students' identity and voice. There is much more possibility of variance here as students are involved with 'meaning making, and identity that are implicit in the use of literacy practices within specific institutional settings' (Lea & Street 2006: 370).

The following theorisations of teaching and learning, drawn from the selected literature support the epistemic access discourse, and on some occasions even challenge it.

Legitimation Code Theory (LCT)

LCT has not had much coverage in articles theorizing foundation provisions. However, at the Higher Education Close Up Conference summary panel at Lancaster in 2016 the paper presented by Karen Ellery (2017) on using LCT in FP was highlighted as an innovative approach, and is thus included here. In short LCT understands the social world as consisting of relatively autonomous fields each with their own favored knowledge resources and practices (Maton 2014). LCT draws heavily on the work of Basil Bernstein.

Bernstein's concern during his lifetime was with pedagogic democracy, in other words the equal access to pedagogic knowledge for all social groups (Bernstein 2000: Introduction). Bernstein coined the term 'classification' for disciplinary knowledge which referred to its distinctiveness and boundaried nature, which may be strong or weak. Some more established university disciplines – for example Natural Sciences, Psychology, Sociology and History – tend to be more strongly boundaried than newer subjects like film or gender studies. This was referred to as having a strong or distinct

grammar versus a weaker grammar which is less well formed and more porous to new ideas (Bernstein 2000: 28). He further went on to classify knowledge fields according to their hierarchal or more parallel knowledge structures, as already expressed. What matters for learning, according to Bernstein (2000: 17), is that students are both able to recognise the distinctiveness of the discipline they are studying ('recognition rule') and also that they are able to mobilise this understanding in text production ('realisation rule').

Although Morrow does not refer to Bernstein in his work on epistemological access, both writers use the term 'grammars' in a similar fashion to denote distinctiveness. Later writers in the Bernsteinian tradition such as Shay, Clarence and Wolff (2016) and Muller (2014) draw out this connection further.

Maton (2014) suggests that although Bernstein's ideas gained traction in the sociology of education they were never fully operationalized at the level of pedagogy. LCT is an attempt to do this. LCT is concerned with identifying what counts in the social world both in terms of the required knowledge and its underlying principles but also the extent to which a particular way of knowing, or knower code, has effect. Codes refer to the underlying principles of what counts as legitimate knowledge, practice and achievement in a disciplinary field. They are enacted through socially agreed upon criteria that can be used to examine, for example, student text, to assess whether it is legitimate or not.

Where lecturers draw legitimation from, what principles they are following and what criteria they are using, has real impact on what they actually do in practice – in designing the curriculum, how they teach and how they assess, for example. Yet these codes are often tacit. Consequently, if students are not privy to these codes, access to knowledge and practice – epistemological access – may be severely constrained. As Ellery (2017: 83) explains:

Code theory is premised on the idea that power and control manifest themselves through the structural and interactional aspects of practices, and therefore have the capacity to include or exclude. Analysing educational practices using code theory enables characterisation of the practices, highlights their underpinning principles (i.e. what is being legitimated), and allows for their effects to be considered.

James Garraway & Vivienne Bozalek

Furthermore, lecturers themselves are not always aware of the principles and criteria underpinning their own disciplines. Maton (2014) suggests that a systematic, LCT guided analysis of disciplinary knowledge is then also important for responsiveness and change in practice (Maton 2014). In Ellery's (2017) work she takes up this challenge as well as that of Bernstein's 'pedagogic democracy'. The author constructively suggests that pedagogies which help students to both recognise the characteristics of legitimate texts as well as how to produce such text are significant enablers toward successful outcomes for FP students.

Archer's Social Realism

Social realist approaches, as with LCT, acknowledge that pre-existing structures and ways of thinking have effect on current social practices. Social realist research follows a so-called 'stratified ontology'. By this is meant that what we observe happening around us are effects of deeper driving forces that are in part causative of empirical events (Carter & New 2004). In Margaret Archer's model, these causative factors of changes in society can be ascribed to the separate but related social realms of structure, culture and agency, even though these may also be evident in observed social practices. Boughey (2014), for example, analyses academic development through the lens of these divisions in the real strata. Furthermore, processes of change are relational (Archer 1995) in that usually it is not just one of these elements which promotes change but an interaction between them. For example, structures in society (such as rules, policies etc.) may provide an enabling space and/or political force for a person to implement changes in their field (for example, in a university programme). Structural and cultural forces are 'real' in that they influence though do not determine what actors in society may do:

The social contexts which people inhabit ... provide people with 'directional guidance' in terms of appropriate beliefs and courses of action People as agents and actors are influenced, though not determined, by their structural situations (Carter & New 2004: 6).

However, analytically, the researcher examines the domains of structure, culture and agency (SCA) as separate entities at one level as each has properties which can influence one or other of the domains. For example, an academic's

drive to study a postgraduate teaching qualification in HE might largely emerge from their individual and persistent desire of 'wanting to be a good teacher' but this would be enabled or constrained by the domains of structure and culture at the university, where the teacher may be encouraged to do such a qualification for probation purposes or may be constrained from doing so by heavy teaching loads.

SCA is thus also a realist framework in that it understands that there are social realities in the world that can in part determine or condition the possibilities for social change. Such social realities can be seen as independent of the society in which they play out; they precede what happens in society. Thus each of structure, culture and agency are understood as being real. Their 'realness' manifests itself in their having properties (emergent properties) which can influence the direction society takes. For example, Eybers (2015: 81) writing from a critical realist perspective on academic literacy facilitation in foundation takes a strong stance on disciplinarity, which has some resonance with epistemological access approaches:

It (academic literacy) should aim to facilitate learning practices which further student awareness of the values and associated practices of the particular discipline.

All along there is the influence of agents on the social system. Agents do inherit cultural and structural constraints and enablements from society and may accept or refuse them, if they are in fact aware of them.

These real properties may be changeable over time in particular when shifts emerge in society. This can, for example, be seen in the realness of university policy which can affect what people can and cannot do, or even promote resistance which can result in, ultimately, policy changes. The realm of ideas (culture) can also be seen in this way. For example, the culture of the interlinked ideas of student engagement, student centred teaching and promoting greater student autonomy in their learning may influence how staff perceive they ought to be teaching, and even promote critique and resistance to these ideas so that new realities may emerge. As Eybers (2015: 88) suggests:

... they (realist theories) afford greater causal efficacy to agency ... agency is critically embedded in a model whereby structures and

cultures such as those of academic disciplines and student homes are seen to be in constant interplay in pedagogic environments.

Such a position of possible change, even though there needs to be homage paid to the nature of disciplines, is further suggested in Ellery and Baxen's (2015: 104) article on Science Foundation:

... while pedagogy may still assume in part an assimilationist stance it recognises individual projects and creates the space for their articulation and expression and seeks to enable transformation not reproduction.

Activity Theory

Activity theory, derived from an expansion of Vygotsky's mediated learning model, is also evident in the literature on foundation studies, but only in two articles. In activity, rather than focusing on what sorts of psychological/cultural tools students use or need in order to be 'mediated' in their learning, the whole system of learning is examined. For example, one may choose to examine the system of the classroom with its rules, culture hierarchy and other interested parties such as parents and administrators. Much interest is paid to the object which is understood as a relatively shifting focus of the activity system. The object is often described as the raw material which the whole activity system attempts to clarify (Sannino & Engeström 2017).

Activity is primarily a way of understanding organisational difficulty and change which has more recently been used in classroom learning. Vygotskian principles such as double stimulation, the existence of major contradictions in any social system and development arising from their identification and resolution, drawn from dialectical materialism (Virkkunen & Newnham 2013) and the origination of a zone of proximal development are all core principles for learning and change. However, in activity, the ZPD refers more to the developmental space between the current activity system and, through analysing difficulties, the new more advanced emerging system. What eventually transpires is initially unknown, so referred to as 'possibility knowledge' by Sannino and Engeström (2017).

Researchers using activity theory in researching foundation tend to limit themselves more on the activity system of the classroom/university and

how implementing changes in different components can affect the whole system and in particular changes in the object. Kizito (2015: 219), writing about the analysis of Science Foundation suggest the usefulness of activity as a theoretical framework:

... a conceptual map could be constructed of the main components within a programme and how they interaction ... accommodating all the participants in the project and their contributions Understanding the tensions and contradictions among the components of the system could shed light on what motivates particular actions and what affects the evolution of the system

Activity takes for granted that there are real effects in society, such as rules, cultures and tools, as well as deeply embedded historical trends, and that these influence the object of learning but do not predetermine it. However, activity is not yet used to its full potential in the (few) studies examined. Activity has strong tradition of dialectics, for example between prior/experiential knowledge and course content. The role of the educator is to understand and attempt to work across this dialectic, which is necessarily different for different disciplines (Edwards 2017). Furthermore, the activity system, for example the classroom and it practices is itself seen as changeable as students introduce new ideas and practices; it is not just the student who potentially develops (Engeström & Sannino 2011). Activity theory highlights the object-motive in learning and development, that different students and staff attach different meanings to tasks and that this may constrain engagement (Edwards 2017). An object-motive focus highlights the importance of student agency in learning, an issue explored as well in Archer's social realism theorisations.

Active Learning and Co-construction of Knowledge

Foundation traditionally promotes active, group learning methods with the smaller student groups typical of foundation classrooms. In a similar vein to activity, active learning approaches frequently draw on the work of Vygotsky, but is also, as suggested here, often undertheorized. For example, Potgieter *et al.* (2015: 111) writing on Science Foundation make the following practical suggestion which is not further explored theoretically:

James Garraway & Vivienne Bozalek

Teaching and learning takes place in smaller groups. This allows for individual attention and gives ample opportunity for questions and discussion.

Active learning often involves students in the construction of knowledge through group activities. Writers in the active/group work arena aim to use these approaches to help students access the discourses of their disciplines. This is in contrast to more instructional 'chalk-and-talk' pedagogies. Krige and Bezuidenhout (2015: 139) refer to these constructivist principles in Foundation Communications Science ('Objective' here refers to a focus on what students need to learn):

The co-operative teaching and learning approach is situated between the continua of collective and objective, calling for collective efforts by group members to work together in examining existing knowledge.

Writers refer to constructivist approaches sometimes with specific reference to Vygotsky's theorisation of mediated learning, for example within the zone of proximal development. Krige and Bezuidenhout (2015: 139) outline their pedagogic approach in Foundation Communication studies thus:

(Vygotsky's) theories and their principles form the premise for learning facilitation The principles include: using the student's experience as the foundation for learning; constructing knowledge in social contexts, allowing active student participation in the interpretation of information, and engaging with knowledgeable others to enable meaning-making through integration and application of information.

McGhie and Du Preez (2015: 167) writing on foundation provision in Management Studies expands on these constructivist principles to include learning principles from social learning, as well as the creation of more enabling learning environments:

.... A theory of social learning is based on ... learning as belonging, learning as becoming, learning as experience and learning as doing ... Four (additional) principles are directly applicable to this project ...

learning is developmental ... learning (occurs) through social interaction ... a positive emotional environment strengthens learning ... the total environment influences learning.

Active learning undoubtedly has value in inducting students into university, Tinto (2012) makes strong claims that such approaches promote learning retention and success in particular in socially disadvantaged students in the USA. Although some authors (for example Krige & Bezuidenhout and McGhie & Du Preez above) invoke constructivist and other learning principles to background their pedagogical approaches, more could perhaps be done given the extent of active learning approaches in foundation.

As things stand, engagement and reference to constructivism, drawing on Vygotsky's work remain quite theoretically underdeveloped. For example, there is little or no reference to the principle of dialectics in how students respond differently in navigating between their own desires and backgrounds and the exigencies of the new field of Higher Education (Edwards 2017).

Although social realist accounts of knowledge and pedagogy are undoubtedly useful in guiding staff in what they teach and how this can be best undertaken in the classroom, reservations have been raised about epistemological access to the so-called 'powerful knowledge' of disciplines. Leibowitz (2017) argues that realist approaches separate out knowledge from how it is taught, suggesting that, particularly in the light of recent calls for curriculum decolonisation, different knowledges need to be acknowledged as having value, and so used to add to and even interrogate the curriculum and its delivery. Zipin, Fataar and Brennan (2015) argue further that 'powerful knowledge' is often knowledge created and circulated within elite, groups rather than an objective, universal source of truth. It thus, they argue, may represent a particular version of knowledge rather than a value-free universal.

Despite these assertions, realist-related accounts of knowledge and related pedagogies involving concepts such as powerful knowledge and epistemological access may be something of a theoretical lock in. 'Lock-ins' is a concept borrowed from technology innovation studies, and refers to decisions taken at some early stage of development which may serve to cut out other, more heterogeneous ideas (Rip 2000) (one such example in technology may be the lock in in the past to internal combustion rather than electric vehicles). Leibowitz and Bozalek (2015: 13), writing in the SAJHE special edition on Foundation Provision Research, propose, quoting from Crain

Soudien's Higher Education Teaching and Learning Association in Southern Africa's (HELTASA's) keynote presentation (2012), that there should be an approach to access that:

... is prepared to engage with the whole spectrum of knowledges and understandings that live on the South African social and cultural landscape, those that are described as Western, African, modern, traditional, 'powerful', 'useful' and so on, and, fundamentally, the whole spectrum of people that are the living bearers of these knowledges.

Soudien's comments raise possibilities of alternative theorisations, in particular under the thematic of social justice. The next section takes forward the notion of social justice in relation to FP in relation to affirming difference as normative rather than seeing it as abject, and something to be addressed which is generally the position of FP programmes. .

Section 2: New directions in Foundational Provision Studies

This section looks at two different approaches which have been used more recently to contribute to the debates on foundation provision or extended curriculum programmes – that of Universal Design for Learning (UDL) and critical posthumanism or feminist new materialism.

Universal Design for Learning

In a special issue on Foundation Provision in the *South African Journal of Higher Education*, Leibowitz and Bozalek (2015) considered how social justice approaches such as the Universal Design for Learning (UDL) could provide an expansive vision of equity in HE, as they embrace differences which they regard as the norm rather than the exception (O'Brien 2005). The UDL sees dis/ability on a continuum and proposes that higher education institutions (HEIs) creatively develop an inclusive curriculum, providing differential opportunities based on students' learning needs. This would mean that instead of relegating certain students to a Foundation Programme, difference is regarded as the norm rather than the exception, and all students are accommodating in so-called 'mainstream' classes, where emphasis is placed

the sorts of social and curriculum arrangements needed to optimally enhance and expand capabilities and learning potential. Here the focus is on the required social arrangements which can lead to curriculum renewal and change, in order to develop a more inclusive approach to learning. The UDL thus goes some way towards establishing the importance of materiality in normalizing difference by making disability a condition of the curriculum rather than the human.

Approaches discussed below take the idea of difference as normative further, including among other considerations, the importance of matter and materiality in their views of social justice.

Critical Posthumanism, Non-representational Theory and Feminist New Materialism for Reconfiguring ECPs

How do critical posthumanism, non-representational theory and feminist new materialism differ from prior theoretical approaches to extended curriculum programme teaching and learning? *Firstly*, these theoretical approaches are based on process philosophies, which lead them to be interested in relation, event, and experimenting with process, rather than a fixation on the end product, the predefined outcome, the valorisable object or artefact (Ehret & Leander 2019; Massumi 2015; Murphie 2018). These approaches also focus on transforming potential and a focus on the new – what inventive and experimental approaches can bring that is new to the process of learning.

Secondly, these approaches are non-representational – which means that they contest the fact that the world is made up of individual entities which precede relationships and have inherent characteristics, prior to their representations. That is, they do not believe in the separation or distinction between representations and independent entities. Rather, the world is seen as material-discursive – of the inseparability of meaning and matter (Barad 2007).

Thirdly, all these approaches pay scholarly attentiveness to ethics and ontology as well as epistemology which they see as inseparable - Karen Barad (2007), an eminent feminist new materialist and posthumanist, refers to this entanglement as ethico-onto-epistemology. In other words, these approaches make ontological and ethical claims, (these approaches are also referred to as the ontological turn) in addition to epistemological ones, the latter being the focus of all previously discussed theories in this paper.

Fourthly, these theories are built on the presumption that matter is important and that it is indeterminate. This would mean that entities 'do not have determinate boundaries and properties and words do not have inherently determinate meanings' (de Freitas & Sinclair 2014: 44). Agency is spread across entities – whether they be human or non-human and is seen as an enactment, rather than residing in intentional human beings.

Fifthly, these approaches are also all predicated on a relational ontology. This means that entities come into being through relationships rather than preceding them. In an ECP programme, it would mean that there are no self-contained entities, or stabilised identities, but that all is entangled – human, non-human and more-than-human. There is also a recognition that the material world such as texts and humans are iterative and mutually constitute each other - rather than being unidirectional. For example, from a critical posthumanist, non-representational theoretical and feminist new materialist position, reading and writing practices involve close, respectful, inventive and responsive relationships of careful attention to details, doing justice to texts. Texts are themselves seen as agentic and as changing humans and vice versa – Barad (2007: x) for example, notes that 'writing is not a unidirectional practice of creation that flows from author to page, but rather the practice of writing is an iterative and mutually constitutive working out, and reworking of 'book' and 'author'.' Here, the processual qualities and the focus on activity and on 'becoming' rather than being, are important. Subjects and objects, including 'knowledges' are not pre-constituted, but are in a state of flux, come into being through relationships and are situational. From these perspectives, mediation, as is used in activity theory, is not necessary as relationships pre-exist entities and entities come into being through relations. Mediation assumes that preexisting entities such as humans need access to concepts through a process of mediation rather than coming into being through relationships.

Critical posthumanism, non-representational theory and feminist new materialism are transgressive approaches to scholarly practice in that they emphasise the undetermined potentials in the immanent capacities of learning processes. For ECP and other learning programmes, this means that it is difficult to predict how learning will happen, and that it is the events themselves which are significant, rather than the individual human and non-human actors such as the commodification of the pre-set curriculum. Practices such as dialogical feedback which happens between learners and teachers which in themselves are processual and response-able would be coherent with

critical posthumanism, non-representational theory and feminist new materialism. Such practices would be seen to extend both learners and teachers, as well as the texts themselves in terms of being co-constitutive and rendering each other capable (Despret 2016; Haraway 2016).

Critical posthumanism, non-representational theory and feminist new materialist approaches are also transdisciplinary – as Åsberg and Braidotti (2018: 1), put it 'where science needs to meet cultural knowledge on values, sense-making, politics and purpose, and where the humanities and social sciences meets postnatural nature' – thus emphasising the transversal. For ECPs from these perspectives then, it would make better sense to organise these as transdisciplinary programmes in which the complexity natureculture is entangled, rather than sticking to narrow domains, and leaving nature to science and culture to the humanities. An example of natureculture crosspollination is the field of biodiversity which encompasses the natural sciences, humanities, law, economic and management sciences. In the face of the current crisis of the anthropocene, these would be important steps to take in acknowledgeing that '[o]ntologically, the world we inhabit is not bifurcated in this simplistic manner. Consequently, we need ethical research practices and epistemologies that dare step out of disciplinary comfort zones' (Åsberg & Braidotti 2018: 2).

Critical posthumanism, non-representational theory and feminist new materialism have enabled ECP practitioners such as Delphi Carstens and Nike Romano in this volume, to move beyond representational logics which assume the centrality of the human, and see the human and the discursive as separate from matter (Ehret & Leander 2019), to a dis-identification with Man as individual and as Anthropos to 'becoming-indigenous/other (racialization) and becoming earth (ecologization)' (Braidotti 2018: 10). Carstens and Romano show how in the extended curriculum programme, critical posthumanism, nonrepresentational theory and feminist new materialism 'can be put to the collective task of constructing new subjects of knowledge, through immanent assemblages or transversal alliances between multiple actors' (Braidotti 2018: 6). Furthermore, the papers written by Carstens and Romano in this volume illustrate how the 'ontological turn', as critical posthumanism, nonrepresentational theory and feminist new materialism is sometimes referred to, encompasses attentiveness towards immanent ethico-politics, which matter, and to which we are response-able and accountable (Barad 2007; Braidotti 2018; Haraway 2016). This implies, as Betty St. Pierre (2013: 655) notes, 'if we see ourselves as always already entangled with, not separate from or superior to matter, our responsibility to being becomes more urgent and constant'.

As Braidotti (2018: 1) reminds us, 'the posthuman knowing subject has to be understood as a relational embodied and embedded, affective and accountable entity and not only as a transcendental consciousness', which implies both a mindbody and a natureculture continuum and a transdisciplinary field of scholarship. In addition, we are always 'subjects-in-process', becoming-with human and non-human others in 'perpetual motion' (Braidotti 2018: 6).

Conclusion

Foundation provision is intended to both help students transition from school/work into first year as well as to navigate disciplinary discourses and develop a critical societal awareness. Such provision is seen as a vital initiative to improve quality and equity of outcomes in higher education. So much so that recent funding letters to universities have requested that they increase their foundation student numbers from the current 14% to 20% of the first year intake. Current debates in the literature on foundation teaching centre largely around social realist theorisations. These have been incredibly useful in focusing attention on barriers to students' access to knowledge, and to promoting more active learning approaches. Nevertheless, there is also a need to open up spaces for less normative, fresh and potentially disruptive social theories that can enrich our understanding of foundation provision. The past few years have seen an explosion of (relatively) fresh theorisations of teaching, learning and curriculum. For example the work of posthumanist and feminist new materialist writers including Braidotti, Barad, Haraway, as well as Deleuze and Guatarri, Massumi and Ettinger have brought about new contestations and disruptions to conventional pedagogical and curriculum practices. Thus the purpose of this article is to encourage the emergence of and discussion of theorisations of teaching and learning in foundation provision, including more recent ones, which can expand on and influence our understandings. As Ashwin (2017) reminds us, research can simplify and elucidate what is involved in best practices of learning to teach. Furthermore, given the complexity and challenges in FP practices, we need as many such simplifications as possible.

References

- Archer, M. 1995. *Realist Social Theory: The Morphogenetic Approach*. Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9780511557675
- Åsberg, C. & R. Braidotti 2018. Feminist Posthumanities: An Introduction. In Åsberg, C. & R. Braidotti. (eds.): *A Feminist Companion to the Posthumanities*. Charn: Springer. https://doi.org/10.1007/978-3-319-62140-1
- Ashwin, P. 2017. PostScript on Theorising and Learning to Teach: Insights, Absences and Future Possibilities. In Leibowitz, B., V. Bozalek & P. Kahn. (eds): *Theorising Learning to Teach in Higher Education*. London: Routledge.
- Barad, K. 2007. *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Durham & London: Duke University Press. https://doi.org/10.1215/9780822388128
- Bernstein, B. 2000. *Pedagogy, Symbolic Control and Identity*. Oxford: Rowan and Littlefield.
- Boughey, C. 2010. Understanding Teaching and Learning at Foundation Level: A 'Critical' Imperative? In Hutchings, C. & J. Garraway (eds.): Beyond the University Gates: Provision of Extended Curriculum Programmes in South Africa. (Proceedings of the January 2009 Rhodes University Foundation Seminar hosted by Professor Chrissie Boughey.)
- Boughey, C. 2014. The Significance of Culture, Structure and Agency in Supporting and Developing Student Learning in South Africa. In Dhunpath, R. & R. Vithal (eds.): *Alternative Access to Higher Education*. Cape Town: Pearson.
- Bozalek, V., J. Garraway & S. Mckenna 2011. Case Studies of Epistemological Access in Foundation/ Extended Curriculum Studies in South Africa. Higher Education Learning and Teaching Association of South Africa. Available at: http://heltasa.org.za/foundation/
- Braidotti, R. 2018. A Theoretical Framework for the Critical Posthumanities. *Theory, Culture and Society* 00: 1 – 31. https://doi.org/10.1177/0263276418771486
- Broekhuizen, H., S. van der Berg & H. Hofmeyr 2016. *Higher Education Access and Outcomes for the 2008 National Matric Cohort.* Stellenbosch: Bureau for Economic Research.

- Carter, B. & C. New 2004. Realist Social Theory and Empirical Research Paper to be presented at ESA Social Theory Conference, Paris, September 15th 17th 2004.
- De Freitas, E. & N. Sinclair 2014. *Mathematics and the Body: Material Entanglements in the Classroom.* New York: Cambridge University Press. https://doi.org/10.1017/CBO9781139600378
- Department of Higher Education 2012. *Foundation Provision in Ministerially Approved Programmes*. Pretoria: Government Printers.
- Despret, V. 2016. What would Animals Say if we Asked the Right Questions? Minneapolis: University of Minnesota Press.
- Dhunpath, R. & R. Vithal 2014. Alternative Access to Higher Education: Underprepared Students or Underprepared Institutions? Cape Town: Pearson.
- Edwards, A. 2017. Cultural-historical Approaches to Teaching and Learning. In Leibowitz, B., V. Bozalek & P. Kahn (eds.): *Theorising Learning to Teach in Higher Education*. London: Routledge.
- Ehret, C. & K.M. Leander 2019. Introduction. In Leander, K. & C. Ehret (eds.): *Affect in Literacy Learning and Teaching: Pedagogies, Politics and Coming to Know*. London and New York: Routledge. https://doi.org/10.4324/9781351256766-1
- Ellery, K. 2017. Conceptualising Knowledge for Access in the Sciences: Academic Development from a Social Realist Perspective. *Higher Education* 74, 5: 915 931. https://doi.org/10.1007/s10734-016-0085-x
- Ellery. K. & J. Baxen 2015. 'I always knew I would go to university': A Social Realist Account of Student Agency. *South African Journal of Higher Education* 29, 1: 91 107. https://doi.org/10.20853/29-1-453
- Eybers, O. 2015. From Mechanist to Critical Realist Interrogations of Academic Literacy in ECP. *South African Journal of Higher Education* 29, 1: 79 90. https://doi.org/10.20853/29-1-449
- Gee, J. 1996. Social Linguistics and Literacies: Ideologies in Discourse. London: Taylor and Francis.
- Haraway, D. 2016. *Staying with the Trouble: Making Kin in the Chthulucene*. Durham and London: Duke University Press. https://doi.org/10.1215/9780822373780
- Herbert, M., H. Conana, T. Volkwyn & D. Marshall 2011. Multiple Modes of Epistemological Access in Physics. In Bozalek, V., J. Garraway & S.

- McKenna (eds.): Case Studies of Epistemological Access. Cape Town: HELTASA.
- Kioko, J., S. Barnsley & D. Jaganyi 2014. Science Access: An Appraisal of Graduation and Throughput Rates. In Dhunpath, R. & R. Vithal (eds.): *Alternative Access to Higher Education*. Pinelands: Pearson.
- Kizito, R. 2015. Structuring an Activity-based Framework for Evaluating a Science ECP. South African Journal of Higher Education 29, 1:211 237.
- Kloot, B., J. Case & D. Marshall 2008. A Critical Review of the Educational Philosophies Underpinning Science and Engineering Foundation Programmes. *South African Journal of Higher Education* 22, 4: 799 816. https://doi.org/10.4314/sajhe.v22i4.25817
- Krige, D. & J. Bezuidenhout 2015. Philosophy and Role Reflection of Teaching Practices in the Communications ECP. *South African Journal of Higher Education* 29, 1: 132 149.
- Lea, M. & B. Street 2006. The Academic Literacies Model: Theory and Applications. *Theory into Practice* 45, 4: 368 377. https://doi.org/10.1207/s15430421tip4504_11
- Leibowitz, B. 2017. Cognitive Justice and the Higher Education Curriculum. *Journal of Education* 68: 93 112.
- Leibowitz, B. & V. Bozalek 2015. Foundation Provision A Social Justice Perspective. *South African Journal of Higher Education* 29, 1: 8 25. https://doi.org/10.20853/29-1-447
- Massumi, B. 2015. Politics of Affect. Cambridge: Polity.
- Maton, K. 2014. *Knowledge and Knowers: Towards a Realist Sociology of Education*. London: Routledge. https://doi.org/10.4324/9780203885734
- Maxwell, J. 2011. A Realist Approach to Qualitative Research. London: Sage.
- McGhie, V. & M. du Preez 2015. Addressing the Learning Needs of At Risk Students at UWC. *South African Journal of Higher Education* 29, 1: 164 180.
 - https://doi.org/10.20853/29-1-452
- McKenna, S. 2010. Cracking the Code of Academic Literacy: An Ideological Perspective. In Hutchings, C. & J. Garraway (eds.): *Beyond the University Gates: Provision of Extended Curriculum Programmes in South Africa*. (Proceedings of the January 2009 Rhodes University Foundation Seminar hosted by Professor Chrissie Boughey.) HELTASA Avaiable at: http://heltasa.org.za/foundation/

- McKenna, S. 2014. The Context of Access and Foundation Provisioning in South Africa. In Dhunpath, R. & R. Vithal (eds.): *Alternative Access to Higher Education*. Pinelands: Pearson.
- Ministerial Statement on University Funding. 2017/18. Pretoria: Department of Higher Education.
- Morrow, W. 2007. Learning to Teach in South Africa. Cape Town: HSRC Press.
- Muller, J. 2014. Every Picture Tells a Story: Epistemological Access and Knowledge. *Education as Change* 18, 2: 255 269. https://doi.org/10.1080/16823206.2014.932256
- Muller. J & M. Young 2019. Knowledge, Power and Powerful Knowledge Revisited. *The Curriculum Journal*. https://doi.org/10.1080/09585176.2019.1570292
- Murphie, A. 2018. Fielding Affect: Some Propositions. *Capacious: Journal for Emerging Affect Inquiry. Capacious* 1, 3. https://capaciousjournal.com/ | DOI: https://doi.org/10.22387/CAP2018.21
- O'Brien, R. 2005. *Bodies in Revolt: Gender, Disability and a Workplace Ethic of Care*. New York and London: Routledge.
- Potgieter, M., A. Harding & Q. Kritzinger 2015. Reflections of Science Students on their Experiences of an AD Programme. *South African Journal of Higher Education* 29, 1: 108 131. https://doi.org/10.20853/29-1-446
- Rip, A. 2000. Fashions, Lock-ins and the Heterogeneity of Knowledge Production. In Jacobs, M. & T. Hellstrom (eds): *The Future of Knowledge Production in the Academy*. Buckingham: OUP.
- Sannino, A. & Y. Engeström 2017. Co-generation of Societally Impactful Knowledge in Change Laboratories. *Management Learning* 48, 1: 80 96. https://doi.org/10.1177/1350507616671285
- Scott, I. 2014. Access, Success and Curriculum. In Dhunpath, R. & R. Vithal (eds.): *Alternative Access to Higher Education*. Pinelands: Pearson.
- Scott, I., N. Yeld & J. Hendry 2007. A Case for Improving Teaching and Learning in South African Higher Education. *Higher Education Monitor*. Number 6. Pretoria: Council for Higher Education.
- Shay, S., K. Wolff & S. Clarence 2016. *New Generation Extended Curriculum. The Flexible Degree Proposal.* Pretoria: Department of Higher Education. DOI: 10.13140%2FRG.2.1.3135.5767
- Soudien, C. 2012. Unpublished Keynote Presentation at the Higher Education

- Learning and Teaching Association of Southern Africa Conference. University of Stellenbosch, November 2012.
- St. Pierre, E. 2013. The Posts Continue: Becoming. *International Journal of Qualitative Studies in Education* 26, 6:646 657. https://doi.org/10.1080/09518398.2013.788754
- Tinto, V. 2012. Completing College. Chicago: University of Chicago Press.
- Virkkunen, J. & D. Newnham 2013. *The Change Laboratory: A Tool for Collaborative Development of Work and Education*. Rotterdam: Sense Publishers.
- Young, M. 2008. *Bringing Knowledge Back in: from Social Constructivism to Social Realism in the Sociology of Education*. London: Routledge. https://doi.org/10.4324/9780203073667
- Zipin, L., A. Fataar & M. Brennan 2015. Can Social Realism do Social Justice? *Education as Change* 19, 2: 9 - 36. https://doi.org/10.1080/16823206.2015.1085610

James Garraway Professional Education Research Unit (PERI) Fundani Centre for Higher Education Cape Peninsula University of Technology garrawayj@cput.ac.za

> Vivienne Bozalek Director of Teaching and Learning University of the Western Cape vbozalek@gmail.com

A Critical Self-reflection on Theorising Education Development as 'Epistemological Access' to 'Powerful Knowledge'

Kathy Luckett

Abstract

This paper is a critical self-reflective piece located in the context of South African Higher education post the student protests of 2015 - 2017. The paper is motivated by the insight that 'epistemic decolonisation' involves exposing 'the hidden complicity between the rhetoric of modernity and the logic of coloniality' (Mignolo 2010: 313). My argument is located in the contradiction between modernity and coloniality which I suggest structurally conditions the experience of black students in Education Development Programmes (EDPs) in historically white universities. The key argument is that when the theoretical concepts 'epistemological access' to 'powerful knowledge' are taken up from the social realist school in the metropoles and applied to the context of Education Development (ED) in post-colonial universities, their ontological assumptions and the normative effects exacerbate the modernity/ coloniality contradiction. I go on to speculate on what a decolonial critique of the application of these two concepts to ED might entail. I conclude by thinking through some of the implications of this reflection for the challenging task of reconceptualising an undergraduate curriculum for HE in SA.

Keywords: Education/ Academic development, South African higher education, decolonisation, Social Realist school of Sociology of Education, curriculum studies, curriculum knowledge

It seems to me that the philosophical choice confronting us today is the following. We have to opt either for a critical philosophy which appears as an analytical philosophy of truth in general, or for a critical thought which takes the form of an ontology of ourselves, of present reality (Michel Foucault [1982/1983] 2010: 21).

Introduction

This article is a self-reflective piece located in the context of South African Higher education post the student protests of 2015 - 2017. The student movements critiqued historically white universities for the racism and 'whiteness' of their institutional cultures and for the Eurocentrism of their curricula — which students demanded should be 'decolonised'. In response, a 'decolonial turn' in the South African literature on higher education (HE) has started to debate how the students' call should be taken up in university curricula (Heleta 2016; Mbembe 2016; Le Grange 2016; Fataar 2018; Curriculum Change Framework UCT, 2018). The focus of this paper is to think through the implications of the 'decolonial turn' for undergraduate education in South African higher education, but in particular I will argue that separate Extended Curriculum or Extended Degree Programmes¹ are no longer tenable post the student protests.

When RMF students first began to protest at UCT, they released a list of 'long-term goals' (RMF 2015). They called for the university to 'Introduce a curriculum and research scholarship linked to social justice and the experiences of black people' (Goal 10) and to 'Improve academic support programs' (Goal 11). The fourth goal was more explicit about the curriculum, 'Implement a curriculum which critically centres Africa and the subaltern'.

By this we mean treating African discourses as the point of departure – through addressing not only content, but languages and methodologies of education and learning – and only examining western traditions in so far as they are relevant to our own experience (RMF 2015).

¹ Throughout this paper Education Development refers to 'foundation provision' that in South African HE is offered to selected students placed on separate Extended Curriculum or Extended Degree Programmes.

A legitimate response to these demands is to insist on the distinction between experience and knowledge and to argue that the higher education curriculum should not be limited to that which is relevant to students' life experiences and contexts. However, the point of this paper is to rather hear the sense of exclusion and longing for recognition and social justice in the student demands and to understand that they speak from subject positions that still feel colonised. The students that I teach are caught in a 'double bind' that traps them in assimilating to Western ways; they desire modernity and its promises of employment and material comfort, but because they are positioned as in need of remedial treatment, they can only access the qualifications that promise access to modernity via the baggage and humiliation of coloniality (discussed below). It is from this position that I turn a critical gaze on ED practice² and the institutionalised curriculum³ that it serves. In particular, I interrogate a pair of theoretical concepts, 'epistemological access' to 'powerful knowledge' which, I will argue, have served to legitimate hegemonic and assimilationist assumptions.

In my view, the protests have opened-up a fault-line or a 'line of fragility' (Foucault cited in Allen 2016:184) in the constitution of the modern/colonial South Africa university, particularly in the historically white research-intensive universities where the protests first erupted. I believe we could use this moment as an opportunity for critical self-reflection, for exercising humility, for unlearning what we thought we knew. Especially for white people in South Africa, like myself, this involves a self-critique of the social institutions, events, practices, subject formations and normative commitments that have led us to constitute ourselves and others as we have. This is not easy, for we have to recognize that even our normative commitments are made within lifeworld horizons that are justified relative to a set of contextually salient values - that is, in contingent socio-historical contexts (Allen 2016). For these reasons, the context and position from which I write is crucial to the argument of the paper – a white female academic working in an Education Development Programme (EDP) in a Humanities Faculty at the University of Cape Town, where the #RhodesMustFall protests began 2015.

_

² This refers to foundational provision taught on separate 4-year Extended Curriculum/ Degree Programmes.

³ This refers to the mainstream undergraduate curriculum taught on 3-year degree programmes.

This context is important because the argument of the paper is deliberately located in the contradiction between modernity and coloniality which I argue structurally conditions the experience of black students in Education Development Programmes (EDPs) in historically white universities (HWUs) – a contradiction that persists to the present. My key argument in the paper is that when the theoretical concepts 'epistemological access' to 'powerful knowledge' are taken up⁴ and applied to this particular context of Education Development in a post-colonial university, the ontological assumptions and normative effects of the modernity/ coloniality contradiction are exacerbated.

The paper is structured as follows. Firstly, I undertake a selective reconstruction of the ED project in the light of current criticisms against it launched from a decolonial platform. Instead of framing it as a liberal antiapartheid project motivated by a concern for equity and social justice, I reframe it as a modernising project within a developmentalist paradigm. Secondly, I link the modernising impulse of the developmentalist paradigm with the decolonial theorists' concept of modernity/ coloniality. Thirdly I locate the work of Basil Bernstein in its original context and discuss how it has been taken up in a different time and place in South African ED work. Since the 2000s this approach to ED work has emphasized two key concepts – 'epistemological access' to 'powerful knowledge' – and it is the take up of these two concepts that are the focus of this paper. Fourthly I speculate on what a decolonial critique of these two concepts might entail. Finally, I conclude by thinking through what some of the implications of this reflection might be for the challenging task of reconceptualising an undergraduate curriculum for HE in SA and other post-colonial contexts.

A Selective Account of Education Development in South African Historically White Universities

In the early 1980s, the apartheid regime started to fracture –racial-capitalism was resisted at home and isolated internationally. In response, the regime, encouraged by business, accepted the idea of allowing a black middle class to

⁴ These concepts are based on the work of Basil Bernstein but have been developed by his followers in what is sometimes referred to as a Social Realist school of Sociology of Education.

develop in restricted ways in white urban areas. This resulted in the opening-up of HWUs controlled through a quota system. ED thus began in the 1980s in HWUs as an anti-apartheid humanist project – to get the best black students, casualties of the Bantu Education system, into so-called 'world-class' white universities – to support them to succeed. It was argued by those in HWUs that access to the white university would become a 'revolving door' unless some kind of 'catch-up' curricular provision was made for black students from a chronically inadequate public schooling system (Boughey 2007; McKenna 2003). Initially Academic Support Programmes (ASPs) and later Education Development Programmes (EDPs) or Extended Curriculum Programmes (ECPs), were established to assist small numbers of 'disadvantaged' or 'underprepared' (euphemisms for black) students with university study; their participation in EDPs being a condition of their admission on lower entry points⁵.

In the first two decades of its existence, the ED project focused on providing additional support to students on ECPs/ EDPs in their first 'foundation' year of study. Students were traditionally placed into separate extended programmes on entry. The programmes usually provide an extra year of study permitting a lighter course load and extra time for developing the academic skills to 'cope' with university level study. Over time ED practitioners have worked critically with new theories and empirical data. Thus, since their inception ED interventions have morphed from an add-on study skills approach to the teaching of reading and writing to an academic literacies approach or an academic socialisation or genre approach as identified by Lea and Street (1998). It was only in the early 2000s that a group of ED practitioners, mostly in HWUs, began to work in the Bernsteinian tradition which was at that time influential in leading Schools of Education across South Africa. We later adopted the terms 'epistemological access' to 'powerful knowledge' to capture the work of inducting entry level students into the discourses and concepts of the disciplines ('powerful knowledge') by making their rules, logics and ways of reasoning explicit ('epistemological access')

__

⁵ While it is easy to criticize these initiatives with hindsight and from current postcolonial or decolonial perspectives, it is important to acknowledge that at the lime of their origin during apartheid, they were led by committed anti-apartheid activists who challenged the race-based policies of separate development and did what was possible under repressive conditions.

(for example Luckett & Hunma 2014; Luckett 2016). Since the 2000s, ED has expanded as a field of practice to include policy work, management of teaching and learning, quality assurance, staff development and the roll out of ICTs – to improve teaching and learning (Boughey 2010; Clegg 2009).

Despite its expansion and growing expertise in a range of fields, the ED project's outcomes have been partial and limited. While there is evidence that its contribution as a mechanism of access has been significant, ensuring that 'underprepared' black students gain admission to HWUs, but with some exceptions, EDP completion rates remain unsatisfactory (Council on Higher Education 2015). The initial gains made at the end of first year are lost by the end of years 2, 3 and 4 when students drop out or are academically excluded. The obstacles to academic success that were seemingly removed, re-appear.

Throughout its history there has been a minor stream of policy critique from within the ED community itself (Bradbury & Miller 2011; Leibowitz & Bozalek 2015; Luckett & Shay 2017) but this has largely failed to penetrate national policy frameworks and the Department of Higher Education and Training's funding criteria for state subsidy. As a consequence, the institutional structuring of ED programmes inherited from the apartheid era have remained almost unchanged since their inception. Clegg argues that, despite taking strong normative positions and showing high levels of self-reflexivity in its writings, the South African ED community has always 'struggled to build intellectual and moral legitimacy' (2009:409). She suggests that the reason for this may be that it has failed to critique the institutionalised power of the disciplines, to challenge the norms and assumptions on which the regular curriculum is based and to question the managerialist power on which the ED project depends for its authorization and institutional resource base. In many ways her criticism anticipated the current critique by students drawing on decolonial theory.

The Developmentalist Paradigm

In order to fully grasp the structural contradictions in which the ED project originated and now finds itself, it is necessary to take a big step back and locate it within a much longer historical duree and its social imaginaries. The colonial powers initially supported missionary education endeavours, legitimating their rule through a discourse of improving and 'civilizing the natives' to make them fit for modernity (Kallaway & Swartz 2016). However, by the mid-1800s

uprisings in the colonies and greater control wrested by settler populations put pressure on this humanitarian impulse. It was replaced by a second discourse, based on social Darwinism, that posited a 'natural' hierarchy of races based on biological and cultural difference.

In his critique of colonial and post-colonial states, Chatterjee (2011) explains how this worked via what he terms the 'norm-deviation-exception' paradigm. Historically the colony was deemed the exception to universal (European) norms on grounds of biological, cultural and moral difference. It was the 'imperial prerogative' to declare 'the colonial exception'. The declaration of an exception opened-up a pedagogical project – in which the imperial power was obliged to take responsibility for educating and disciplining the colonized to bring them up to European norms. Chatterjee's work shows how this paradigm of measuring the colonized against European norms outlived imperial rule and was taken up in similar ways by post-colonial developmental states.

In the post-colonial era, developmental states continue to adopt this norm-deviation-norm exception strategy, now applying the normative standards of the West to their own population groups, using statistics to show a 'norm-deviation' and thus the need for state intervention (Murray Li 2007). This leads to a 'norm-exception' paradigm in the policy domain, where certain populations are identified for NPO or state-funded treatments. The developmental state's instrumental rationality is that this will encourage 'backward populations' to modernize (Chatterjee 2011). In fact, this produces deficit, schizophrenic subjects (who live in modern democratic states but are deemed not-yet-ready for exercising sovereignty and full civil liberties). These subjects believe it is in their self-interest to comply with such programmes, thus giving their consent to hegemonic values and power relations. Murray Li (2007) argues that, despite the good intentions of its protagonists, the 'will to improve' via developmental projects always falls short of its promises – yet stubbornly persists within given power relations. Developmental projects fail because they do not engage with political questions nor see their intended beneficiaries as political actors with sufficient agency to work out their own solutions to their problems. Murray Li (2007) asserts that from the colonial through to the current neo-liberal era, whenever their expertise is challenged, those who wield 'the power to improve', tend to reassert their authority, devising new and better improvement schemes that perpetuate the divide between the developed and undeveloped.

As noted by Chatterjee (2011), working in India, there is certain irony that post-colonial states often perpetuate the developmental paradigm. For example, in South Africa, the DHET has set up race-based redress and equity projects that require universities to report student performance using the old race-based population groups. At national level, this perennially shows a normdeviation in graduation rates by students in the black groups. The DHET uses this discrepancy in performance by race to justify its Foundation Grant policy whereby black students are positioned as the exception to the white norm. In order to earn subsidy from the DHET's Foundation Grant (2012) that funds foundational provision, students are admitted to universities on entry points lower than those for the regular 3-year degrees and / or identified via placement tests such as the National Benchmark Tests for placement in separate, administratively identifiable, 4-year extended programmes for the duration of their undergraduate careers. The state funds only the 'additional teaching input' that students receive on such programmes, which must be over and above that provided to 'normal' students on 'mainstream' three-year degrees.

Looking back at the structural formation of the ED project perhaps it was inevitable that the inherited curriculum and performance of privileged white students would be taken as the norm in South African HWUs. As long as black students were seen to deviate from white norms, 'colonial difference' would come to mean 'not good enough' and 'not as good as us', despite the use of euphemisms such as 'disadvantaged' or 'underprepared' intended to locate the 'problem' in the public schooling system and not in the person of the student. Given the racialized 'dispositif' of South African society and the institutionally marginalized status of the ED project, perhaps it was not possible to run an anti-apartheid, humanist and modernizing project that did not also entail 'coloniality' (see below). My argument is that despite the good intentions of its protagonists and the apparent gratitude of its beneficiaries, the good work carried out at agential level has been overshadowed by it structural contradictions. This has been highlighted by the student protestors' use of decolonial theory to inform their critique of HWUs.

Relevant Concepts from Decolonial Theory

The first wave of decolonial writings were associated with political ideologies and anti-colonial struggles (Cesaire 2001; Nkrumah 1970; Nyerere 1968; Fanon 2001; Biko 2010). The second wave, based mostly on the works of Latin

American theorists and drawn on by contemporary South African student movements, poses an epistemological as well as a political challenge to neocolonialism, or what it terms 'coloniality'. 'Coloniality' refers to 'long-standing patterns of power' that began with the conquest of the Americas in 1492 and defined a new world order that enabled the primitive accumulation of capital in Europe from which Western modernity developed (Maldonado-Torres 2007) – hence the key concept 'modernity/coloniality' (Quijano 2007; Mignolo 2010). In decolonial theory and crucially important for the South African context, the ideology of race and racist practices that involved violence, the destruction and negation and of the bodies, minds and cultures of colonial subjects, are viewed as constitutive of modernity (Ndlovu-Gatsheni 2013).

Decolonial theorists insist that the legacy of empire endures in the present as 'coloniality', the 'darker side' of modernity. They thus apply the concept 'modernity/ coloniality' to the politics of knowledge production and they see the same patterns of power working to determine who produces knowledge, who owns it and who legitimates it. Gordon (2014) is critical of how historically knowledge has been colonized and centralized by Europe in ways that validated only one form of knowledge, not only de-legitimating the knowledges of others; but undermining the very conditions for epistemic life (2014: 85). Regarding epistemology, decolonial theorists assert that because the modern disciplines were generated from within the colonial apparatus and power relations, not only the contents of the modern disciplines, but also their foundational epistemic assumptions must be interrogated (Escobar 2002; Grosfoguel 2008; Mignolo 2011). They assert that there is no autonomous universal subject of knowledge (in truth based on the consciousness of a Eurocentric, propertied, white male). They point out how the western episteme has been institutionalised and universalized through the modern university system, the modern disciplines and through the five hegemonic (ex-colonial) European languages (Grosfoguel 2013, 74). Insisting instead that modernity is plural and not the sole property of Europe, they claim that Eurocentricism is based on 'confusion between abstract universality and concrete world hegemony derived from Europe's position as centre' (Mignolo 2010: 317). Furthermore, this domination of European thought has led to the 'developmentalist fallacy' (the assumption that all nations and epistemologies must follow Europe's path of development) (Dussel 2000: 471 cited in Escobar 2010: 38). 'Epistemic de-colonization' then involves exposing 'the hidden complicity between the rhetoric of modernity and the logic of coloniality'

(Mignolo 2010:313).

In contrast decolonial theorists view all knowledge as situated and embodied (including modern Western epistemologies). They promote an openness to all forms of knowledge, especially the recognition and restoration of subjugated people as subjects of knowledge. They emphasise the importance of knowledge being relevant to and contextualized within the lifeworlds of its knowers. Some advocate that knowledge production in the Social Sciences should begin with the contradictions of the lived experiences of subjugated peoples (Gordon 2014).

This selective account of decolonial theory suggests that a decolonial critique of the ED project in South African HWUs, would view it as a typically Eurocentric, modernizing project that takes the Western episteme, its disciplines and the hegemony of the English language as universal and unquestioned – thus structurally reproducing relations of coloniality. I now return to my account of ED practice to show how a particular appropriation of concepts from the Bernsteinian school has served to exacerbate this contradiction or 'double bind' of 'modernity/ coloniality' experienced by many black students on ED programmes in South African HWUs.

Basil Bernstein's Context and Project

Bernstein was a British academic who set out to explain how power relations in society translate into discursive practices in schools that work to disadvantage working class pupils and advantage middle-class pupils. He originally developed the 'pedagogic device' as a conceptual framework to explain how the modern education system in the UK in the 1970s and 1980s had a structural tendency to reproduce social inequality. His work is a class-based, Neo-Marxist, structuralist analysis based on a realist ontology that seeks to uncover hidden macro-structures (such as external class structures and internal semantic codes) that are causal and can be observed or experienced by their effects on micro-practices in classrooms and education systems more broadly. Bernstein was a subtle thinker, whose work is not always fully appreciated by either his protagonists or antagonists. He warned not to reduce education systems to sites of social pathology, arguing instead that they have their own internal logics which he set out to model in the pedagogic device (Bernstein 2000).

Bernstein's work has subsequently been taken up and elaborated by a

'social realist' school (the SR school) of the Sociology of Education⁶ (for example Muller 2000; 2012; Young 2008; Muller & Young 2014; Wheelahan 2010; Maton & Moore 2010; Moore 2013; Maton 2014) to hold onto a notion of knowledge as structured by a world that is ontologically independent from what we know about it. The SR school advocates a realist position in order to defend the disciplines and the curriculum from perceived threats originating in the social sciences such as constructivism, standpoint theory, the 'discursive turn', the 'ontological turn', the 'reflexive turn' or 'the decolonial turn' – which are understood to relativize epistemology and reduce knowledge to its social relations. Given its time and context, Bernstein's work was firmly located in a modernizing paradigm and did not take coloniality into account. Unsurprisingly the neo-Marxists categories of 'working class' and 'middle class' do not apply straightforwardly to the South African social formation or its contemporary HE system. They exclude numerous other structures with causal power such as race, language, gender, school type/ quintile, geographic location. I turn next to discuss how his theories have been taken up by myself and others in pockets of ED research and practice in HWUs (see for example Luckett 2009; 2014; 2016; 2018).

The Take-up of 'Epistemological Access' to 'Powerful Knowledge' by Some ED Practitioners

In South Africa, Bernstein's theory has been far more thoroughly researched and applied to curriculum and pedagogic research by those working on schooling where it has made important policy interventions (see Muller 2000; Ensor 2003; Hoadley 2008; Hugo & Wedekind 2013). In ED, where the focus is on preparing first-year students to access the disciplines, a narrower focus has been adopted that analyzes objectified structures of curriculum knowledge with a view to informing curriculum design and pedagogic practice in both the regular and EDPs — aiming to give students 'epistemological access' to the target disciplinary knowledge.

_

⁶ It is important not to confuse the Social Realist school in the Sociology of Education based on the work of Basil Bernstein, with the Social Realist school in Sociology led by Margaret Archer, and others, working mostly in the discipline of Sociology. The latter build on and apply the theory of critical realist philosopher, Roy Bhaskar, to analyses of society.

The now commonplace phrase 'epistemological access', was first coined in South Africa by Morrow (2009) at UWC in the early 1990s to distinguish between formal admission to an institution and access to the forms and ways of thinking in the disciplines. The term was introduced, in contradistinction to 'formal access', to capture the need for academics (not ED practitioners)⁷ to make explicit for students the specific demands, the 'grammars of inquiry' and the 'epistemic values' of their disciplines. It was only in the early 2000s that the term was appropriated to apply to ED work and given explicit theoretical content by those working in the Bernsteinian tradition (see below).

Following Morrow (2009) and Muller (2012), the concept 'epistemological access' became paired with Young's (2008) term 'powerful knowledge' – the latter refers so the disciplines, objectified as 'knowledge structures'. Young (2008) defines 'powerful knowledge' as specialised knowledge, developed and verified by disciplinary communities of enquiry according to transparent epistemic rules and a certain 'sociality of knowledge' ('truth as agreement'). The SR school emphasizes the importance of 'bringing knowledge back in', arguing for the importance of recovering knowledge as object with its own causal powers and properties and internal logics; that is, according knowledge an ontologically real status relatively independent of its knowers. Knowledge practices are viewed as emergent from but irreducible to their contexts of production.

Young's definition locates the concept of 'powerful knowledge' firmly in the disciplines; the assumption is that it is this institutionalized knowledge that is the best currently available to all of humanity and to which, therefore, access should be democratised. Furthermore, it is (only) in the disciplines that we can find the theory, methods and procedures for verifying knowledge claims – against which all forms of knowledge can and should be judged.

Although Bernstein himself did not use the term 'powerful knowledge', (he used 'vertical discourses'), his late sketchy work on 'knowledge structures' has generated a set of new concepts for analyzing 'powerful knowledge' (Young 2008; Wheelahan 2010; Young & Muller 2014). This body of work and also Maton's (2014) Legitimation Code Theory, provides conceptual and methodological tools for analyzing knowledge structures in ways that capture the differentiated nature of knowledge in the

⁷ Aslam Fataar, personal communication, 30/10/2018.

disciplines and professional fields with a view to informing curriculum design - especially the selection, sequencing and conceptual coherence of curriculum knowledge (for example Luckett 2009; Luckett & Hunma 2014). The integrity of a knowledge structure, it is argued, needs to be retained in curriculum design to enable students to build knowledge cumulatively and progress vertically up a curriculum spine – with a preference for moving from concrete to more abstract forms of knowledge (Muller 2009). Key concepts used are the specialization of knowledge and knowers, semantic density and gravity etc. The methodology is adapted from Bernstein's concepts classification and framing, which involves analyzing the relative strengths of boundaries between categories. Bernstein's penchant for setting up dualistic analytical categories is used to highlight differences, contrasts and tensions between different knowledge structures in order to improve curriculum design. This approach, based on the assumption that modern/ Western disciplinary knowledge is universally powerful, opens up a modernizing pedagogical project that aims to use analyses of curriculum knowledge to enhance students' 'epistemological access' to that knowledge.

Within the theoretical framework of the SR school and when applied to the ED project, the meaning of Morrow's phrase 'epistemological access' (now to 'powerful knowledge') was filled with new content. It became linked to Bernstein's concept of a 'visible pedagogy', used to make explicit the cognitive and discursive demands of learning, reading and writing in the 'elaborated codes' (the disciplinary discourses) in higher education (see for example Luckett 2016). Moore (2013) re-interpreted Bernstein's 'vertical discourse' as esoteric, cryptic codes that are relatively independent of their originating contexts. He explains that in order to abstract and generalize; meanings become increasingly specialized, semantically dense and removed from their everyday contexts. It is thus understood that good pedagogic practice elaborates or unpacks these condensed meanings so that students can access their ways of reasoning, reading and writing – and eventually learn to move fluently between the concrete and the abstract in their own writing.

In a recent stock-take of the ED project, Vorster and Quinn (2017) identify four discourses and related hegemonic concepts that they claim have informed the work of ED in South African universities. These are the facilitation of 'epistemological access' to the disciplines for a diversity of students; respect for the disciplinary expertise and identities of academics – closely linked to the concept of 'powerful knowledge'; the concept of critical

reflexive practitioners and a commitment to working with 'strong theory'. They go on to suggest that particularly the notion of facilitating 'epistemological access' to 'powerful knowledge' has been used problematically in 'assimilationist and exclusionary ways' in education development discourse and practice (Vorster & Quinn 2017:42). In the next section, I respond to Vorster and Quinn's challenge and, as a form of self-critique, think through what a decolonial critique of this approach to ED work looks like – especially when used in ED programmes located in a two-track curriculum structure that works to perpetuate a developmentalist paradigm.

Re-reading 'Epistemological Access' to 'Powerful Knowledge' through a Decolonial Lens

Whether one subscribes to the decolonial position or not, given its resonance with black students, many of whom are on EDPS, it is important to understand their critique of Western epistemologies and universities. So, what might a decolonial critique of the notion of 'epistemological access' to 'powerful knowledge' look like?

Firstly, as noted above, the naturalization of its universal claims and assumptions would be questioned; including the taken-for-granted power of the disciplines as institutions of modernity. It would be pointed out how the assumed universal reach of 'powerful' knowledge claims excludes other forms of knowledge and knowers and, in post-colonial contexts, perpetuates the power relations of coloniality.

Secondly, Bernsteinian theory's reinforcement of 'strong boundaries' to constitute and preserve specialised abstract knowledge would be critiqued by the decolonialists for excluding other forms of knowledge. They would call for a weakening of the classification and framing around both knowledge and knowers. They want to open up the West's control of symbolic space, letting in other kinds of knowers and legitimating knowledge produced from other spaces. This promotion of non-hegemonic hitherto silenced counter-discourses is understood as a liberatory project that will produce alternatives to Eurocentric universalism, challenging its modernist logic of progress and development and its grand narratives based on the ideologies of Christianity, liberalism or Marxism. More specifically the decolonialists call for new ways of thinking from 'the other side of colonial difference' (Escobar 2010); they

want to delink from (rather than assimilate into) Western hegemony. They call for an 'epistemic shift' that changes the terms of the conversation and provides new spaces to think from. By shifting the 'geo-politics' and the 'body-politics' of knowledge production from the North to the South and from 'a white male consciousness' to that of the damne, they believe that an-other rationality will emerge culminating in 'pluriversality' Mignolo 2007) or 'transmodernity' (Escobar 2010).

Thirdly, the SR school's privileging and reification of abstract context-independent theory over contextualized practice and relatedly of 'epistemological access' over social or ontological access and would also be challenged by decolonial scholars. As feminist and decolonial scholars have long pointed out, the privileging of epistemology over ontology, mind over body, reason over affect is typical of Western thought and works to exclude 'others' and other ways of knowing.

This leads to a *fourth critique*, that of dualistic thinking. The endemic dualisms in Western social science theory have long been problematised by feminist and postcolonial scholars, for example male / female, subject / object, mind / body, theory / practice, fact / value, society / individual, structure / agency, sacred / profane, modern / traditional, and so on. Of course, making distinctions and thinking with dualisms is a fundamental way of making meaning in all semiotic systems, such that the use of dualistic patterns for distinguishing differences that make a difference can be seen to repeat fractally both within and between concepts as they develop (Abbott 2001). Bernsteinian discourse has a penchant for setting up its concepts in strong oppositional dualisms. Examples include strong / weak classification and framing, elaborated / restricted codes, vertical / horizontal discourse, instructional / regulative discourse, vertical / horizontal knowledge structures, epistemic/ social relations and more recently epistemological access / formal or social access.

One could argue that these are useful analytical tools, but the problem arises when these dualisms are reified and imposed on ED pedagogy in practice. Furthermore, typical of dualistic thinking in general, is the tendency for normative judgements to coalesce around a 'good' pole versus a 'bad' pole. One of the binaries gets privileged, foregrounded and normatively valued, while the other is backgrounded and negated. Whether intended or not, this happens in Bernsteinian and SR school discourse. In post-colonial contexts and, more specifically within a developmentalist paradigm, this dualistic

thinking inevitably ends up valuing what is modern, Western and 'global' and devaluing what is local, indigenous and Southern. In particular, decolonial scholars critique the subject/ object dualism whereby Western epistemology's knowing subject is abstracted from the world s/he is perceiving and observing. That said, decolonial theory itself is not immune from dualistic thinking, but it flips the script, for example it wants to privilege colonized /colonizer; practice/ theory; local/ global; the rest/ West /; the South / the North and so on. Others such as Mignolo (2013) are more sophisticated, he specifically states that his teleological vision for a 'pluriversity' 'is not one of cultural relativism, but the 'entanglement of several cosmologies connected today in a power differential' (2013: 147). He calls for thinking from within this entanglement.

My overall argument here is that the theory-building of the SR school is a typical instance of Western epistemology applied to education. For example, it makes universal claims, protects the institutionalised power of the disciplines, maintains strong boundaries between institutionalized knowledge and other forms of knowledge and works with dualisms. In ED work and more broadly in a post-colonial context, these epistemological positions can work to objectify curriculum knowledge and its structures in ways that background social relations and ontological conditions and so work to exclude 'others'.

A response from the social realist school to the decolonial critique would be likely to challenge their theory of knowledge. While accepting that the social identity of knowers is salient to knowledge production and epistemic judgement, social realists argue that social identity on its own is insufficient grounds for making or attributing a knowledge claim (Maton 2014; Maton & Moore 2010). The social realists believe it is reductionist to limit knowledge production to the interests of its knowers; we should not reduce standards and criteria for knowledge (and for determining the curriculum) to the social interests of certain groups. Further, they argue that relevance and experience are inadequate bases for determining what knowledge should be selected for a curriculum; that such curricula ultimately short-change students who may not get adequate access to 'powerful' disciplinary knowledge.

A more measured way through the debate set up here between the SR school and the decolonial theorists is suggested by feminist philosopher Louise Alcoff (2011). She writes in support of the 'decolonial turn'. While critical of Western epistemology's individualist, decontextualized and politically non-reflective approach to the effects of its own cultural and social locations, she argues that this does not mean we should abandon all attempts to justify

knowledge claims, 'we need to take into account the identity and situatedness of knowers while still maintaining epistemology's normative capacity' (2011:70). While we should resist reducing knowledge to the identities of its knowers, especially in the Human and Social Sciences these do have epistemic salience and political consequences (Alcoff 2011). Instead she calls for a 'political epistemology' that questions how epistemic roles and authority are structured and institutionalised and what the ontological implications might be of our truth claims (2011:70).

My own position in this debate around what knowledge and which knowers should be valued and institutionalised is informed by the work of Roy Bhaskar, the founder of critical realism, (who ironically, takes a far more critical stance than the SR school of the Sociology of Education – especially towards the analytic tradition of Western philosophy on which they draw). Bhaskar (2016) argues that the historical development of Western thought has led to an 'epistemic fallacy' where knowing is substituted for being (only what we know is what exists). Instead he claims that epistemology is only one dimension of ontology – but because Western philosophy negates non-duality, it is unable to posit an underlying ontological unity (Bhaskar 2016). He suggests that this lack of ontological depth or 'ontological mono-valence' (2016: 87) in Western analytical philosophy in particular, has led to closed systems that exclude alterity and absence – which in turn may be related to a desire for control and fear of change. With regard to change, Bhaskar notes that all abstract theory inevitably leaves something out of its description of reality. This results in an incompleteness or inconsistency in its knowledge claims that can trigger a crisis in the field. Those in control of the theory will either adjust it, moving towards a better grasp of reality – morphogenesis; or they will resist change - leading to morphostasis (Archer 1996). Finally, Bhaskar points out that Western philosophy's privileging of abstract universalism fails to capture the paradox of 'concrete universality' - the recognition that all universals manifest only in concrete embodied forms which in turn are always both a unique and singular instance of a universal (Bhaskar 2016:129).

What about Learning?

Leibowitz (2017) and Zipin, Fataar & Brennan (2015) argue that those in ED working in the Bernsteinian SR school have failed to give sufficient attention

to how people come to know; that learning is affective, emotional and experiential, as well as cognitive. In a similar vein, although the decolonial theorists do not address learning and teaching specifically, they promote the idea that institutions should promote human flourishing and well-being (Escobar 2010; Mignolo 2013). We have noted their critiques of modernity's 'dehumanizing' ways of thinking and being. One could speculate that they would advocate a weakening of the modern university's hard boundaries around the control of time and space, social relations and assessment. They would probably advocate a softening of the hierarchical framing of pedagogic interaction between lecturers and students to give more control to students over their own learning. Undoubtedly decolonial theorists would advocate this weakening of framing as a means of encouraging students to bring into the classroom their own cultural and linguistic resources for learning, leading to their affirmation, recognition and a more convivial and creative learning environment.

In contrast we have noted the negative effects on learning of a developmentalist and assimilationist pedagogic model⁸ in the HWUs that focuses on teaching for modernity and is often blind to its own coloniality⁹. In this traditional model lecturers tend to take strong control over how teaching and learning happens, reinforcing hierarchical social relations in the classroom. In the HWUs, the privileging of knowing over being serves to retain considerable cultural and semiotic distance between the Eurocentric/ white subjectivities of the authors of texts and the academics who teach them and those of students from previously colonized groups.

An additional manifestation of 'coloniality' that constrains the successful academic performance of black students in South African universities is the strong framing of the language of instruction and the norm of high levels of English language proficiency. Students from poor schools are

-

⁸ It is important to note that in his work on pedagogic rights, Bernstein himself opposed a model of assimilation and remedial education for working class pupils.

⁹ While it is true that many ED practitioners have challenged this model at an agentic level in their own classrooms, my argument is that we have failed to adequately challenge the curriculum structures and mainstream curricula of our institutions. Working with the two concepts 'epistemological access' to 'powerful knowledge' have further subdued this challenge.

forced to perform in an-other language without the requisite cultural capital to support it (Bangeni & Kapp 2017; Christie & McKinney 2017). This negation and devaluing of their being, languages and cultures robs students of motivation and agential resources to make their own meanings and engage actively in the learning process.

Thoughts on a Way Forward

So, what does this mean for undergraduate teaching practice in South Africa? In this paper I have argued that in post-colonial contexts, especially post the student protests in historically white South African universities, it is urgent for some of us working in ED to re-think our use of the concepts 'epistemological access' to 'powerful knowledge' when used within curriculum structures that perpetuate a developmentalist paradigm. This is particularly important if we are to erase the legacy and culture of coloniality in our institutions and ensure that conditions for learning pertain for all students. In HWUs, it is particularly urgent that black students feel 'at home' in their universities, they must have their sense of agency restored and come to recognise themselves as sources of meaning-making. More widely, the recognition of indigenous cultures and languages for academic purposes and the employment of multi-lingual lecturers and tutors will be crucial going forward.

That said, new sets of knowers in the postcolony are not anti-modern, nor are they advocating a return to 'pure' indigenous knowledges and world views. The students I teach desire modernity but without the baggage and humiliation of coloniality; they want to appropriate modernity in their own ways for their own ends and contexts. Thus, I am not suggesting we should entirely abandon the work entailed in facilitating access to the what and how of knowledge practices. Rather we should broaden the concept of 'epistemological access' to include socio-cultural and ontological access and take into account the effects of our own positionality and institutional roles. Simply put this would entail subverting and challenging the structural, cultural and institutional legacies of colonialism and undoing the ways that coloniality positions us and shapes our subjectivities. We should stress the importance of making the curriculum accessible to all – not only in our own ED classrooms, but across the mainstream curriculum. This implies working with lecturers to ensure that valued knowledge and skills are recontextualized in ways that resonate with the lifeworlds, desires, concerns and projects of all students. As

lecturers and ED practitioners we should be capable of recontextualized in ways that resonate with the lifeworlds, desires, concerns and projects of all students. If the curriculum fails to offer ontological affirmation and respect to students from previously colonised groups, their learning potential will be blocked by affective and motivational factors and they will fail to make their own meaning and internalise the knowledge, regardless of its 'power'.

What does this mean for the ED project? The project will have to be reconceptualised and restructured outside of a developmentalist paradigm. This means abandoning the two-track curriculum structure for undergraduate degrees. It is no longer tenable to place students into separate 3 and 4-year degree programmes with the latter looking remedial for students of a particular racial profile¹⁰. As long noted in ED circles, the mainstream undergraduate curriculum and the culture of the HWUs will have to change (be decolonised) to accommodate the students – and not the other way round. Student support – whether academic, pyscho-social or curriculum advice – should be fully integrated into regular undergraduate curricula and available for all students as and when they chose to use it.

What does this mean for curriculum knowledge? If the concept 'powerful knowledge' is used to maintain an untouchable universal status for disciplinary knowledge that is blind to its social relations, then this normative commitment that is blind to its own coloniality should be abandoned. However, while the decolonial critique on South African campuses has highlighted ontological and experiential issues (for example Curriculum Change Framework, 2018) it is in danger of reducing knowledge to power relations (only)¹¹. As argued above, the position advocated here is to agree that social identity is salient to epistemic judgement, but at the same time to reject social identity on its own as sufficient grounds for making a knowledge claim. Going forward, if it were possible to extract some of the analytic tools from the SR school's normative and ontological framing, these might still be useful for purposes of curriculum analysis and design. For example, Fataar (2018) has

¹⁰ This means that the current criteria for earning Foundation Grant subsidy from the DHET awarded only for students on programmes and courses that provide 'additional teaching input' (DHET, 2012) should be challenged.

¹¹ This may explain why decolonial critiques tend to work at high levels of abstraction, without providing clear guidelines for knowledge selection and curriculum design.

argued recently that the SR school's tools for analysing and differentiating knowledge structures may be useful to the decolonial movement in providing a principled approach to the selection of curriculum knowledge. Following Muller (2009) and Shay (2015), he suggests that the analytic distinction between conceptual and contextual coherence may be useful for this purpose. Similarly, I would venture that Maton's distinction between epistemic and social relations to knowledge could help identify which types of knowledge are most amenable to being decolonised.

That said, the answers to questions about legitimating curriculum knowledge are seldom determined on the basis of educational theory and principle alone. Instead they will emerge through actual curriculum debates and contestations. As Bernstein noted in another context,

Whoever appropriates the (pedagogic) device, has the power to regulate consciousness. Whoever appropriates the device, appropriates a crucial site for symbolic control. The device itself creates an arena of struggle for those who are to appropriate it' (Bernstein 2000:38).

Curriculum struggles are usually resolved through power struggles and seldom on the basis of sound curriculum theory.

References

- Abbott, A. 2001. *Chaos of Disciplines*. Chicago: The University of Chicago Press.
- Alcoff, L.M. 2011. An Epistemology for the Next Revolution. TRANSMODERNITY: Journal of Peripheral Cultural Production of the Luso-Hispanic World 1: 68 - 78.
- Allen, A. 2016. *The End of Progress: Decoloizing the Normative Foundations of Critical Theory*. New York, Columbia University Press. https://doi.org/10.7312/alle17324
- Archer, M.S. 1996. *Culture and Agency*. Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9780511557668
- Bangeni B. & R. Kapp. (eds.) 2017. *Negotiating Learning and Identity in Higher Education: Access, Persistence and Retention.* London: Bloomsbury Academic. https://doi.org/10.5040/9781350000223

- Bernstein, B. 2000. *Pedagogy, Symbolic Control and Identity: Theory, Research, Critique*. Oxford: Oxford, Rowman & Littlefield.
- Bhaskar, R.R. 2016. *Enlightened Common Sense: The Philosophy of Critical Realism*. London and New York: Routledge Taylor & Francis Group. https://doi.org/10.4324/9781315542942
- Biko, S. 2010. I Write What I Like. Johannesburg: Picador Africa.
- Boughey, C. 2007. Educational Development in South Africa: From Social Reproduction to Capitalist Expansion? *Higher Education Policy* 20: 5 18. https://doi.org/10.1057/palgrave.hep.8300140
- Boughey, C. 2010. Academic Development for Improved Efficiency in the Higher Education and Training System in South Africa. Pretoria: Development Bank of South Africa.
- Bradbury, J. & R. Miller 2011. A Failure by Any Other Name: The Phenomenon of Underpreparedness. *South African Journal of Science* 107: 1 8. https://doi.org/10.4102/sajs.v107i3/4.294
- Cesaire, A. 2001. *Discourse on Colonialism*. New York: Monthly Rreview Press.
- Chatterjee, P. 2011. *Lineages of Political Society: Studies in Postcolonial Democracy*. New York: Columbia University Press.
- Christie, P. & C. McKinney 2017. Decoloniality and 'Model C' Schools: Ethos, Language and the Protests of 2016. *Education as Change* 160 180. https://doi.org/10.17159/1947-9417/2017/2332
- Clegg, S. 2009. Forms of Knowing and Academic Development Practice. Studies in Higher Education 34: 403 - 416. https://doi.org/10.1080/03075070902771937
- Council on Higher Education 2015. Vital Stats for Public Higher Education 2013. Pretoria: CHE.
- Curriculum Change Working Group 2018. *Curriculum Change Framework*. Cape Town: University of Cape Town.
- Department of Higher Education and Training 2012. Foundation Provision in Ministerially Approved Programmes. Pretoria: DHET.
- Ensor, P. 2003. The National Qualifications Framework and Higher Education in South Africa: Some Epistemological Issues. *Journal of Education and Work* 16: 325 346. https://doi.org/10.1080/1363908032000099476
- Escobar, A. 2002. Worlds and Knowledges Otherwise: The Latin American Modernity/ Coloniality. *Tercer Congreso Internacional de Latin Americanistas en Europa*. Amsterdam.

- Escobar, A. 2010. 'Worlds and Knowledges Otherwise': The Latin American Modernity/ Coloniality Research Program. In Mignolo, W. & A. Escobar (eds.): *Globalization and the Decolonial Option*. Abingdon: Routledge.
- Fanon, F. 2001. *The Wretched of the Earth.* London: Penguin Books. https://doi.org/10.1007/978-1-137-05194-3 4
- Fataar, A. 2018. (How) can Decoloniality Inform 'Education (Curriculum) Knowledge' Selection? (South African Education Research Association.) Pretoria: SAERA.
- Foucault, M. 2008. *The Government of Self and Others. Lectures at the College de France 1982 1983.* New York, Palgrave Macmillan.
- Gordon, L.R. 2014. Disciplinary Decadence and the Decolonisation of Knowledge. *Africa Development* 39: 81 92.
- Grosfoguel, R. 2008. Transmodernity, Border Thinking, and Global Coloniality: Decolonizing Political Economy and Postcolonial Studies. *Revista Crítica de Ciências Sociais*. Available at: https://www.eurozine.com/transmodernity-border-thinking-and-global-coloniality/
- Grosfoguel, R. 2013. The Structure of Knowledge in Westernized Universities: Epistemic Racism/ Sexism and the Four Genocides of the Long 16th Century. *Human Architecture: Journal of the Sociology of Self-Knowledge* 11: 73 90.
- Heleta, S. 2016. Decolonisation of Higher Education: Dismantling Epistemic Violence and Eurocentrism in South Africa. *Transformation in Higher Education* 1: 1 8. https://doi.org/10.4102/the.v1i1.9
- Hoadley, U. 2008. Social Class and Pedagogy: A Model for the Investigation of Pedagogic Variation. *British Journal of Sociology of Education* 29: 63 78. https://doi.org/10.1080/01425690701742861
- Hugo, W. & V. Wedekind 2013. The Ordering Principles and Operating Principles of Pedagogy: A Reply to Zipin. Southern African Review of Education 19: 167 - 175.
- Kallaway, P. & R. Swartz (eds.) 2016. *Empire and Education in Africa: The Shaping of a Comparative Perspective*. New York: Peter Lang Publishing.
- Le Grange, L. 2016. Decolonising the University Curriculum: Leading Article. *South African Journal of Higher Education* 30: 1 12. https://doi.org/10.20853/30-2-709
- Lea, M.R. & B.V. Street 1998. Student Writing in Higher Education: An Academic Literacies Approach. *Studies in Higher Education* 23: 157 –

- 172. https://doi.org/10.1080/03075079812331380364
- Leibowitz, B. 2017. Cognitive Justice and the Higher Education Curriculum. *Journal of Education* 68: 93 111.
- Leibowitz, B. & V. Bozalek. 2015. Foundation Provision A Social Justice Perspective. *South African Journal of Higher Education* 29: 8 25. https://doi.org/10.20853/29-1-447
- Luckett, K. 2009. The Relationship between Knowledge Structure and Curriculum: A Case Study in Sociology. *Studies in Higher Education* 34: 441 453. https://doi.org/10.1080/03075070902772018
- Luckett, K. 2016. Making the Implicit Explicit: The Grammar of Inferential Reasoning in the Humanities and Social Sciences. *Universal Journal of Educational Research* 4: 1003 1015. https://doi.org/10.13189/ujer.2016.040510
- Luckett, K. 2018. Gazes in the Post-colony: An Analysis of African Philosophies Using Legitimation Code Theory. *Teaching in Higher Education* 24,2: 197 211. Available at: https://doi.org/10.1080/13562517.2018.1476338
- Luckett, K. & S. Shay 2017. Reframing the Curriculum: A Transformative Approach. *Critical Studies in Education*. Available at: https://doi.org/10.1080/17508487.2017.1356341
- Luckett, K. & A. Hunma 2014. Making Gazes Explicit: Facilitating Epistemic Access in the Humanities. *Higher Education*, 67: 183 198. https://doi.org/10.1007/s10734-013-9651-7
- Maldonardo-Torres, N. 2007. On the Coloniality of Being: Contributions to the Development of a Concept. *Cultural Studies* 21: 240 270. https://doi.org/10.1080/09502380601162548
- Maton, K. 2014. *Knowledge and Knowers: Towards a Realist Sociology of Education*. Abingdon: Routledge. https://doi.org/10.4324/9780203885734
- Maton, K. & R. Moore. 2010. *Social Realism, Knowledge and the Sociology of Education*. London: Continuum.
- Mbembe, A. 2016. Decolonizing the University: New Directions. *Arts and Humanities in Higher Education* 15: 29 45. https://doi.org/10.1177/1474022215618513
- McKenna, S. 2003. Changing Discourses of Academic Development. *South African Journal of Higher Education* 17: 60 67. https://doi.org/10.4314/sajhe.v17i2.25299

- Mignolo, W. 2013. Geopolitics of Sensing and Knowing: On (de) Coloniality, Border Thinking, and Epistemic Disobedience. *Confero: Essays on Education, Philosophy and Politics* 1: 129 150. https://doi.org/10.3384/confero.2001-4562.13v1i1129
- Mignolo, W., D 2007. Delinking: The Rhetoric of Modernity, the Logic of Coloniality and the Grammar of De-coloniality. *Cultural Studies* 21: 449 514. https://doi.org/10.1080/09502380601162647
- Mignolo, W. & A. Escobar (eds.) 2010. *Globalization and the Decolonial Option*. Abingdon: Routledge.
- Mignolo, W.D. 2010. Introduction: Coloniality of Power and De-colonial Thinking. In Mignolo, W. & A. Escobar (eds.): *Globalization and the Decolonial Option*. Abingdon: Routledge.
- Mignol, W.D. 2011. Epistemic Disobedience and the Decolonial Option: A Manifesto. *Transmodernity* 1: 3 23.
- Moore, R. 2013. *Basil Bernstein: The Thinker and the Field.* Oxford: Oxon, Routledge. https://doi.org/10.4324/9780203818251
- Morrow, W. 2009. *Bounds of Democracy: Epistemological Access in Higher Education*. Cape Town, South Africa: Human Sciences Research Council.
- Muller, J. 2000. Reclaiming Knowledge: Social Theory, Curriculum and Education Policy. London: Routledge Falmer.
- Muller, J. 2009. Forms of Knowledge and Curriculum Coherence. *Journal of Education & Work* 22: 205 226. https://doi.org/10.1080/13639080902957905
- Muller, J. 2012. Every Picture Tells a Story: Epistemological Access and Knowledge. *Knowledge & Curriculum Symposium*. University of Cape Town: University of Cape Town.
- Muller, J.Y.M. 2014. Disciplines, Skills and the University. *Higher Education* 67: 127 140. https://doi.org/10.1007/s10734-013-9646-4
- Murray, L.I.T. 2007. *The Will to Improve: Governmentality, Development and the Practice of Politics*. USA: Duke University Press.
- Ndlovu-Gatsheni, I.S.J. 2013. Empire, Global Coloniality and African Subjectivity. New York: Berghahn Books.
- Nkrumah, K. 1970. *Conscientism: Philosophy and Ideology for Decolonization*. New York: Monthly Review Press.
- Nyerere, J. 1968. *Freedom and Socialism*. Dar es Salaam: Oxford University Press.

- Quijano, A. 2007. Coloniality and Modernity/Rationality. Cultural Studies 21: 168 - 178. https://doi.org/10.1080/09502380601164353
- Rhodes Must Fall (RMF) Movement 2015. RMF Manifesto. Cape Town: UCT.
- Shay, S. 2015. Curriculum Reform in Higher Education: A Contested Space. Teaching in Higher Education 20: 431 - 441. https://doi.org/10.1080/13562517.2015.1023287
- Vorster, J.-A. & L. Quinn. 2017. The 'Decolonial Turn': What does it Mean for Academic Staff Development? Education as Change 21: 31 - 49. https://doi.org/10.17159/1947-9417/2017/853
- Wheelahan, L. 2010. Why Knowledge Matters in Curriculum: A Social Realist Argument. Abingdon: Routledge.
- Young, M.F.D. 2008. Bringing Knowledge Back In: From Social Constructivism to Social Realism in the Sociology of Education. Abingdon: Routledge. https://doi.org/10.4324/9780203073667
- Zipin, L., A. Fataar & M. Brennan. 2015. Can Social Realism do Social Justice? Debating the Warrants for Curriculum Knowledge Selection. Education as Change 19: 9 - 36.

https://doi.org/10.1080/16823206.2015.1085610

Kathy Luckett **Humanities Education Development Unit** University of Cape Town Kathv.luckett@uct.ac.za

Just(ice) Do It! Re-membering the Past through Co-affective Aesthetic Encounters with Art/ History

Nike Romano

Abstract

The article explores the possibilities of reconfiguring an Extended Curriculum Programme's history of art and design curriculum in a South African university of technology and examines whether critical arts-based pedagogical encounters can affect students and my own becoming. To this end, the paper describes and analyzes an art history pedagogical encounter that explores ways in which educators and students might respond to calls to decolonise the academy and work affirmatively with difference(s) both within classroom encounters and society at large. The paper draws on the work of Donna Haraway, Karen Barad and Bracha Ettinger, three feminist theorists who move beyond binary 'othering' and explore notions of both/and conceptions of difference(s) and share a common understanding of subjectivity as partial, co-affecting and coemerging. The entanglement between the afore mentioned theories brings together posthuman(ist) theories of diffraction and Ettinger's human(ist) matrixial theory that emerges out of her psychoanalytic and aesthetic practices. Rather than position them as incompatible, it is my hope that by reading them through each other, new possibilities for shifting the binaries between, to quote Thiele (2014: 203), 'what supposedly counts as posthumanism and humanism respectively' may emerge.

Keywords: Critical arts-based pedagogies, decolonisation, posthumanism, matrixial theory, feminist new materialism, hauntology

Raising questions of history, memory, and politics (all of which are rooted in and invested in particular conceptions of time and being) ... [are] ... about the possibilities of justice-to-come, the tracing of entanglements of violent histories of colonialism (with its practices of erasure and avoidance as an integral part of an embodied practice of re-membering – which is not about going back to what was, but rather about the material reconfiguring of spacetimemattering in ways that attempt to do justice to account for the devastation wrought as well as to produce openings, new possible histories by which time-beings might find ways to endure (Karen Barad 2018:62).

Introduction

In the context of ongoing contestations within institutions of higher education in South Africa, this article describes and analyzes an art history pedagogical encounter that sought to find ways in which educators and students might respond to calls to decolonise the academy and work affirmatively with difference(s) both within classroom encounters and society at large. Located in the Design Extended Curriculum Programme (ECP) Foundation course of the Cape Peninsula University of Technology (CPUT), the research explores the possibilities of reconfiguring a history of art and design curriculum in a South African university of technology and examines whether critical arts-based pedagogical encounters can affect students and my own becoming.

The aim of CPUT's ECP is to increase the throughput rate of at risk students who, due to their secondary education backgrounds, may not be adequately prepared for higher education/university study. Following the guidelines for the implementation of ECPs at CPUT, the enquiry adopts multifaceted pedagogical approaches that seek to provide students with 'extensive pedagogic curricula and psycho-social support in order to support students' transition to university learning and preparing them for the mainstream programmes that they will join the following year'.

Ndlovu-Gatsheni (2016) notes that South Africa continues to be 'haunted by the struggle for inclusion and equality by those who have been

Nike Romano

excluded, peripheralised and pauperised since the time of colonial encounters'. These hauntings are imbrocated in CPUT, an institution that is traumatised on many levels. For example, following the 2001 National Plan for Higher Education, CPUT was grafted from the merger between two Technikons that had been conceived within the violent history and logic of apartheid South Africa (see Gachago et al. 2015 for the effects of merging). Furthermore, the campus is built on the ruins of District Six1, a vibrant mixed-race community that was annihilated after the land was declared a whites-only area under the Group Areas Act of 1950. More recently, student protests that highlight the ongoing struggles that students face on a daily basis continue to haunt the troubled institution by challenging ongoing epistemological domination and cognitive injustice, and demanding quality, relevant and fee free higher education (Ndlovu-Gatsheni 2016). It is within these interconnected layers of trauma and troubling times that I explore how teachers and learners might cocreate socially just pedagogies through pedagogical encounters that foreground the need to acknowledge, respect and work affirmatively with differences so as to create spaces in which transformation can occur.

Given the complexity of the above mentioned histories, the paper will argue that affective encounters with art history can offer possibilities for students' and my own becoming, within the university. In particular it will foreground the need for both lecturers and students to deal with the ongoing traumas associated with historical apartheid injustices that affect our lives, as well as site-specific traumas that arose out of student protest action that resulted in the early closure of our campus in 2017. In this regard, the research outlines a pedagogical strategy that activates possibilities for participants (both students and myself) to grapple with our asymmetrical and ambivalent past/presents in order to surface, access and bear witness to the trauma of each other in ways that are neither engulfing nor assimilating². This is important because it not only foregrounds the crucial role that relational pedagogies play

¹ District Six was a municipal district of Cape Town that was home to a mixed community of freed slaves, merchants, artisans, labourers and immigrants. In 1966 it was declared a white area under the Group Areas Act of 1950. More than 60 000 people were forcibly removed to outlying areas of Cape Town, their houses were flattened by bulldozers.

² In this context, trauma is therefore understood as grounded in an ethics of solidarity, compassion, and encounter.

in challenging traditional hierarchies between lecturer/learner, but also offers the possibilities for building trust and solidarity during classroom encounters.

Given the precarious state of the university after months of ongoing student protest action the previous year, the lesson sought to work with epistemological imperatives that would have ongoing ethico-ontological effects on students as they embarked on their university careers. At the same time it foregrounded some of the complexities and ambivalences associated with the teaching and learning of art history, a discipline that is both founded on and embodies Eurocentric cultural hegemonic ideologies that are 'embedded in both theory and institutional and pedagogical practices' (Braidotti 2013:2).

With this in mind, as educator, the challenge was to find ways of both critically disrupting the pejorative western canon of art history without reinforcing it as normative, whilst positioning students as central rather than marginalised within the university. To this end, critical posthumanism/ feminist new materialism and critical arts-based pedagogies provide the theoretical lenses through which an understanding of how students' lived experience is both central to and productive of new knowledges.

To begin, I summarise key debates about decolonisation of the university. I then locate the research within a critical posthumanism/ feminist new materialism theoretical framework. This is followed by the case study and pedagogical findings that continue to inform my practice. Strands of students' writings as well as excerpts of my own reflexive journalling are interwoven through this text as we research-create³ (Manning 2016) and render each other capable throughout relational encounters with art/ history (Harraway 2016).

Summary of Decolonisation Debates

The Council of Higher Education's November 2017 issue of *Briefly Speaking*, arranges the debates around decolonisation into four themes that I summarise in what follows. The *first* deals with what content is taught, and calls for content that is 'relevant, effective and empowering for the people of Africa

_

³ Manning argues that the term research-creation opens up the differential between making and thinking and offers a 'fertile field for thinking this coming-into-relation of difference' (Manning 2016:11).

and, more particularly, for the immediate African societies the universities serve' (Nkoane 2006:49).

Premised on an understanding of academic literacies as socially constructed, the *second theme* focuses on the transformation of how content is taught. Arguing that academic literacies are not a value-neutral set of skills (Boughey & McKenna 2016), it becomes critical that educators do not assume prior knowledge as this can result in students feeling alienated and pressurised to assimilate into the 'dominant meanings, norms, codes, practices and values of academia' (Briefly Speaking 2017:5). It is imperative therefore, that in order to decolonise, students become co-constructors of a curriculum that is reconfigured as 'a co-constructed set of understandings rather than a static object that students passively receive' (2017:5). Considering the above imperatives, finding ways of working with art/history so as not to render those students whose indigenous knowledges and histories have traditionally been excluded to experience feelings of deficit due to lack of cultural capital (Bourdieu 1979) becomes key.

Concerned with the Cartesian dualist structure of the academic project, the *third theme* focuses on foregrounding of 'subjugated knowledges' and troubling of the split between epistemology and ontology that privileges knowledges based on western rationalism over indigenous knowledges (Ndlovu-Gatsheni 2014). Following on from this, the *fourth theme* attends to how social and power relations are practiced in pedagogical encounters, as well as between the researcher and those being researched. For the purposes of this article, the above-mentioned themes are read through one another because they are differentially entangled and all have impact on and are implicated in this study.

Theoretical Framework

Working in the field of visual art/design, I am drawn to theoretical frameworks that theorise the process of diffraction as a way of seeing and understanding the world differently. In this regard, I turn to feminist new materialism/critical posthumanism theories that trouble binary logics that separate teacher/student and researcher/researched and reconceptualise them as co-creative, becomingwith and co-response(a)ble (Bozalek & Zembylas 2016). Bozalek & Zembylas (2016) also argue that they challenge neoliberal society's privileging of binary thinking that valorises the human over the non-human, the individual over the

collective and the discursive over the material world. Accordingly, rather than limit understanding to a representationalist view of words and things, emphasis is placed on relationships and importantly, on finding commonalities (rather than differences) in human and non-human entanglements.

I refer to Donna Haraway (1988; 2000; 2016), Karen Barad (2007; 2010; 2014; 2017; 2018) and Bracha Ettinger (2005a; 2005b; 2006), three feminist theorists who move beyond binary 'othering' and explore notions of both/and conceptions of difference(s) and share a common understanding of subjectivity as partial and co-affecting. Following Thiele's (2014) inquiry into 'an ethos of diffraction as primary relating-in-difference', the entanglement between the aforementioned theories bring together posthuman(ist) theories of diffraction and Ettinger's human(ist) matrixial theory that emerges out of her psychoanalytic and aesthetic practices. Rather than position them as incompatible, it is my hope that in reading them through each other, new possibilities for shifting the binaries between, to quote Thiele (2014: 203), 'what supposedly counts as posthumanism and humanism respectively' may emerge⁴. I elaborate on these theorists in turn.

Haraway's seminal work on situated knowledges (1988) critiques Western Enlightenment notions of universal knowledge as value-free because it positions students as situated generators of knowledge in their own right and thereby challenges unequal power relations embedded in traditional pedagogy and curricula. Of relevance too, are her more recent writings on 'staying with the trouble' (2016) whereby she advocates working affirmatively with ambiguous and damaged pasts in order to build more sustainable futures. By urging us to 'make trouble ... [and] ... stir up potent response[s] to devastating events ... [and] ... settle troubled waters and rebuild quiet places' (2016:1), Haraway proposes response-ability as an ethical way of being in the world and argues that rather than 'clearing away the present and the past in order to make futures for coming generations', we render each other capable through our ongoing relations in the thickening present (2016:1).

Exploring optics in science studies, Haraway moves beyond notions of reflectivity and reflexivity that 'displace the same elsewhere', and turns to the

1

⁴ Thiele's proposition is helpful in the South African context where an ongoing critique of posthumanism is that it ignores the structural needs of those presently disempowered, and that it assumes that all people are treated equally as humans.

Nike Romano

'process of diffraction as an optical metaphor for another kind of critical consciousness ... [that is] ... committed to *making* a difference' (2000:102) (e.a.). Significantly, the process of diffraction maps both the process and where the effects of difference appear and, as Haraway explains, makes visible 'all those things that have been lost in an object; not in order to make the other meanings disappear, but rather to make it impossible for the bottom line to be one single statement' (Haraway 2000:105)⁵.

Building on Haraway's (2000) recognition of the possibilities that diffraction offers the understanding of difference and of making a difference that matters, Barad's posthumanist theory of agential realism, that is generated out of 'a diffractive reading of quantum physics through contemporary issues of social justice', reveals difference/s as ongoing and non-binary (2018:G110). In/formed by physicist Niels' Bohr's diffraction experiments that show how the process of diffraction, as a methodological apparatus, implicates humans in the production of knowledge, Barad coins the term 'ethico-ontoepistemological' thus drawing attention to how ethics, ontology and epistemology are mutually constituted. The shift towards an ethico-ontoepistemological understanding of knowledge production de-centres the dominant representational role that language plays in positioning humans as separate from the world and foregrounds performativity that shifts the focus from 'descriptions of reality ... to matters of practices/doings/actions' (Barad 2003:802). This approach 'allows matter its due as an active participant in the world's becoming ... and it provides an understanding of how discursive practices matter' (Barad 2007:136). By highlighting the relationship between ontology, materiality and agency, Baradian ethics reveals the crucial role that response(a)bility and accountability play in the lively relationalities of becoming of which we are a part (2007:393). This is usefeul within in the context of higher education because it offers ethical possibilities and responsibilities for teachers and students in shaping the future for humans, nonhumans and the material environment in the production of knowledge (Dolphijn & van der Tuin 2012:69).

⁵ Haraway elaborates 'diffraction does not produce 'the same' displaced, as reflection and refraction do. Diffraction is a mapping of interference, not of replication, reflection, or reproduction. A diffraction pattern does not map where differences appear, but rather maps where the effects of difference appear' (Haraway 2000:101).

A quantum understanding of diffraction troubles Newtonian understandings of the universality and homogeneity of space, time, and matter, and also undoes the idea of dichotomy itself (Barad 2017: G110). Accordingly, Barad develops the notion of the agential cut that – rather than split entities into two separate parts – cuts 'together-apart' as a 'material act that is not about radical separation, but on the contrary, about making connections and commitments' (Barad: 184). Barad writes 'there is no singular act of absolute differentiation, fracturing this from that, now from then' (2014:168). Instead differences shift within 'every "thing", reworking and being reworked through reiterative reconfigurings of spacetimematterings⁶ [...] each being (re)threaded through the other' (2017:178 - 179). Barad's insights are significant for the teaching and learning of art history because they reveal how the present is full of ongoing intra-actions⁷ that continue to be in/formed by 'ghostly causalities' that trouble time. Drawing on Derrida's (1994) notion of hauntology, she writes 'Hauntings are not immaterial, and they are not mere recollections or reverberations of what was. Hauntings are an integral part of existing material conditions' (2018: 74). It is to these hauntologies from the past with/in the present/future, that the case study will turn.

Ettinger's theory of matrixial trans-subjectivity emerges out of a psychoanalytic and aesthetic register that also disrupts the linearity of Cartesian time. Working with arts-based practices, that she terms 'artworking', Ettinger explores trans-subjective aesthetic encounters that are generated within a matrixial time-space that 'links the time of too-early to the time of too-late and plants them in the world's time' (Ettinger 2001:710). Ettinger conceptualises matrixial aesthetic practice as a 'means to effect the passage to

_

⁶ Barad explains that the 'past' and the 'future' are iteratively reworked and enfolded through the iterative practices of spacetimemattering because space and time are phenomenal and are intra-actively produced in the making of phenomena. Therefore neither space nor time exist as determinate givens outside of phenomena (2007:315).

⁷ Barad's neologism 'intra-action' signifies the mutual constitution of entangled agencies. She writes, '(intra-action is) ... in contrast to the usual "interaction", which assumes that there are separate individual agencies that precede their interaction, the notion of intra-action recognizes that distinct agencies do not precede, but rather emerge through, their intra-action' (Barad 2007:33).

Nike Romano

a future that accepts the burden of sharing the trauma while processing and transforming it ... whereby we can be with and remember for the other through the artistic act and through an aesthetic encounter' (Ettinger in Pollock 2010: 830).

Ettinger's theorisation of art as a 'transport station of trauma' (2005b: 711) activates a space-time that not only looks backwards but also forwards. thus reinforcing her proposition that art 'has to do with primary meanings and imaginable futures for the humane' (Kaiser & Thiele 2018: 105). Art in the matrixial functions as a relational postconceptual practice in which art's function moves beyond art as testimony (given by the witness), towards an aesthetic wit(h)nessing. In other words, art has the potential to activate a compassionate and co-affective rapport between the artist, artwork and viewer that offers healing possibilities of 'historical memory for the injured other ... that is simultaneously witness and wit(h)ness'8 (Pollock:2012). Arguing that the artist/viewer 'can't not-share with an-other, she can't not witness the other' during matrixial aesthetic encounters, instead Ettinger writes, 'they become partialised, vulnerable and fragilised wit(h)ness to one another' (2005:704). Her construction of the neologism 'wit[h]nessing' expands the notion of witnessing – that sets people apart from and therefore reinforces othering – in order to accommodate a compassionate response-ability of 'being with' and 'bearing witness' to the trauma of the other. Unlike an engulfing merging-with the other, matrixial wit(h)nessing does not give way to assimilation (Ettinger 2009; 2005b). Pollock writes that the insertion of the letter (h) into the word witness embodies the notion of being beside the other in a gesture that does not risk the assimilation of the other and is therefore 'much more than mere ethical solidarity' (2010:831).

Matrixial theory offers helpful insights for pedagogical praxis in which co-response-ability becomes key to building trust and solidarity within the learning environment. Arguing that that there is no discrete separation between subject and object, Ettinger foregrounds the transconnectedness of matrixial trans-subjectivity that is incapable of not sharing (2009: 9). Importantly,

⁸ The artist who is working through the cross-inscribed traces and is worked through by virtual, phantasmatic or traumatic real strings practices her art – art that is an aesthetic-in-action – as a healing, healing that is an ethics-in-action. Such is the co-response-ability of artworking and of healing in copoiesis (Ettinger 2005:708).

Ettinger cautions that while matrixial aesthetic encounters offer possibilities for healing, they are also potentially risky because they inhabit matrixial timespace in which individual boundaries are transgressed and call forward selfrelinquishment and fragilisation (2005:705). As lecturer, I recognise that while entering into open and compassionate co-response-ability with students as we wit(h)ness each other through co-poietic encounters requires risk, matrixial encounters offer the potential of transforming traumatic events into subjectivising potentiality. The role that research-creation plays in affectively responding to/within trauma-and-affect as generative, rather than pathological, supports the move away from the deficit model that has historically been central to DHET notions of foundation pedagogy (Leibowitz & Bozalek 2015:11). It seeks instead, to move beyond 'disadvantaged' narratives about victimhood, or pain, that rely on a deficit model, and explore possibilities of research-creation that think-with and move-with students' productive and affective sites of resistance in order to 'open new critical spaces that can sustain the connection between bearing witness and political transformation' (Zembylas 2006: 324).

The following case study focuses on a diffractive intra-action in which Cartesian spatio-temporality is troubled by the entanglements of artworks from the 'here and now' with artworks from the 'there and then' (Barad 2010: 244)⁹. The intention is to find different ways of working with the past by re-presenting and troubling histories so as to make a difference that matters (Barad 2007).

Case Study

The case study describes and analyses the introductory lesson of the 2018 theory course that aims to familiarise students with the discipline of art and design history and introduce them to current debates around the role that art and design history performs in contemporary design practices. While the pedagogical aims included orienting students towards the kind of material the syllabus would cover, they also emphasised the importance of relationality and

-

⁹ Barad conceptualises diffraction as an iterative (re)configuring of patterns of differentiating-entangling in which there is no moving beyond the past and there is no absolute boundary between here-now and there-then. For her, there is nothing that is new and there is nothing that is not new.

Nike Romano

how students could expect the content to be 'taught' during the course of the year.

With this in mind, the broad strategy focused on threading student's subjectivities through these art/histories, in order to foreground their lived experience as central to their learning. At the same time, it aimed to highlight the valuable role that art/history can contribute to the re-presenting of troubled histories that continue to affect our lives on a daily basis. Following Haraway's understanding of diffraction as an apparatus for making visible invisible histories, it seemed fitting to begin with the academy as site of contestation because it impacts directly on students. As a methodology, the intra-active diffractive process generated debates across the spatial/temporal through students and my subjective lived experience.

Barad provides helpful strategies in dealing with our troubled times by troubling understandings of time itself. She does this in order to 'undo pervasive conceptions of temporality that take progress as inevitable and the past as something that has passed and is no longer with us as is' (2018:57). These insights informed the conceptualisation of the lesson which referenced the pivotal moment when the statue of arch-colonialist Cecil John Rhodes was removed from the University of Cape Town's (UCT) campus¹⁰. Fisher argues that 'haunting happens when a place is stained by time, or when a particular place becomes the site for an encounter with broken time' (2013:19). For UCT students, this time had come. Protesting against the systemic violence of the predominantly colonial culture of whiteness within the academy that left them feeling pressurised to assimilate, for students the statue not only reinforced Eurocentric hegemonic ideologies and practices, but also served as a haunting reminder that even though South Africa's democracy began in 1994, transformation had not taken place throughout South African Higher Education.

The #rhodesmustfall movement garnered a groundswell of popular support and in the aftermath of the removal of the statue, the #feesmustfall campaign that called for fee free higher education for all and the insourcing of outsourced workers gathered momentum. What followed was two years of protest action at higher education institutions (HEIs) across the country. In 2017, CPUT's classes were interrupted from August and in September after

 $^{^{10}}$ After months of student protests led by the #rhodesmustfall movement, the statue was removed on 15 April 2015.

several arson attacks and violent protest action, the university closed prematurely for the year. The effects of the protests reinforced the precarious position of the institution which in turn affected those students who were beginning their studies in 2018. Many of them had applied for admission in 2018, but because of the four month closure, their applications were not processed timeously and they never knew, until the last minute, whether they would be able to begin their studies the following year. Due to the intensity of the protests and the damage to property, it was also unclear whether the university would be up and running and open in time for the 2018 academic year.

At the beginning of 2018, it felt important to reference these uncertainties in order to encourage beginner students to actively grapple with the complexities and contestations around South African higher education. At the same time, rather than limit the discussion to the fall of Rhodes, and risk paradoxically re-positioning him as central, I wanted to open up debates across the spatial/ temporal that could forge understandings of art/ history's performative function and in so doing, highlight the ethico-onto-epistemological implications that arise out of material-discursive practices. By adopting this strategy, I also hoped that our discussions would surface broader themes around social justice that we could re-turn to throughout the course of the year. My understanding of re-turning follows Barad's (2018) notion of returning that is more than simply revisiting broader themes in a linear way. Rather it is about looping back to themes and 're-turning and turning our attention to a multiplicity of entangled histories' (Barad 2018:69).

Mignolo argues that given the ubiquitous presence of Western Modern aesthetics, decolonial thinkers should start with the legacy of modern aesthetics and its Greek and Roman legacies in order to delink from them (Gatzambde-Fernández 2014: 201). To this end, the lesson was structured around the diffraction of the removal of the Rhodes monument through two additional artworks, the first is the ancient Greek sculpture entitled *Winged Victory of Samothrace*, also known as the *Winged Nike* (See Figure 1) and the second is artist Sethembile Msezane's performance entitled, *Chapungu – the day Rhodes* fell (See Figure 2) that took place as the statue of Rhodes was removed¹¹.

_

¹¹ Unearthed on the island of Samothrace in 1863 by French consul Charles Champoiseau, the *Winged Nike* was sent to France where it remains in the Louvre Museum.



Figure 1 The Winged Goddess of Victory



Figure 2 Sethembile Msezane performing Chapungu the day Rhodes Fell

The pedagogical aim was to encourage students to engage with South Africa's colonial cultural legacy through and across time, in order to explore the relationship between art and power, as well as the transformative potential role that art plays in inspiring and building social justice. Moreover, following Garneau (2013) who argues that decolonial aesthetic activism should move beyond the mere revival of Indigenous cultural practices towards the need for 'Indigenous ways of knowing and being to reinvigorate and rebalance Western aesthetic practices, even to the point of de-Westernizing them', I was curious whether the diffractive encounter between an indigenous contemporary South African artwork and an ancient Hellenistic sculpture artwork might thicken an understanding of both artworks.

While Msezane's performance did not explicitly reference the *Winged Nike*, I was struck by the uncanny resemblance between the two artworks that embody such differing ideologies. I hoped that the patterns of difference generated through their intra-action would offer a useful introduction to the kinds of concerns that the course would be dealing with.

Msezane's performance references and challenges the unmitigated colonial practice of the pillaging of African artefacts, in this case one of the soapstone sculptures of the bateleur/short-tailed eagle, known as the Chapungu, that guarded the Great Zimbabwe settlement site that Cecil John Rhodes bought and housed in Groote Schuur, his residence in Cape Town¹². According to Shona cosmology, the Chapungu is the divine messenger that intercedes between Mwari (the creator of human beings), the ancestral spirits and the living (Matenga 2011). The artists explains, 'The story of Chapungu and Rhodes in the same space and time asks important questions related to gender, power, self-representation, history making and repatriation... On that day, I embodied her existence using my body, while standing in the blazing sun for nearly four hours. Twenty-three years after apartheid, a new generation of radicals has arisen in South Africa From then on, I realized that my spiritual beliefs and dreams texture my material reality' (excerpt from TED talk). Shortly after the removal of the Rhodes statue, the Msezane visited Great

-

¹² The remains are in the house, which was the official residence of eleven Prime Ministers of South Africa, in Cape Town, from 1911 – 1994, before the residence was moved to Westbrooke, under P.W. Botha. The latter was also taken up by Mr. Neslon Mandela, but renamed, as Genadendal, after the 1994 election.

Nike Romano

Zimbabwe and reperformed Chapungu as a symbolic act of returning the bird to its spiritual home (see Figure 3)¹³.



Figure 3 Sethembile Msezane, Chapungu – The Return to Great Zimbabwe. 2015.

Nike, the goddess of Victory was an attribute of Athena and Zeus. Her Roman equivalent was Victoria. With the advent of Renaissance Humanism and subsequent Enlightenment thinking, she has come to embody notions of victory, progress and reason – key tenets that underpin the colonial and imperialist projects that in/form South Africa's violent history. The overlays of this construct are felt in the haunting presence of the statues of Victoria,

¹³ See Msezane's TED talk in which she tells the story of Chapungu at https://en.tiny.ted.com/talks/sethembile_msezane_living_sculptures_that_stangle_dfor_history_s_truths

Queen of the British Empire, that stand proudly outside the houses of parliament in Cape Town and in the Botanical Gardens in Durban. (See Figure 4 and Figure 5).



Figure 4 Queen Victoria, Houses of Parliament, Cape Town

Mindful of the sensitivity and complexity that the diffraction of the above mentioned artworks might generate necessitated an openness to risk and vulnerability on the part of participants, I was guided by Boler's (1999) writings on pedagogies of discomfort that provide a useful framework within which to explore the relationship between emotions and power. Boler urges educators to take collective responsibility in recognising how their economic and social positions are implicated in their teaching practices. Furthermore, her critique of 'passive empathy' alerts educators to the risk of both distancing the other 'whom we cannot directly help' whilst simultaneously distancing ourselves from recognising our own implication 'in the social forces that create the climate of obstacles the other must confront' (1999:158). In other words, in addition to teaching critical thinking, Boler calls on educators to take responsibility for their implicatedness in historic moments and highlights the need for students and educators to develop a nuanced ethical language that recognizes the ambiguity of ethical interrelations and acknowledges the

Nike Romano

complexity of working with/in difference during classroom encounters. In this regard, her proposal of 'collective witnessing' that is 'understood in relation to others, and in relation to personal and cultural histories and material conditions' (1999:178).



Figure 5 Queen Victoria, Botanical Gardens, Durban

Given the complex and ambiguous nature of the content, I understood, with some trepidation, that as educator I would have to 'wing it' because the encounter would be unpredictable. I drew on Roth's (2014) post-constructivist perspective of the 'living curriculum' and Seller's (2013) notion of the 'becoming curriculum' because they emphasise the need for ongoing, contingent response(a)bility and openness to indeterminant outcomes in pedagogical practice. I was curious to participate in an open-ended process that would reveal a multitude of patterns of difference that could trouble the flattening effects of dualistic thinking practices that reduce differences to either/or.

To begin students watched a short documentary about Msezane as well as video footage of her performance. Thereafter students were introduced to the *Winged Nike*. Working in small groups, students discussed the similarities

and differences between the artworks. The intention was not one of juxtaposition that reinforces binary thinking, rather the aim was paradoxically to expose the limitations of binary logic as students begin to trace the patterns of difference that emerge from the diffractive overlays and in so doing, 'question the very notion a binary itself' (Barad 2014:174). Some examples of similarities included how both artworks reference the female body, have wings and were created to perform in public spaces. Students also noted differences such as time and context, one is human while the other is stone, the one embodies notions of victory and power, that the other seeks to overturn. However, it was the commonalities that the intra-action generated out that were significant to the teaching and learning encounter. After reporting back to the plenary, students were tasked with an in depth written assignment in which, rather than working with a given definition of decolonisation, they explored their subjective opinions and understandings of decolonisation and considered the transformative possibilities of artworks in bringing about social change.

Registered for a masters in fine art at UCT, Msezane describes how, on coming to Cape Town, she was struck by the proliferation of public sculptures commemorate South Africa's colonial and apartheid history throughout the city. She set about redressing the absence of the black female body in public space in a series of performances that insert the black female body in public space.

Walking down the street in the city that was now my home, I couldn't identify with the symbols and the figures that were supposed to represent a kind of national identity. These [monuments and statues] were white men ... They were colonial ... Dutch, Afrikaner nationalist men... I couldn't see anything African ... anything that was women ... anything that was like my mother and my aunts, or women that I knew. So for me, it was a task of reclaiming histories that had been omitted from public spaces¹⁴.

Msezane's words summarise the challenge of teaching relevant art/history in South Africa after centuries of systematic exclusion and absence on the one

[.]

¹⁴ Extract taken from Matroos, J. 2018. Sethembile Msezane on why she uses her art as resistance, at: http://www.designindaba.com/articles/creative-work/sethembile-msezane-why-she-uses-her-art-resistance

Nike Romano

hand and the simultaneous inclusion and foregrounding of an art/history that promotes colonial ideology and hegemony on the other. With this 'double whammy' in mind, the assignment called on participants to engage with Southern Africa's colonial cultural legacy and the arbitrary creation of colonial borders, through and across time in order to understand how art functions as a symbol of power and, as in the case of Msezane's performance, how art offers the transformative potential to inspire and build social justice.

The simultaneous falling of Rhodes and the rising of Chapungu was a spectacle that was wit(h)nessed and documented by thousands of students. What follows is the artist's account of the event.

As the time came, the crane came alive. The people did, too – shouting, screaming, clenching their fists and taking pictures of the moment on their phones and cameras. Chapungu's wings, along with the crane, rose to declare the fall of Cecil John Rhodes. Euphoria filled the air as he became absent from his base, while she remained still, very present, half an hour after his removal (Matroos 2018).

In terms of my own privileged subject position as a white, middle-class second generation South African/Greek woman, the haunting of the *Winged Nike* is also my own haunting because it is my namesake. Following Boler's proposal of 'testimonial reading' that encourages the educator to recognise herself as a 'battleground for forces raging...to which [she] must pay attention...to properly carry out [her] task', it was important to acknowledge the legacy of my subjectivity from day one (1999:167)¹⁵. 'Not in my name' is not an option as I recognise the repercussions of my cultural heritage that perpetuates systems of exclusion and exploitation. Similarly, encouraged by Haraway, I explore possibilities of working affirmatively with the complexities of situatedness, complicity and partial subjectivity in order to recuperate ambivalent losses and non-innocent pasts that continue to affect the present so that, 'like all offspring of colonizing and imperial histories, ... we relearn how to conjugate worlds with partial connections and not universals and particulars' (2016:20).

¹⁵ Boler's (1999: 168) notion of testimonial reading calls for the analysis of the historical genealogy of emotional consciousness as part of the structure that forms and accounts for the other's testimony.

Given students' familiarity with Nike as a global sports brand, the lesson also laid the foundations for deconstructing how notions of power and victory are inextricably linked to Ancient Greek culture's valorisation of the Olympic hero. Similarly, in looking backwards to the construction of the Victory ideal and by drawing attention to the ethical practices of the Nike brand with regards to the exploitation of child-labour in the manufacturing of their products, the encounter also provided an opportunity to engage the underlying cultural biases and imperatives that prop up global capitalism. In addition to making visible new connections of understanding the world implicatedness in its ongoing worlding, the diffractive encounter also drew attention to our ongoing response(a) bility in working proactively in addressing issue of social justice. It seems fitting therefore to create the neologism Just(ice) do it, as a play on the Nike brand slogan, 'Just Do It!', in order to imagine a future of inclusivity and to understand difference as generative and affirmative. At the same time I question my privileged position as is evidenced in the following journal extract.

Can I question students' desire for globally branded goods, the Rolexes, the Adidas, the beats by Dre? Is it my place as a white woman of privilege to point out the inbuilt contradictions of global branding, the social and political implications of buying these products, the effect that they have on social relations, the environment, the reinforcing of the west as the leader of the world?

Concerned with mourning and justice, Barad asks what 'would make it possible to trace the practices of historical erasure and political a-void-ance, to hear the silent cries, the murmuring silence of the void in its materiality and potentiality?' (2018: 64) Her words resonate with an ongoing lament on the part of students who express their sense of loss of and desire for making visible their own histories that were systematically erased by colonial and apartheid hegemonic practices. As one student writes:

In Africa we have been taught that it is okay to undermine our very own intelligence ... We have been taught that the only way to be educated is through thinking like the colonists that occupied our country and exploited our economy. The people that came to our country and labeled our beliefs and culture as witchcraft, and they introduced us to their culture and made us undermine ours.

Unlike the Rhodes statue that looked eastwards towards the sunrise, Msezane turned her back on the statue and faced the university. By inserting herself between the statue and the University buildings, the artist simultaneously redressed the absence and erasure of indigenous histories brought about by colonialism and made visible the spectral possibility of an Afrocentric future.

Msezane is standing there in the crowd while other students remove the statue of the colonial man, she is not even facing the crowd, but what she does is lift her wings once she hears the crowd celebrating. This whole performance shows that Africans were never ready for the Colonial Government. They came while they all were not looking and the same way they came we [s]hall rise with our faces covered showing no individuality, but rising as Africans. Take control of our education, think like the Africans that we are, take back what the colonials stole from us: our culture, dignity and pride. As much as they have undermined us and dehumanized us we are rising above all those things and taking back all that has been stolen/taken.

Some students commented on the vulnerability of the Rhodes statue. As one student writes:

The Rhodes statue was powerless. If it had power, there wouldn't be much joy amongst the students of the University of Cape Town. Throughout that removal process, the statue was vulnerable because it was vandalised before the removal and during the protest.

The *Winged Nike* was also perceived in different ways. For one student it represented how 'Western culture has and still continues to dominate the world', whereas for another student, the artwork functions as 'success, triumph [and] superiority', a third student read the sculpture as a symbol of freedom.

Paradoxically, the intra-action of the two artworks was interpreted by one student as a powerful act of colonising the west. He wrote:

Msezane's performance flipped that notion on its head ... by taking such a powerful symbol, highly esteemed highly European symbol and Africanizing it. In a sense colonializing it, very much like the Europeans did Africa. How ironic. Removing the symbol's old European identity and titling it as *Chapungu-the day Rhodes fell*.

What follows is a summary of the main pedagogical learnings that emerged from the lesson. To begin, the lesson confirmed the significance of working with artefacts that resonate with students' lives. Furthermore, because students could identify with the artist and her performance they understood the importance of symbols and their performative power, as well as their agency to affect change. Following on from this, the pedagogical exchange provided an opportunity for students to foreground their subjectivity in relation to the pressing debates around decoloniality within the academy. In other words, they understood through the material discursive encounter how we are all implicated in these performances for example:

Her bravery is an inspiration to many people around the country period she shows that women should also Stand Up For Themselves. She's powerful, Fearless, brave, strong physically and probably emotionally, spiritually... [She] shows the country of South Africa that the removal of the statue is a symbol that bit by bit South Africa is moving further apart from the British colony and being colonised.

The intra-action also revealed how iterations of the past continue to impact on the present/future as they constantly re-turned to the time of the Ancient Greeks, the time of Colonialism, the moment of the Chapungu rising. Similarly the notion of the future in the present was also evident as students discussed how Msezane's performance in the present would impact on their year ahead.

As a precursor to the year ahead, the lesson laid the foundations for various themes, that include redressing the effects of absence/presence, developing literacies around the representation of the female body, that we returned to throughout the year.

While the diffractive encounter encouraged students to address the concerns around decolonisation, it also afforded them an opportunity to make themselves visible as they position themselves within the academy. Similarly, the initial discussion paved the way for ongoing conversations that dealt

specifically with understanding difference and beginning to build trust as we navigate asymmetrical differences¹⁶ both from the past and the present in the classroom.

With regards my own learnings, I am gaining a better understanding of the notion of response(a) bility, understood in this context as an ability to respond to students, that has become of increasing concern to my practice as educator.

Conclusion

As an introduction to the course, the lesson generated ethico-ontoepistemological effects for students and myself. The encounter also positioned students' knowledges as central to the course from the outset and helped to bridge the transition from community/school lives to their first year in the university. Similarly, by drawing on students' situated knowledges, concerns about epistemological access and the risk of assuming prior knowledge were addressed. Consequently, rather than feeling marginalised and pressurised to assimilate, students affirmed their own knowledges and understandings through their encounter with the artworks. Moreover, contrary to deficit discourses that tend to position first year students as unable to deal with complexity, the open-ended process encouraged students to grapple with layered and interconnected concepts without fear of getting them wrong. The pedagogical encounter also positioned the legacy of my heritage and surfaced the complexities of my implicatedness in the 'historic moment', an issue that continues to haunt and in/form my practice (Boler 1999). Finally, for some of us, the aesthetic encounter activated a matrixial rapport through which the relationship between ethics, epistemology and ontology were enacted as students and I engaged issues of decoloniality, social justice both within the academy and beyond.

The plinth of statue marks the site where the Rhodes statue stood on the UCT campus (See Figure 6). As a rhizomatic assemblage, it traces lines of flight that traverse the past, the present and the future. In addition to remembering the past, graffiti references the ongoing struggles around social and

¹⁶ These asymmetrical differences included between gender, race, class, religion, teacher, student etc.

economic exclusion that defines many South Africans lived (Deleuze and Guattari 1980:9–10).



Figure 6: The remains of the Rhodes statue bearing an inscription of a poem by Rudyard Kipling that reads 'I dream my dream, by rock and heath and pine, Of Empire to the northward. Ay, one land From Lion's Head to Line!' and graffiti demanding a living wage and commemorating the 2012 Marikana Massacre when seventeen striking miners were massacred by South African Security forces.

Acknowledgements

Thanks to my supervisors Professors Vivienne Bozalek and Kathrin Thiele for their ongoing support, generosity and encouragement of my PhD project. I also thank Professor James Garraway for inviting me to the Montfleur writing retreat where much of this article was written. Thanks too, to the reviewers whose incisive and insightful comments enriched this article. Finally I thank the Design ECP students of 2018 who generously participated in this project and who taught me much more than I could ever teach them.

References

- Barad, K. 2007. *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Durham, NC: Duke University Press. https://doi.org/10.1215/9780822388128
- Barad, K. 2010. Quantum Entanglements and Hauntological Relations of Inheritance: Dis/continuities, SpaceTime Enfoldings, and Justice to come. *Derrida Today* 3,2: 240 268. https://doi.org/10.3366/drt.2010.0206
- Barad, K. 2014. Diffracting Diffraction: Cutting Together Apart. *Parallax* 20,3: 168 187. https://doi.org/10.1080/13534645.2014.927623
- Barad, K. 2017. No Small Matter. In Tsing, A., H. Swanson, E. Gan & N. Bubandt (eds.): *Arts of Living on a Damaged Planet*. Minneapolis: University of Minnesota Press.
- Barad, K. 2018. Troubling Time/s and Ecologies of Nothingess: Re-turning, Re-membering and Facing the Incalculable. *New Formations* 56 86. https://doi.org/10.3898/NEWF:92.05.2017
- Boler, M. 1999. Feeling Power: Emotions and Education. New York, NY: Routledge.
- Boughey, C. & S. McKenna. 2016. Academic Literacy and the Decontextualized Learner. *Critical Studies in Teaching and Learning* (*Cristal*) 4.2: 1 9.
- Bourdieu, P. 1979. *Distinction: A Social Critique on the Judgement of Taste*. London and New York: Routledge.
- Bozalek, V. & M. Zembylas. 2016. Critical Posthumanism, New Materialisms and the Affective Turn for Socially Just Pedagogies in Higher Education. *South African Journal of Higher Education SAJHE* 30,3: 193 200.
- Braidotti, R. 2013. Posthumanities. European Educational Research Journal 12,1: 1 19. https://doi.org/10.2304/eerj.2013.12.1.1
- Deleuze, G. & F. Guattari. 1987. *A Thousand Plateaus: Capitalism and Schizophrenia*. Massumi, B. (trans.). Minneapolis: University of Minnesota Press.
- Dolphijn, R & I. van der Tuin 2012. *New Materialism: Interviews & Cartographies*. Open Humanities Press. https://doi.org/10.3998/ohp.11515701.0001.001
- Derrida, J. 1994. *Spectres of Marx: The State of the Debt, the Work of Mourning and the New International*. Kamuf, P. (trans.). New York and London: Routledge.
- Ettinger, B. 2000. Art as the Transport-Station of Trauma. In Ettinger, B.L.

- Artworking 1985 1999. Ghent: Ludion.
- Ettinger, B. 2006. Matrixial Trans-subjectivity. *Theory, Culture and Society* 23,2 3: 218 222. https://doi.org/10.1177/026327640602300247
- Ettinger, B. 2005a. Art, Memory, Resistance. *iframework x ephemera* 5,x: 690 702.
- Ettinger, B. 2005b. Copoiesis. *iframework x ephemera* 5,x: 703 713.
- Ettinger, B. 2009. Fragilisation and Resistance. *Studies in The Maternal* 1,2: www.mamsie.bbk.ac.uk
- Fisher, M. 2015. What is Hauntology? *Film Quarterly* 66,1: 16 24. https://doi.org/10.1525/fq.2012.66.1.16
- Gachago, D., Z. Sosibo, Ndeto & E. Ivala 2015. Nostalgia, Anxiety and Gratification: Narratives of Female Staff in a Merged Higher Education Institution. Alternation Special Edition No 16: 19 43. Available at: http://alternation.ukzn.ac.za/Files/docs/22%20SpEd16/02%20Gachago%20F.pdf
- Garneau, D. 2013. Extra-Rational Aesthetic Action and Cultural Decolonisation. *FUSE Magazine* 36,4.

 See https://e-artexte.ca/id/eprint/25209/1/FUSE_36-4.pdf
- Gaztambide-Fernández, R. 2014. Decolonial Options and Artisti/aestheSic engtanglements: An Interview with Walter Mignolo. *Decolonization, Education & Society* 3,1: 196 212.
- Haraway, D. 1988. Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective. *Feminist Studies* 14, 3: 575. https://doi.org/10.2307/3178066
- Haraway, D. 2000. How Like a Leaf. An Interview with Thyrza Nichols Goodeve/ Donna J. Haraway. New York; London: Routledge.
- Haraway, D. 2016. Staying with the Trouble: Making Kin in the Cthulucene.

 Durham & London: Duke University Press.

 https://doi.org/10.1215/9780822373780
- Kaiser, B. & K. Thiele 2018. If You Do Well, Carry! The Difference of the Humane An Interview with Bracha L. Ettinger. *philoSOPHIA* 8, 4: 10 125. https://doi.org/10.1353/phi.2018.0005
- Leibowitz, B. & V. Bozalek. 2015. Foundation Provision A Social Justice Perspective. *South African Journal of Higher Education* 29,1: 8 25. https://doi.org/10.20853/29-1-447
- Manning, E. 2016. *The Minor Gesture*. Duke University Press. https://doi.org/10.1215/9780822374411

- Matenga, E. 2011. The Soapstone Birds of Great Zimbabwe Archaeological Heritage, Religion and Politics in Postcolonial Zimbabwe and the Return of Cultural Property. Uppsala: Uppsala University.
- Matroos, J. 2018. Sethembile Msezane on Why she Uses her Art as Resistance. Available at: http://www.designindaba.com/articles/creative-work/sethembile-msezane-why-she-uses-her-art-resistance
- Nkoane, M.N. 2006. The Africanisation of the University in Africa. *Alternation* 13,1: 49 69.
- Ndlovu-Gatsheni, S.J. 2016. Decolonizing the University and the Problematic Grammars of Change in South Africa. Keynote address, 5th Annual Students' Conference on Decolonizing the Humanities and Social Sciences in South Africa/Africa, UKZN, 6-7 October 2016.
- Pollock, G. 2010. Aesthetic Wit(h)nessing in the Era of Trauma. *EurAmerica* 40,4: 829 886.
- Roth, W-M. 2014. *Curriculum-in-the-making: A Post Constructive Perspective*. New York: Peter Lang.
- Sellers, M. 2013. Young Children becoming Curriculum: Deleuze, Te Whariki and Curricula Understandings. London & New York: Routledge. https://doi.org/10.4324/9780203111819
- Thiele, K. 2014. Ethos of Diffraction: New Paradigms for a (Post)humanist Ethics. *Parallax* 20,3: 202 216. https://doi.org/10.1080/13534645.2014.927627
- Zembylas, M. 2006. Witnessing in the Classroom: The Ethics and Politics of Affect. *Educational Theory* 56,3: 305 324. https://doi.org/10.1111/j.1741-5446.2006.00228.x

Nike Romano Design Extended Curriculum Programme Cape Peninsula University of Technology <u>niker@icon.co.za</u>

Revisiting Writer Identities in Discomforting Spaces: The Envisioned Self in Writing

Aditi Hunma Moeain Arend Gideon Nomdo Catherine Hutchings Sean Samson

Abstract

This paper explores shifts in students' writer identities in a tumultuous South African higher education context. Within the Humanities Extended Curriculum Programme, our transformation agenda triggers tensions between assimilationist and disruptive approaches to teaching writing. On our course, attempts are made to ease student's acquisition of discipline-specific writing norms, while encouraging them to draw on their brought-along resources, a negotiation causing discomfort. We invite such discomfort as productive, and ask: How do discomforting spaces inflect on our understanding of writing and writer identities? We invite students to write reflectively about how the course may or may not have influenced their identities and worldviews. Drawing on Foucault, we see the reflective essay as confessional writing, and an enactment of our writing pedagogies in discomforting spaces. We argue that in such spaces, writing can create possibilities for change, particularly as students adopt an ethical stand in their writing, calling us to reconceptualise writer identities. We apply Biko's (2017) 'envisioned self' concept to capture the ethical dimension in students' writing, by introducing a new layer of Clark and Ivanic's (1997) clover model of writer identity. Our paper contributes conceptually to existing views of writer identities, with implications for writing pedagogies in the current context.

Keywords: Writing, writer identities, writing pedagogies, confession, discomfort, reflective essays, envisioned self

Introduction

This article revisits how writer identities get conceptualised, particularly in the politically fraught SA higher education climate, where students are using the written mode as a confession (Foucault 1990) to take a socio-political and ethical stand. This stand becomes visibilised through our pedagogy of discomfort which destabilises notions of a coherent self by introducing texts and concepts that call into question one's familiar worldviews.

The research site is a foundational academic literacy course, which has its roots in Academic Development and forms part of the Humanities ECP. As an ECP course operating within a historically white university, our primary goal is to facilitate equitable access to black students. We do this by providing epistemic access (Morrow 2009; Scott 2017) through developing students' capacity to access new knowledge in the disciplines. We complement such epistemic access with a provision of social access, derived from Mbembe's (2016:30) concept of the 'democratization of access', which goes beyond demographics to include 'the possibility to inhabit a space to the extent that one can say, "This is my home. I am not a foreigner. I belong here". This is not hospitality. It is not charity'. For us as ECP lecturers (coming from disciplines such as education, sociology, and film and media), the central mission is to create opportunities for our students to experience a sense of belonging, especially since the drive to secure epistemic access can often obscure the importance of securing 'social and environmental' access, or 'access for social justice' (Wilson-Strydom 2011). For this to succeed, both forms of access are needed. We thus take seriously the ECP goals of equity and redress, using these as 'access points' to inform the theory underpinning our pedagogy.

At the same time, we are aware, on the one hand, of the tension of easing students' transition into academia through a process of assimilation, and on the other, valorising their brought along resources and encouraging them to push the frontiers of what counts as legitimate ways of knowing and writing.

Lately, we have had to reflect deeply on our roles within the highly volatile higher educational landscape, where issues of access and equity, key mobilising factors within the fallist movements (Scott 2017[a; b]), remain core concerns. Such reflective practice called for us to 'reposition' ourselves in relation to students' needs. Thus, we resorted to drawing on disciplinary dispositions to social justice, and pooled our different insights on this to develop a collaborative, context-sensitive and student-centred approach towards the teaching of academic literacy. Informing this approach is an

ideological imperative to counter the institutional culture of stigma that continues to be attached to ECP. In 2014, we introduced a digital component comprising of weekly reflective tasks (Arend *et al.* 2017). In 2017, these tasks culminated in a reflective essay. Reflective writing, in particular, is one of the tools we use to work through the dilemmas encountered by our students and ourselves.

This article revisits writing and writer identities in discomforting spaces, by carefully analysing students' reflective essays as powerful confessions, and our (self) critical responses to them. We ask: How do these spaces inflect on our conceptualisation of writing and writer identities? We argue that writer identities need to be revisited to make space for an emerging identity within the current academic climate, where students' socio-political stances seek expression.

The Reflective Essay

We introduced the reflective essay into our assessment regime to encourage students to reflect on their learning. The essay is a culmination of reflective tasks assigned to students throughout the course. Prebel (2016) claims that reflective writing is 'a useful way for us to track student success or satisfaction with the course as well as the achievement of our course learning outcomes'. Our recent paper, (Samson *et al.* 2018), which explores students' written reflections on our course, attests to this, providing students with a 'rhetorical space to express their feelings and write about their new experiences' (Anson, in Prebel, 2016).

Drawing on Foucault (1990), the reflective essay also takes the form of a 'confession' about the students themselves, our course and writing pedagogy, and provide a means for us to think more insightfully about the nature of our teaching and the extent to which it was responsive to students' calls for transformation within the academy. This means that we have to confront the tensions, uncertainties, pain, marginalisation and resentment which many ECP students experience in their quest for acknowledgement and belonging, but also our own stories, struggles, and discomfort.

When used productively, discomfort can lead to an affirmation of self and purpose in the world, that extend well beyond the classroom. It could be imagined as the grain of sand in an oyster shell, painful but generative. As teachers of writing, this idea places the onus on us to create opportunities for

students to interact with this discomfort productively, by exploring how writing tasks can invite the personal as well as the ethical, into academic spaces.

Literature Review

Writing in Discomforting Spaces

Academic writing is seldom impersonal, and far less risk-free (Thesen & Cooper 2014). The stakes are not only related to marks, but about what gets admitted on the page.

In such moments, writing can take the form of a calculated confession. According to Foucault (1990), historically, confessions have been used to suppress the individual to admissions of truth by regulatory powers. Thus, confessions can become a way to trigger guilt, shame and compliance (Foucault 1990). Admissions of guilt in religious contexts can lead to absolution, or varying recipes for purging, where in the legal context, they may lead to further incrimination and punishment. On our course, we are aware of how opening up confessional spaces through reflective writing can trigger moments of discomfort.

However, we explore such pedagogies for their *productive* potential and unpack the writer identities that are emerging in such spaces. Boler and Zembylas (2003:108) conceptualise a pedagogy of discomfort as 'an educational approach to understanding the production of norms and differences'. It seeks to make matters usually classified as personal and private - our emotional investments and beliefs - public and visible. In relation to writing, this pedagogy requires that both students and lecturers move beyond comforting certainties, expressing their challenges to these centering norms, and different ways of understanding the world.

As students engage with academic content, there are always blind-spots, life-narratives to which we are oblivious, because they do not align with the social practices that anchor a secure sense of self. There is emotional labour in making a confession, as students must distance themselves from this security; from *themselves* so to speak. How are lecturers and students supported while engaging in the process? (Boler & Zembylas 2003). We broach this shortly, when we examine students' reflective writing.

Importantly, rather than engaging solely with what we/ I know, and what (we/ I know) exists, this pedagogy is a deliberate attempt to engage with

silences, using reflective writing to allow the writer to surface in her/ his writing.

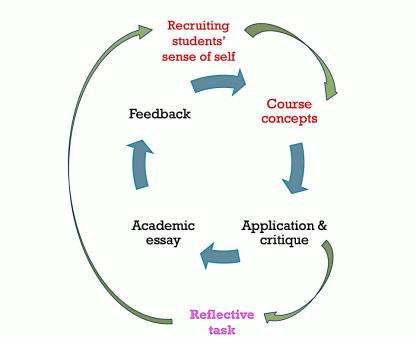
A pedagogy of discomfort moves beyond the quest for a stable unitary self and embraces a notion of the self that is in process, stabilised, perhaps through different experiences, but having room for something that is presently an unknown. Definitive categories solidifying difference, are disrupted through this pedagogy of discomfort, whose goal is 'to inhabit a more ambiguous sense of self not reduced to ... binary positions ...' (Boler & Zembylas 2003:121). The ambiguity gets enacted through the reflective tasks assigned to our students (see Nadan & Stark 2016; MacDonald 2013).

Reflective Writing as a Pedagogical Method

The role of reflective writing as a confession that seeks to (dis)entangle the 'self that writes' and the 'self on the page' (Creme 2000) may be a starting point here. The following diagram illustrates how our writing pedagogy invites students to locate themselves in their writing and engage dialogically with their lived experiences and the concepts on the course.

The inner loop signals student engagement with the course concepts while the outer loop reflects how students draw on their lived experiences in the broader social context. These loops therefore exist in a dynamic relationship. The reflective essay illustrates this dynamism, as well as the 'messiness of meaning making' (Arend *et al.* 2017), with opportunities to engage with concepts in a 'living way' (Butler in Zembylas 2015) in their narratives. This process of making the concepts 'real' can take students out of their comfort zones and lead to moments of tension between theory and lived reality; a gap that is not easy to suture.

Unlike the final reflective essay, the weekly reflective tasks are neither assessed, nor do they hold students accountable for the insights shared. These continual written scripts that students produce about their identity, could be seen as a 'refrain' (Deleuze & Guattari 1980), that brings together various, and sometimes contradictory aspects of their identity construction over time. It resonates with St Pierre's (2017:3) experience: 'my refrain enabled a pause, a gathering that was also an intensity that would explode as thinking-writing picked up speed again'. The pause could be viewed as a moment of suspending 'judgement' (Arend *et al.* 2017), where new meaning potentials are given free rein.



The inner-outer loop dynamic

Current Understandings of Writer Identities

Writing pedagogies designed to unleash meaning potentials, require a particular orientation that challenges the generic, skills-based approach, and aligns with the academic literacies approach where writing is inevitably agentic (Lea & Street 1998). Thus, in the 1990s, preoccupations with the author's identity or 'voice' became central to this approach. Nonetheless, voice remained a nebulous term that could at once stand for an intrinsic and unfaltering sense of being and an acquired mode of expression. This was until Clark and Ivanic (1997) developed a framework for defining and analysing voice, which they referred to as the 'clover model of writer identities'. The clover's three leaves depict the three aspects of students' writer identities as identified in their writing, namely the 'autobiographical self': the student's life history as made evident in the text, the 'discoursal self': a discipline-specific identity, and the 'authorial self': an assertion of 'self as author'. The idea of

authority in writing is further emphasised by Hyland (2002:1021) who notes that 'academic writing is not completely impersonal'. He explains, 'writers gain credibility by projecting an identity invested with individual authority, displaying confidence in their evaluations and commitment to their ideas'.

While conceptually the three writer identities are described as distinct elements, empirically, there are overlaps and tensions between these. For instance, in an attempt to gain insider status in the discipline, a student's deliberate attempt to conform to discipline specific conventions in writing *and* display the discoursal self, may at times be executed at the expense of their authorial self, where the student is expected to take ownership of ideas and shows signs of critical thinking in writing (see Hunma 2009). On the disjuncture between the autobiographical and discoursal selves, Park (2013) recounts her personal experience:

.... I reconstructed my identity as a Korean immigrant girl in the United States in the late 1970s and as a graduate student studying the experiences of diaspora. Hence, my writing became situated, social, and political in nature.

She still uses the notion of the 'autobiographical self' to describe the social and political flavour of her writing, which we feel becomes a missed opportunity to theorise more aptly the activism present in her text.

Her diasporic experience highlights the role of context in determining the possibilities for articulating voice. For Blommaert (2005), voice is a matter of 'uptake' in particular contexts or repertoires, which Clark and Ivanic (1997) describe as 'available positions for selfhood'. Matsuda (2001) goes a step further to consider 'socially available yet ever-changing repertoires'. It thus becomes evident that an expression of one's writer identities while overlooking what is permitted in particular contexts, may not readily yield the approval of academic gatekeepers.

Presently, the calls for decolonising the curriculum in the higher education context are prompting academics to rethink what they teach and how. It is possible that the uses to which students put writing, might transcend the three writer identities described by Clark and Ivanic (1997). For instance, to what extent can their framework capture students' critical deliberation about their location in the institution?

What this study seeks, is a conceptual frame to describe the type of

writing that questions those 'available positions', and surfaces the writer's ethical stance through writing. To explore this aspect further, we use students' reflective essays as our main object of scrutiny, taking cognisance of the discomforting spaces in which they find expression.

Methodology

We employ a case study methodology as the overarching lens to identify how the self manifests in student writing. Stake (1995) defines case study research as the 'study of the particularity and complexity of a single case, coming to understand its activity within important circumstances'. Through close engagement between researcher and participants, case study research aims to grasp what is happening in the field from the vantage point of the participants (Creswell 2013; Yin 2014). The insights gathered are co-constructed, as they adopt a reflexive stance towards interpreting the data (Creswell 2013).

In this study, reflexive interpretation is enabled as the lecturers also write their reflections alongside students' reflections.

Reflective Writing as a Research Method

St Pierre (2017) describes reflective writing in the post-qualitative sense, as a method that is 'living' because it loops upon itself, using writing to make sense of experiences retrospectively and to reconstruct these in the present. As a research method, it allowed us to keep track of our emerging insights as we inserted our subjective responses to student data collected.

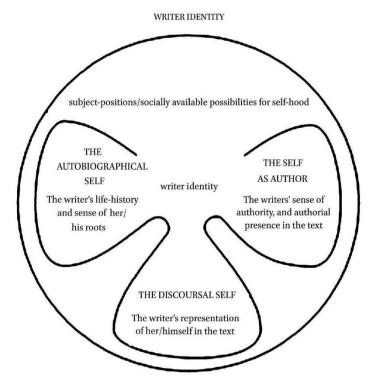
Similar to St Pierre's (2017) movement between 'two capacious writing spaces', our dual engagement with students' reflective tasks for marking purposes and then for research purposes, sheds light on how we move across both moments, and the insights we gain from them. The marking process may have made us less attentive to some of the individual narratives, making them secondary to a generalised marking rubric. The research process though, seems to illuminate moments of identification with particular students' experiences on the part of the lecturer, and subsequently a theoretical distancing from them to generate emerging themes.

Our reflections alongside the students' reflective writing during the research process could be used as a method to develop a theoretical understanding of our pedagogic practices, experiences of discomfort and

conceptualisations of writer identities in the extended curriculum context. In analysing students' writing, we adopt a descriptive, rather than prescriptive approach, allowing unexpected instantiations of the writing mode to reveal themselves. With this in mind, the heuristic described below becomes less of a starting point in our inquiry, and more the object of our scrutiny, to unravel what the tool may not adequately capture.

The Clover as a Possible Heuristic

Clark and Ivanic's (1997) 'clover model of writer identities', comprising the 'autobiographical self', the 'discoursal self' and the 'authorial self', offers a possible heuristic to describe the writer identities emerging in the students' texts.



Clover model of writer identity (Clark & Ivanič, 1997)

However, given the precarity of the higher education context, we open ourselves to unanticipated outcomes and put the heuristic itself to the test. The outer layer of the 'socially *available* possibilities for self-hood' acknowledges the 'social' possibilities alongside the 'epistemic'. However, how do we account for moments when students push the boundaries and use writing in ways that could subvert the spaces and roles available to them within these?

Data Analysis

To explore the uses to which writing is put and the reach of the clover model itself, we focus on moments of discomfort and ways in which different writer identities become apparent in our students' reflective pieces, as they seek to contain, express, challenge, and repurpose those moments. Through purposive sampling, we each selected a student from our respective classrooms who wrote reflectively about how the course may or may not have shifted their thoughts, but also their feelings and beliefs about themselves and their contexts.

The analysis that follows is inevitably tinged with the subjective experiences of the academics critically examining them.

Dineo's Reflective Piece (Sean's student)¹

Discussing the work of Ngugi and problematizing his argument has opened my eyes ... our oppressors found a way to forever keep us subjugated. The best example I can use is that of the Extended Degree Programme at UCT.

... people of colour are still unable to escape the socio-economic issues that we have been dealing with since colonial powers first made their appearance.

... boundaries are no longer physical, the boundaries have become subliminal and you will only notice it if you are truly conscious.

It is epiphanies such as these that I had throughout the course and that has re-awakened an anger inside of me.

¹ Pseudonyms have been attributed to students mentioned in this study.

98

The extract shows how the reflective task allows the student, Dineo, to be in conversation with her past identity and her present context, a conversation characterised by intellectual and emotional engagement. This eye-opening moment that Dineo refers to is used by her to critique ECP. Dineo's writing shows that she is in dialogue with her context, her placement on ECP, connecting this to a larger context of inequality, a means by which 'our oppressors found a way to forever keep us subjugated'. On the one hand, the awareness that Dineo marks the course as exemplifying ongoing inequality works to problematize Sean's position of 'comfort' as a lecturer on the course. It destabilises his sense of safety and security when considering Dineo's experiences of 'anger'. It thus takes both student and lecturer out of their comfort zones (Boler & Zembylas 2003). But, how do we then work with this sense of discomfort?

While the experience of reflecting can be painful and result in feelings of 'anger', Dineo does have a critical and ethical awakening, an awareness of inequality that is at the heart of a pedagogy of discomfort (Boler & Zembylas 2003), which the student describes as an 'epiphany'. This discomfort is catalysed by a critical lens which the student adopts as she grapples with the work of Kenyan author and postcolonial theorist Ngugi wa Thiongo (1987). There is a close engagement with the core text that plays a catalysing role. This critical engagement with concepts is aligned with the discoursal self (Clark & Ivanic 1997), but one which also prompts a visceral response. In many ways then, the text signals a multi-layered conversation, as Dineo applies the theorist's work to understand and explain her experiences, a means of *making sense* of her thinking and feeling.

This application to experience extends the application of the discoursal self, making it real through an analysis located in the student's lived reality, one which Dineo politicises through her engagement with Ngugi, making theory 'real' in this process of application (Zembylas 2015). It is in this moment that Dineo recognises the crux of the text, a language for speaking to the ongoing material and psychological effects of the colonial system. While Dineo's critique encompasses the course itself, it signals a moment of learning and critical engagement that is an outcome of a pedagogical approach. Clearly it is through Dineo's writing that discomfort is articulated. The result is a hybrid text that does not draw distinctions between experiences of critical reading, analysis and engagement that are central to the course and a broader experience of the university.

Certainly, Dineo takes a stance in the text, stating clearly that 'people are still unable to escape the socio-economic issues that we have been dealing with since the colonial powers first made their appearance'. Yet, this position makes links to contexts outside the course, and it links to the process by which Dineo came to this realisation, opening her eyes. This suggests movement from a previous way of thinking, or one towards a way of describing what previously went unnamed. The reflective task embraces this process and reflects shifts from these silences towards awareness, in the writer's position and thinking process, in light of how they feel and what they have experienced. Rather than a settled authorial self (Clark & Ivanic 1997), Dineo's writing makes these movements between concepts, experiences and contexts visible, describing how she has now *become* 'truly conscious', in this way resisting the construction of the writer who writes to signal a uniform self. Simply, the text brings the usual 'behind-the-scenes' engagement to light, rather than a current location as a point of departure.

Both Dineo and Sean's discomfort lead Sean to introduce other genres, which link student and lecturer. While not included in this extract, early on in the course Dineo used hip hop to discuss structural inequality. This move prompts Sean to introduce hip hop as a form of expression and knowledgemaking to illustrate the intersectional theory, one of the lenses covered in the course. Dineo acts as a reminder to Sean that he had encountered hip hop as a form of knowledge in his undergraduate career. It is in recognising what the student brings into the classroom, that Sean engages with his past self. In this way, Dineo's awakening, rooted in discomfort, and initially unsettling the repertoire of teaching tools Sean utilises, prompts a revisiting of practice. It is this revisiting and self-assessment that leads him to the broadening of texts and tools. This may signal an attempt to mitigate the violence of discomfort. Sean's response, deciding to draw on hip hop as a consequence of engaging with Dineo, works together with the act of writing itself, one of the means of engaging with the student, to move beyond violence or crisis (Zembylas 2015).

Both student and lecturer draw on multiple selves and locations. Dineo's writing signals a disruption of the stability of the text in which a position is solidified rather than showing the thinking and feeling process that led to its development. Because they cannot be neatly categorised in terms of the voices they amplify, or the spaces in which the writers locate themselves, they are heterogeneous texts (St Pierre 2017). Reflective writing, the thinking

and uncertainty it allows for, and the heterogeneity that characterises it, is the means through which the discomfort becomes visible. Through reflective writing, we engage with that discomfort. Leaving discomfort as is, without a means to articulate the anger it harbours, could be viewed as the darker side of discomfort. But in this case, the anger results from close and critical engagement with course materials and applied to Dineo's broader context, beyond the course itself.

This written text cannot be captured solely through notions of biography, critical reading or emotion, nor by a view of writing that seeks to signal the immediacy or stability of a position. The movement between spaces, concepts and selves obstructs our ability to categorise the text in any one way. In addition, it becomes difficult to name the genre shifts witnessed in terms of the clover model, as the student takes the creative license to incorporate hip hop, a part of his identity, as a mode of expression.

Linda's Reflective Piece (Gideon's student)

When I began the first reading on identity by Woodward (2004), I took it with a grain of salt and a great deal of doubt and denial. The idea that our identity – the very essence of who we are – was nothing more than a social construct, and furthermore had to be validated by others in order to be real, was unnerving, to say the least As much as a big part of me wanted to hold onto the comfort of what I've always known - even if it was wrong - a much bigger part of me could no longer deny the truth as I did more of the course work and re-examined my own life When I finally understood what a social construct was, ... I began to see how this had affected nearly every aspect of my own life without realising it ... mental, emotional, and social boundaries. I had no idea to what extent they had been controlling my life, choices and the roles I played One of the big turning points for me was the McKinney (2013) reading feeling like outsiders and often being silenced due to their Cape Coloured accent was a situation that I was all too familiar with. It was at that specific moment that the information and concepts that I had been reading about for weeks became real

As a mature, goal-directed student, Linda enters the course with self-assuredness about how the world operates and what her position is, therein. This hegemonic outlook has cemented her sense of identity, the relationships she has fostered, and how she thinks, feels, responds and interacts with those around her. In Linda's reflection, she is found oscillating (Arend *et al.* 2017) between the authorial, discoursal and autobiographical selves (Clark & Ivanic, 1997). Her autobiographical self emerges as a critique of an emerging discoursal self, when she relates about her suspicions in approaching the first reading.

The cocoon which houses her sense of security, and which she carries into the class, comes to be placed under scrutiny through her interactions with theoretical concepts and classroom discussions. As her discoursal self gains prominence, she is forced to apply her new-found conceptual knowledge to her autobiographical self, setting up a critical tension between what she was comfortable with on the one hand, and the realisation of the ways in which she had been positioned and marginalised throughout her life, on the other. Through its application, she makes the theory 'real', and the outcome of this realisation is a source of discomfort and outrage for her and the seemingly stable world she inhabited.

Her 'unnerving' marks the beginning of her 'deliberate wandering' (Davis & Shadle 2000), a process of self-reflexivity through which she confronts those beliefs that had grounded her until then, beliefs which she begins to question in light of the intensity of new ideas that had intruded her normal, everyday routines. The tension between the autobiographical and discoursal selves leaves her in a suspended state, and it is here that we see the analytical mode (Arend *et al.* 2017) being enacted, through the reflective writing process. Utilising this analytical mode, she could repeatedly interrogate emerging views alongside hegemonic ones she had thus far accepted without question. So Linda develops a critical dynamic between her writer identities, thereby displaying the ambiguous, contradictory and multiple nature of identity, and the discomfort that goes along with it.

What emerges from her discomfort is an awareness about the ambiguity (Boler & Zembylas 2003) and multiplicity we all possess. The reflective writing task offers her the opportunity to confront the hegemony that had made her an accomplice in her own marginalisation. In this way the use of discomfort, as a pedagogical tool, contributes towards exposing the 'violence' (Bulhad in Tejeda *et al.* 2009) that had been part of how she had come to view

herself and her location in the world. Through this pedagogy of discomfort, she comes to wrestle with those 'troubled knowledges' (Jansen in Zembylas 2015) that had restricted her sense of self and had reduced her to a one-dimensional being. The self-reflective lens she now wears allows her critical awareness about her life history and opens up new possibilities for enacting agency. What stands out here is how the discoursal and authorial identities allow her to recognise and dismantle the ties that bind her, while simultaneously revealing other possibilities for her location in the world, and how to view herself.

The way in which Linda's assertive opinions gradually took on a more tentative tone, the different ways in which she came to listen, question, and respond to the new ways of seeing that he had introduced her to, made Gideon realise how destabilising the shifts are that new learning can bring about. He also came to realise the extent of the responsibilities we bear as ECP lecturers, and how fragile relationships of trust are in teaching and learning relationships. In other words, it is the introduction, management, negotiation and contestation of discomfort that become part of the ethical practices that constitute our pursuits of social justice.

Recognising our students' discomfort means that we as lecturers also bring in our discomfort, or at the very least, are made to feel uncomfortable. This signals an important meeting point, 'a purposeful way of examining uncomfortable emotions we (and our students) might otherwise resist or deflect' (Prebel 2016). Linda's recognition of how unjust norms have bound her to a limited form of being in the world, is also the route to her enlightenment. Linda's reflection signals her active participation in her life, a meeting point of her old and new selves. Embedded in Linda's reflection are the unspoken and unacknowledged bits of reckonings that intersect and contradict each other within the dimensions of the clover model of writer identities (Clark & Ivanic 1997). So what lies hidden below the surface? What appears to be new ways of viewing herself in relation to those around her. This is made possible by the dialogue between the three components of the clover model, and may hint at something much more than what the individual components of the model offer. Linda's experience of certainty, disillusionment, realisation, awakening, oscillating, ambiguity, multiplicity and freedom, spans across the three clover leaves, holding them in productive contention, in a suspended process of 'becoming' more than its constituent and even its combined parts.

Safia's Reflective Piece (Moeain's student)

Coming into the DOH course, I was a small-minded 18-year-old girl, whose whole world, was about to become bigger than expected.

I wish to ... share with the reader, who I was, in terms of race, gender, language and identify as for a bigger understanding of who I have become and what aspects of my mindset have changed because of theories, authors, and concepts in the DOH course

Being the product of a mother who was seen as 'white' and a father who was seen as 'Indian', I have always had an issue with identifying myself. Because of this, I constantly found myself being asked, 'so what are you?' Before coming into this course, the mere thought of being asked this question upset everything inside of me, and because of this, the question was often met with my unimpressed blank stare. I believe I felt this way because I did not have the knowledge required to feel any different. All I knew was that my parents, grandparents, and others had told me, for example, I was told that who I was depended on me, and only me. I now know this to not be the truth.

Safia's reflection highlights her discomfort with the 'stories' she was told about her identity in a country where race played and still plays a significant role in forging identities for people. Safia notes that being a product of a biracial parental relationship brought up identity issues for herself. Because she defied the neat race categories that the apartheid and the post-apartheid regime offered her, she mentioned that she often had to field the question as to what race she is. Moeain, on the other hand mentioned that he always had an issue with the romanticised stories he was told of his ancestry. These stories promoted certain ancestors, who were constructed as chivalric and scholarly, while deleting and hiding those who were seen as ordinary and insignificant.

Safia's reflection highlights a sense of discomfort with the stories told to her by her family members about where she came from, even *before* she entered the academy. The discomfort with her autobiographical self becomes more 'visible' and finds expression in writing when her story meets the theories of the academy. For example, Safia comments that due to the theories, her ideas changed. Safia's observation may signal the emergence of a discoursal self that is in the process of becoming through the reflections that emerge when the

autobiographical encounters the theories of the academy. Moeain suggests that Safia's reflections demonstrate 'The danger of a single story' (Adichie 2009), which forms part of the course, and speaks of the possible problems and discomfort that sanitised versions of one's history or autobiographical self can create.

In Moeain's response to Safia's reflection, he draws on theory and therefore privileges his discoursal self. He notes that Dugdale's (1999) research (on talk about the intrauterine contraceptive device [ICD]), concluded that objects are *always* both singular and multiple rather than 'converging from multiplicity to singularity'. Because artefacts have a high degree of interpretive flexibility we often see a 'continued oscillation between singularity and multiplicity rather than a movement from oscillation to a resting-place'. Moeain amplifies Dugdale's argument by drawing on the arguments of Law (2002), who suggests that like objects, human beings have multiple versions, which often 'interfere with one another, and shuffle themselves together to make a single [version]' (Law 2002: 2-3).

Moeain proposes that Adichie (2009), Dugdale (1999), and Law's (2002) arguments underscore the conundrums that students like Safia face when in a country like SA, one story of themselves, often shaped by race classification, interferes and is shuffled together with other different stories of themselves, which suddenly becomes a possibility when theories of the academy are encountered. The reflection's focal point centres the pressures post-apartheid individuals face when their autobiographical selves are expected to find a 'resting-place' (Dugdale 1999) for their identities when they are constantly asked to classify themselves in terms of 'neat' race categories. These are pressures felt by both student and lecturer in a post-apartheid era which inherited and appropriated these race categories. Furthermore, they both highlight *the effects* of the nexus between constructions of brought along identities and social science theories. Moeain suggests that it is at this nexus that reflective writing can play a significant role in making sense of the oscillations of self that students experience.

When considering this meeting point of experiences and academic concepts, Moeain poses the following questions: What role *could* reflective writing play when we situate it at this nexus point especially in a post-apartheid SA where race still plays a significant role in constructing identities? Can reflective writing be a response to Safia's 'unimpressed blank stare' when confronted with the question 'so what are you?' Can reflective writing offer a

momentary 'resting-place' for the constructions of student and lecturer identities? At other times, how would one describe the self that the students oscillate to and from? Would it be characterised as 'autobiographical' in the sense of rooting, uprooting and aspiring to an imagined elsewhere?

Xola's Reflective Piece (Aditi's student)

Prior to doing [the course], I consider myself to have been a narrow-minded person who looked at myself, others and society with only one eye opened. What I mean by this is that I was biased about social issues and lacked understanding about the important concept of identify, my own and that of others.

The course has made me conscious of the aspect of political and social constructs in identify formation and change and given me the analytical skills to better understand the concepts of race and gender to name a few. Additionally, I did not know that these concepts are heterogeneous. I did not know that these concepts require a sense of choice. I thought it was right for society to choose for a person the cultural resources one can have access to.

Coming from a small rural village in East London called Kwamagqukela, I held essentialist views about race and gender due to the way I was socialised. Most of the people in my community hold essentialist views of social concepts and I was expected to perform my role as a young Xhosa man without question, which I did.

Xola's discomfort and guilt arise from him viewing his earlier self through the prism of identity theories. He confesses that his previous self was 'narrow-minded', with 'one eye opened'. In this, he exacts symbolic violence (Zemby-las 2015) upon himself and his community, as he eschews the previous 'essentialist' views passed down by his community as negative and limited. Aditi questions whether the task prompted this student to look at himself differently with the awareness of being watched. This question signals that there is a degree of voyeurism involved in reading and evaluating students' reflective tasks, which could have altered the submitted product itself. It also points to the fact that stories of the 'autobiographical self' are seldom neutral, but have a dialogical nature, being told and retold differently, depending on the audience.

Aditi's discomfort surfaces from Xola's guilt, induced by his perception that his community's teachings do not measure up to new academic theories. It also arises more broadly from the dilemmas implicated in ECP and the lecturer's role within it. In line with the ECP goal of easing students' transition into university, are we engaging in the business of education as conversion, or opening avenues for contestation? Reflective tasks such as these may push one to ask discomforting questions about one's being and positionality, prompting one to challenge some dominant or polarised views about sociological concepts. Arguably then, a pedagogy of discomfort could promote certain social justice goals. Yet, we need to guard ourselves against the likelihood of appearing to advocate the facile abandonment of previous dominant views for new ones within the higher education context.

The question about Aditi's possible complicity in the student's assimilation remains unanswered, since students did not read our lecturers' reflective responses. This missed opportunity for reciprocity, or more specifically, 'strategic empathy', may occasion some form of 'ethical violence' (Butler in Zembylas 2015), since Xola's admission, and possible guilt and vulnerability are left unaddressed. In this case though, Xola finds comfort in the new theories that give him 'a language' to express the inexpressible.

Thus, in Xola's writing style, we find a heavy reliance on theoretical concepts, to the extent that his 'autobiographical self' when he speaks about his 'one eyed view', gets interrupted by a strong 'discoursal self' when he gets introduced to the 'political and social constructs of identity'. Though the reflective genre could allow for 'asides' (St Pierre 2017), the fact that the discoursal self gradually supplants the autobiographical self, could possibly suggest the student's attempt at appearing scholarly to gain more credibility within the academic space, where theoretical engagement tends to be valued more than narrative or anecdotal retellings.

Xola's reflective piece also sheds light on the multiple uses to which writing is put. Besides enabling the application of concepts, it has a visceral effect in making Xola interrogate his very being, his brought-along norms and practices through an interplay of the academic and reflective writing genres. However, it does more, by pushing him to a point where he starts rethinking himself anew and questioning his alliances. Here, we find the 'think-write-be' nexus play out, as an extension of St Pierre's (2017) 'think-write' mode of text production. This also bears implications for the clover model in gauging the transformative potential of writing in discomforting spaces.

Emerging Themes The Layers of Dialogue

The final reflective essays could be seen as a dialogue with the self which give legitimacy to the reflective asides that students engaged in weekly. It also makes manifest the workings of a pedagogy of discomfort, crystalising and stabilising the conflicting thoughts in the classroom in particular points in time. Students' confessions reveal how they experienced discomfort as they sought to reconcile their brought-along views with those introduced. Yet, it also invited them to occupy a discursive gap where knowledge could be appropriated, re-purposed and made more relevant. Discomfort also came from having to admit the shifts that took place in the thoughts, feelings and beliefs as expressed in students' reflective essays. These allowed students to trace critical moments in their identity formation. The act of engaging with students through meaningful dialogue underscored the productive manner in which discomfort could be dealt with. Dialogue here came to represent an enabling and empowering device, for both lecturer and student. By entering into a dialogue, we made the invisible visible. We encountered students' (as well as our own) capital, anxieties, anger, pain, resilience, aspirations and affirmations of self. It enabled us to say to each other, 'I see you' (Fraser 2005).

Dialogue allowed us to reflect on what we brought to the debate, to think about our own positionality, so that our students and ourselves walked away with something meaningful (even if it is discomforting). Lecturers experienced discomfort as they began to empathise with some of the students' discomfort. This prompted lecturers to trace critical moments in their political and professional identities. It also generated productive moments for us to revisit our pedagogical practices and examine possible contradictions between our ideals, praxis and the degree of institutional flexibility to initiate new pedagogical experiments.

Revisiting Writing as a Confession

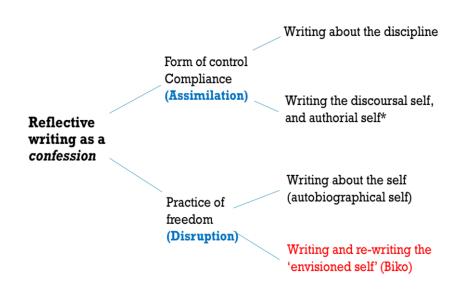
While triggering self-dialogue, writing also occasioned moments of detachment and confession. As mentioned, confession in the traditional sense, has been used as a compliance mechanism through a process of (self) blame, guilt, remorse and absolution (Foucault 1990). However, confession is a double-edged sword. Foucault (1984) notes that confessions can also become a practice of freedom, enabling the individual to re-narrate and transform

him/herself. What about the confessions made through the mode of academic writing?

Earlier, Foucault (1983) described a concept he came to call self-writing, which he saw as a way of transforming what we 'see and hear into flesh and blood'. The potency of texts here to metamorphosise that which they objectify through the very act of writing, can be quite poignant if the object of writing is the 'self' itself. Extending this thought, if one were to read self-writing as a confession, then students' writing could become an opportunity not only to give life to what is narrated, but to re-script the self. Such a concept has yet to find its place in the conceptualisation of academic writing and voice. How would one describe the emerging self in students' writing?

Perhaps, this self bears similarities with what Biko might have meant when he referred to the 'envisioned self' (Biko 1987:49). Biko states that the 'envisioned self' is the 'liberated self' that has 'rid [himself] of the shackles that bind [him] to perpetual servitude'. These shackles could also be mental ones, such as hegemonic discourses that reproduce themselves through blind compliance.

Acknowledging Reflective writing as a (discomforting) confession



In their reflections, if students merely regurgitated theories without bringing themselves to the fore, they would fall in the first category of compliance. They would write about the discipline and perform an expected discoursal self.

Their writing could also have moments of the authorial self. By this, we mean a critical self that takes ownership of ideas. It could be claimed that the authorial self should feature in the other category of practice of freedom. However, we argue that academia values a very specific type of authorial self that requires students to master logical reasoning, rather than draw on other aspects of persuasion, such as ethics or emotions. Therefore, we would place the authorial self within the assimilation category.

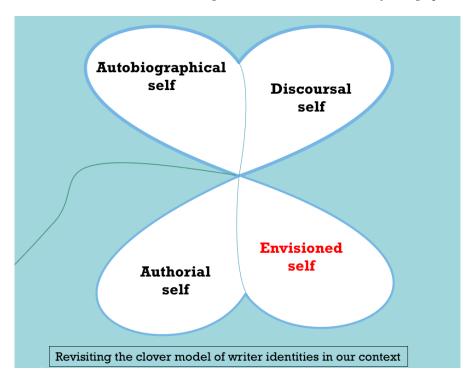
On the other hand, and that is part of the practice of freedom, if students use the reflective story to share their life experiences, then their writing may have more of the autobiographical self.

The Envisioned Self in Writing

In light of the data, especially within a pedagogy of discomfort, we are beginning to see the emergence of a fourth writing self, which we now call the 'envisioned self' using Biko's terminology, to signal a disposition that transcends the fixation on logos in academia, to acknowledge modes of ethical validation. This constitutes a key finding for this study for it assists us in stretching our conceptualisation of writer identities and theorising a new disposition that we are witnessing in students' writing.

Thus, we propose adding a fourth leaf to Clark and Ivanic's (1997) clover model.

The envisioned self can be defined as the expression of an ethical and often socio-political stance adopted by students as they critically reflect on their positionality in relation to the course, the institution and society. The envisioned self operates not only within the course, but through and beyond the course. It spirals outward to urge one to reflect on one's location within the institutional spaces as these are part and parcel of forms of control seeking compliance, and beyond. The envisioned self prompts one to reflect on how the course may shift one's sense of self and view of the world. It invites one to negotiate one's sense of belonging through writing, to reflect on what aspects of one's being to keep and what to discard, to reflect on diversity, on the curriculum, and to use one's narrative to respond to or write back to the academy and its dominant norms where necessary.



So, the envisioned self is a reflective past looking self, and it is also an aspirational, future-looking self that turns writing into a commentary on one's context and a tangible record of one's outlook, as it has been stabilised for now. Both the reflective past-looking self and aspirational future-looking self is anchored in the present by the creation of disruptive/discomforting moments which act as a stimulus for the types of past and future reflections alluded to here!

By using students' reflections as lenses to view ourselves as lecturers, we can begin to reflect on our practices and how we envision ourselves, and our roles.

Implications for Writing Pedagogies

Writing tasks that create allowances for ethical modes of expression to exist alongside the cognitive modes, could raise the complexity of students'

engagement with academic texts and concepts beyond the confines of the formal curriculum.

In our view, the revisited clover model could apply to academic essays as well. Still, the expansion of available writing repertoires to incorporate hitherto invisible aspects of one's writer identities could enable us to sharpen the indexical links between the academic texts that students produce and the socio-political context that surrounds them, in contrast to traditional writing modes that sometimes remain self-referential. The new writing repertoires within academia could also create possibilities for students and lecturers to speak back to issues of social and epistemic access, and the inevitable tensions between them.

Generally, what gets viewed as social access is access to institutional spaces, dominant norms and practices, and what gets implied by epistemic access is access to available and acceptable subject positions within academia. In some students' reflections, epistemic access gives them the language to articulate what they previously struggled to pin down, and in that sense, to create some coherence out of multiple incoherent understandings of the self (Dugdale, 1999). In other reflections, we note some apprehension around the fact that the cultivation of an epistemic gaze may uproot them from their community selves and related dispositions.

In response, the reflective moments create a space for students to hold the social and epistemic dimensions in a state of productive tension. For lecturers, the reflective moments could become spaces to be critically aware of how we enforce or help negotiate various forms of access. Those moments could get us to pause and ask ourselves what kind of knowledge we are granting epistemic access to, and to confront the artificial divide between the social and the epistemic dimensions, to open avenues for an envisioned self in writing that mediates as well as interrogates both.

Conclusion

To conceive of writing as a confession creates possibilities to imagine to new kind of student writer, that chisels new personas as he crafts new scripts. Engaging with our students' narratives serves as a reminder for us to be vigilant of our own locations within a previously white university space, and the ways in which we may have been co-opted into certain dominant discourses that continue to add to our students' sense of marginalisation. Students' confessions

are part of the discomfort that we as lecturers need to engage in with our students, in order to remain responsive to the dilemmas which present themselves in the ECP classroom so that possibilities for change remain within reach.

As ECP lecturers, we are primarily practitioners in the field, and we view this role as an opportunity rather than a deficit, as it opens avenues for authentic learning, whereby practice leads to theory.

What the research process has enabled us to do is to articulate for ourselves, to confess and name what our writing pedagogy looks like and what it entails for both parties. It also enabled us to theorise a particular form of writer identity, the 'envisioned self', which opens avenues for the writer's ethical stance to be constructed, expressed and critiqued through writing. It became necessary to name this feature of writer identity to legitimise the modes of expression that did not neatly fit the *a priori* model of writer identities.

References

- Adichie, C. 2016. *Transcript of 'The Danger of a Single Story'*. [online] Ted.com. Available at:
 - https://www.ted.com/talks/chimamanda_adichie_the_danger_of_a_single_story/transcript?language=en (Accessed on 1 February 2017.)
- Arend, M., A. Hunma, C. Hutchings & G. Nomdo 2017. The Messiness of Meaning Making: Examining the Affordances of the Digital Space as a Mentoring and Tutoring Space for the Acquisition of Academic Literacy. *Journal of Student Affairs in Africa*. 5:89 111. https://doi.org/10.24085/jsaa.v5i2.2704
- Biko, S. 1978. *I write what I like: A Selection of his Writings*. Stubbs, A (ed.). Johannesburg: Heinemann.
- Blommaert, J. 2005. *Discourse: A Critical Introduction*. Cambridge University Press. https://doi.org/10.1017/CBO9780511610295
- Boler, M. & M. Zembylas 2003. Discomforting Truths: The Emotional Terrain of Understanding Difference. In Trifonas, P. (ed.): *Pedagogies of Difference: Rethinking Education for Social Change*. New York: RoutledgeFalmer.
- Bozalek, V. & R. Carolissen 2012. The Potential of Critical Feminist Citizenship Frameworks for Citizenship and Social Justice in Higher Education. *Perspectives in Education*. 30:9 18.

- Bozalek, V. & M. Zembylas 2017. Towards a Response-able Pedagogy across Higher Education Institutions in Post-apartheid South Africa: An Ethicopolitical Analysis. *Education as Change* 21, 2: 62 85. https://doi.org/10.17159/1947-9417/2017/2017
- Clark, R. & R. Ivanic 1997. *The Politics of Writing*. Hoboken: Taylor and Francis.
- Creswell, J.W. 2013. *Qualitative Inquiry & Research Design: Choosing among Five Approaches*. 3rd Edition. Thousand Oaks, Sage.
- Davis, R. & M. Shadle 2000. 'Building a Mystery': Alternative Research Writing and the Academic Act of Seeking. *College Composition and Communication* 51, 3: 417 446. https://doi.org/10.2307/358743
- Deleuze, G. & F. Guattari 1987. A Thousand Plateaus: Capitalism and Schizophrenia. Minneapolis: University of Minnesota Press.
- Dugdale, A. 1999. Materiality: Juggling Sameness and Difference. *The Sociological Review* 47:113 135. https://doi.org/10.1111/j.1467-954X.1999.tb03485.x
- Fraser, N. 2005. Reframing Justice in a Globalizing World. *New Left Review* 36:69 88.
- Foucault, M. 1984. The Ethics of the Concern for Self as a Practice of Freedom. Interview by H. Becker *et al.* In Rabinow, P. (ed.): *Ethics: Subjectivity and Truth.* New York: The New Press.
- Foucault, M. 1990. *The History of Sexuality: An Introduction*. New York: Vintage Books.
- Foucault, M. 1983. *Self Writing*. Translated from Corps écrit no 5: 3 23. Available at: https://foucault.info/documents/foucault.hypomnemata.en/
- Law, J. 2002. *Aircraft Stories: Decentering the Object in Technoscience*. Durham, NC: Duke University Press. https://doi.org/10.1215/9780822383543
- Hunma, A. 2009. *Identity and Coping Strategies in Academic Writing: A Study of First Year Mauritian Students at a South African University* [Thesis]. University of Cape Town. Available:

 https://open.uct.ac.za/bitstream/handle/11427/8277/thesis_hum_2009_h

 unma_a.pdf?sequence=1&isAllowed=y
- Hyland, K. 2002. Authority and Invisibility: Authorial Identity in Academic Writing. *Journal of Pragmatics* 34, 8: 1091 1112. https://doi.org/10.1016/S0378-2166(02)00035-8

- Matsuda, P.K. 2001. Voice in Japanese Written Discourse: Implications for Second Language Writing. *Journal of Second language writing* 10, 1-2: 35 53. https://doi.org/10.1016/S1060-3743(00)00036-9
- Mbembe, A. 2016. Decolonizing the University: New Directions. *Arts & Humanities in Higher Education* 15, 1:29 45. https://doi.org/10.1177/1474022215618513
- Morrow, W. 2009. Bounds of Democracy: Epistemological Access in Higher Education. Cape Town: HSRC Press.
- Ngugi wa Thiong'o. 1987. The Language of African Literature. In *Decolonising the Mind: The Politics of Language in African Literature*. Harare: Zimbabwe Publishing House.
- Park, G. 2013. 'Writing is a way of knowing': Writing and Identity. *Elt Journal* 67, 3:336 345. https://doi.org/10.1093/elt/cct012
- Pratt, M.L. 1991. Art in the Contact Zone. Profession 33 40.
- Prebel, J. 2016. Engaging a 'Pedagogy of Discomfort': Emotion as Critical Inquiry in Community-Based Writing Courses. *Composition Forum* 34, Summer.
- Samson, S., M. Arend, C. Hutchings, A. Hunma & G. Nomdo 2018. Constructing the ECP Lecturer through an Analysis of Student Reflective Essays. In *Teaching in Extended Programmes in South Africa: Classroom Contexts, Lecturer Identities and Teaching Practices*. Fundani CHED. Cape Town: CPUT.
- Scott, I. 2017a. Without Success, Access will Fail. In *Mail & Guardian Online*, October 6th. Available at: https://mg.co.za/article/2017-10-06-00-without-success-access-will-fail (Accessed on 16 October 2018.)
- Scott, I. 2017b. Core Issues besides Finance and Access Hinder Students' Success. In *Mail & Guardian Online*, October 20th. Available at: https://mg.co.za/article/2017-10-20-00-core-issues-besides-finance-and-access-hinder-students-success (Accessed 27 July 2018.)
- St Pierre, E.A. 2017. Writing Post Qualitative Inquiry. *Qualitative Inquiry* 9,24:1 6. https://doi.org/10.1177/1077800417734567
- Stake, R.E. 1995. *The Art of Case Study Research*. Thousand Oaks: Sage Publications.
- Wilson-Strydom, M. 2011. University Access for Social Justice: A Capabilities Perspective. *South African Journal of Education* 31:407 418. https://doi.org/10.15700/saje.v31n3a544

Aditi Hunma, et al.

Yin, R.K. 2014. Case Study Research: Design and Methods. Los Angeles: Sage.

Zembylas, M. 2015. 'Pedagogy of Discomfort' and its Ethical Implications: The Tensions of Ethical Violence in Social Justice Education. *Ethics and Education* 10:163 - 174.

https://doi.org/10.1080/17449642.2015.1039274

Zembylas, M. & M. Boler 2002. On the Spirit of Patriotism: Challenges of a 'Pedagogy of Discomfort'. *Teachers College Record* August 12.

Aditi Hunma Language Development Group, ADP, CHED University of Cape Town aditi.hunma@uct.ac.za

Moeain Arend Language Development Group, ADP, CHED University of Cape Town moeain.arend@uct.ac.za

Gideon Nomdo Language Development Group, ADP, CHED University of Cape Town gideon.nomdo@uct.ac.za

Catherine Hutchings Language Development Group, ADP, CHED University of Cape Town catherine.hutchings@uct.ac.za

Sean Samson
Language Development Group, ADP, CHED
University of Cape Town
sp.samson@uct.ac.za

Access or Set Up? A Critical Race Feminist, Black Consciousness, and African Feminist Perspective on Foundation Studies in South Africa

Corinne Knowles

Abstract

Foundation provision for South African university students has been a national programme to redress the inequalities of apartheid. This paper considers the ongoing concerns around race, gender and class inequalities, raised, for instance, during the 2015, 2016 student protests in South Africa. Three theories are used as a lens to consider foundation programmes in this context: Critical Race Feminism, Black Consciousness, and African feminism. Critical race feminism is not a new theory – for example bell hooks' work on feminism and liberatory pedagogy, and Krenshaw's work on intersectionality, date back several decades, but remain relevant. Black consciousness, popularised by Steve Biko in the 1960's and 70's, continues to inspire a thoughtful consideration of race in South African society. African feminism argues for noticing the silenced voices and finding the communities that animate their knowledge seeking. Some of the complications in the success of the foundation studies, and in transformation of universities, can be better understood by using these lenses to interrogate race and class dynamics on campuses that continue to struggle to transform. The paper reminds us of the university's purpose as a public good, and asks us to locate the poor, black student in the centre of our deliberations.

Keywords: Foundation studies, public good, African feminism, Higher education transformation, inequality

Introduction and Context

Universities in post-apartheid South Africa have undergone numerous transformations since the onset of democracy in 1994, driven by new constitutional imperatives of a better life for all. Some of us who teach in national universities feel a profound responsibility to help to undo the legacies of colonialism and apartheid, so that our students' experiences and learning can be relevant to their participation in a more progressive and equitable future. While universities have undergone all sorts of changes since the move to democracy in 1994 (for example, Reddy 2004), nationwide campus protests in 2015 and 2016 raised students' concerns around the rate and content of our transformation efforts. The hash-tagged protests at various universities #RhodesSoWhite; (#RhodesMustFall; #Luister: #FeesMustFall: #RUReferenceList) exposed some of the ways in which race, class and gender inequalities continue to divide society, and be under-recognised and unresolved in South African universities (for example, Muzenda 2018; Chengeta 2018). Most of the protesting students across the country were black¹, and they were passionate about the need to rethink the purpose of the university and the place of the black young person in it. This paper proposes three theories that could orientate our thinking to address these concerns, including how we think about foundation studies. At the university where I teach in a foundation programme, many of my ex-students were part of the 2015 and 2016 protests. They were fighting to be recognised, to be valued, to be central rather than marginal, in the university that had invited them to be part of its programme.

The nationally devised foundation studies programmes were set up as part of the transformation of the higher education system (White Paper 2013). Their aim has been to increase access in the South African post-apartheid university landscape, by providing different kinds of support to 'underprepared' students (Boughey 2010; Badat 2011; CHE report 2013). However, the CHE report of 2013 estimates that 55% of those who enter university will never complete their degrees (2013: 14), which suggests that many students who are accepted into the university system are underprepared, or that the university itself is underprepared for the students it accepts. In a South African university context of high dropout rates, poor throughput,

_

¹ 'black' is used in the political sense encompassing those who were classified as 'non-white' in the apartheid regime (see Mahlangu 2012).

economic and social strain (World Bank Report 2018), and success rates that continue to be raced and classed (Pather 2018), we are urged to question the theories and pedagogies that shape academic interventions such as foundation programmes. These programmes tend to attract students who have completed township or rural schooling, and who qualify for the National Student Financial Aid Scheme (NSFAS). In other words, foundation programmes are most likely to attract the poor, black young person, who might or might not obtain a degree. The programmes have perhaps been successful in addressing the articulation gap between school and university (CHE Report 2013: 71,72), but this paper suggests different ways to think about 'success', and wonders about the articulation gap between the foundation programme and the rest of the degree. If the programmes, or indeed the pedagogies that we use in universities in South Africa, perpetuate the profound race and class inequalities in our society, we are failing the young people who enter university to lift themselves and their families out of poverty and inequality. We are also failing the public. It seems that the focus of our institutions is narrowing from one that includes the majority poor as the public, to one that relies on the success and benefit of a few individuals. Mkhize argues that universities in their current form have very little return on investment, and instead 'churn out a 'multiracial' middle class that can fit into a very narrow professional stratum' (Mkhize 2015). The theories that I explore in this paper ask us to reconfigure how we conceptualise 'success' in our transformation and pedagogic strategies, to include how capable and equipped graduates are to contribute to the national transformation project to reduce class and race inequalities. This has implications for how we think about foundational provision, which prepares and supports students for successful participation in mainstream disciplines.

At the university where I teach, the foundation programme is a first-year augmenting course² which consists of a smaller class, which facilitates a different kind of teaching and learning supported by the theories and ideas I explore in this paper. My class is usually between 35 and 40 students, who take Politics 1 and Sociology 1 with mainstream students, and then participate in

_

² While foundation provision is a national strategy in South African universities (White paper 2013; CHE report 2013), it is largely up to the individual university to practice their own interpretations of this. I acknowledge that my experience is not necessarily mirrored in how this is experienced in other universities.

augmenting classes for these subjects with me. Because of the small size of the class, and because my teaching is aligned to hooks' and Freire's humanising, participatory, liberatory pedagogy (hooks 1994; Freire 1970), we get to know each other well during their foundation programme year and remain in informal contact throughout their degrees. In the foundation/ augmenting year, we unpack concepts explored during their mainstream courses, finding examples from current South Africa and the continent, and seeking the relevance for South African society (Knowles 2014). The kinds of work we do and the way we do it – where the student is central and recognised – is not necessarily followed through in their mainstream university disciplines. Part of my dilemma and the reason for writing this paper rests with the question about whether my way of teaching sets students up for failure, once they leave my class and continue their degree in an unforgiving mainstream that is neither Afrocentric nor student centred. It has led me to ponder on the purpose of the university, and how to teach with ethical integrity not only in foundation courses, but also in mainstream disciplines. The implication is that the theories help us to conceptualise more relevant pedagogy and planning for all sectors of the university, so that foundation studies do not become a kind of ghetto where 'disadvantaged' students are 'fixed' to enable their 'success' in the mainstream.

If our universities are institutions of public good (Badat & Singh 2001; Mama 2003) what is the 'good' and who is the 'public' that they serve? According to a recent World Bank report (2018), South Africa is one of the most unequal countries in the world, and 'inequality is high, persistent, and has increased since 1994'. Sayed argued a decade ago that despite the lack of clarity about what it means, 'the reduction and elimination of poverty is becoming a key component of education policy' across the board, and prominent in 'government efforts at national development' (Sayed 2008: 53). What contribution has the university made in the last decade in the form of graduates who will enter the market and provide leadership and clarity regarding the reduction of poverty? What can we predict for the next decade? This paper doesn't necessarily answer these questions but directs our thinking to theories that will help us to grapple with them.

In this paper, I argue that the increasing inequalities in our country and universities encourage a critique of the pedagogies that we currently facilitate and reward in universities and the foundation programmes we devise. If in post-apartheid South Africa, inequalities have become increasingly

exacerbated, we are not getting it. We are perhaps looking for answers in the wrong places or not seeing the whole picture. Universities could and should equip students with the recognition, confidence and resilience to complete their degrees and make important contributions to society. This paper looks for different approaches that might re-orientate our thinking of the foundation programme as a project for the public good, to include the majority who are poor and black.

The theories that can re-orientate our pedagogies, interventions and practices in universities, can re-centre those who are currently least successful in universities and societies. This will disrupt the neoliberal tendencies in our thinking, because the subject of our thinking shifts to align with those who are least advantaged. Critical Race Feminism, Black Consciousness, and African feminism overlap to help us understand the challenges and opportunities in the foundation programme in South African universities. Each of them has a unique contribution to make. The theories and appropriate methodology will be discussed for their relevance to the sector, and two themes will clarify their usefulness: the reconnection of mind, body and spirit; the public and the good.

Introduction to the Theories

One purpose of theory is to guide our thinking when we make policies, programmes and decisions about funding and pedagogy, for instance about foundation programmes and higher education, and how we view 'success' in this context. But theory is not arbitrarily an intellectual frame to understand and address the social problems of our worlds – it is also a contextual and political choice. How we choose to think is based in part on the kinds of exposure we have had to which theories; and the resonances we experience with thinkers that address the challenges that concern us (Few 2007: 467). Our choice is also guided by how we understand power, which values we esteem, and to what ends we are focussing on an issue or phenomenon. I am drawn to seek out the thinkers on this continent, and who also resist imperialism and colonialism, to find the resonances that orient the thinking about foundation programmes towards social and epistemic inclusion and justice. It is poor black young people who are most vulnerable in our universities and society – as I will argue in more detail, our theories can move beyond a 'talking about' to a

'talking with', and be relevant and even transformative in application, if they are resonant with those they research.

Students enter our universities, many of them with dreams to move beyond poverty into firm employment. But South Africa struggles with chronic unemployment, especially in the youth category (Skade 2016; Linden 2017; Statista 2018). There are arguably more sustained benefits to a university education than for individual benefit only. Thinking of the university as a public good, and locating our thinking in Africa, can expose a different set of benefits. Ngugi (1986: 1139) argues compellingly that

Education is a means of knowledge about ourselves... After we have examined ourselves, we radiate outwards and discover peoples and worlds around us. With Africa at the centre of things, not existing as an appendix or a satellite of other countries and literatures, things must be seen from the African perspective.

When we locate our thinking about foundation studies in and of Africa, and push back against colonialism and inequality, we find that a particular set of experiences and perspectives is revealed that shift our thinking about the why, what and how of the foundation programme. As Sayed argues, in a discussion that looks at the link between education and poverty reduction: one's questions and answers, 'to an extent, depend on who is asking them and what the understanding of poverty elimination is' (Sayed 2008: 54). Theory shapes how we see the world and will frame our data, and what it can tell us, when we are making or using a theory. The theories we use help us to think through the foundation programme and analyse the problems and prospects that we see, anticipate and facilitate.

Although Appiah has been critiqued for anti-Afrocentrism, arguing instead for 'cosmopolitanism' (2006) that transcends the hierarchies of social structures, he agrees that theory is political, in that it will always find the data to support it. Arguing against an essentialist Positivism, he asserts that theory 'never came free of theoretical commitments' (Appiah 2006:40). Appiah borrows Burton's image of a shattered mirror, to remind us that 'each shard...reflects one part of a complex truth from its own particular angle' (2006:8). To recognise that any theory (that will find evidence to support it) is entangled in the intentions and politics of those who use or make it, implies that we should also be curious about where the theorist is standing, in what

context – which shard of mirror is she holding and whose world does it reflect?³ My work for the last decade has been in foundation studies, and my pedagogic praxis is deeply influenced by and reflects those who are least advantaged in the university. Theory that is being remade through an ongoing conversation between ideas and the narratives of those researched, can help us to find a way towards more inclusive coherence in this sector. Critical race feminism, Black Consciousness, and their synergies with African feminism, are all standpoint theories which have helped me to relocate the poor black student at the centre of our deliberations about foundation programmes in South Africa.

Critical race feminism emerged in the legal field where researchers claimed that the critical issues of race needed to be complicated and enhanced by adding the layers of gender and class to understand the sometimes-triple nature of oppression (Childers-McKee & Hytten 2015; Carter 2012). The intersection of these identity markers, and how they shape and are shaped by the legal and policy frameworks in our social life, are pertinent to our thinking on foundation programmes in South Africa. Students who enter foundation studies, in my experience, are black, and many of them are poor. The intersection of race and class have significant influence on how they experience a formerly white, and arguably middle-class orientated university. The theory argues that not only is it important and necessary to understand the social structures that contribute to inequality and oppression in overlapping ways, but that we need to understand this oppression from the perspective of the oppressed. It argues strongly for the centrality of the oppressed, using unconventional research methods that disrupt the single story of essentialist notions, by featuring stories, poetry, fiction, and other non-traditional data to understand the multiple, overlapping identities that people bring to the research process (Few 2007:257).

Black Consciousness is another theory that re-centres blackness in how we can think about foundation programmes. In the USA, Black Consciousness was a way for African Americans to build a narrative that was not merely in response to dominant and oppressive whiteness, but that re-established blackness as central (Jones 2002: xiii). In South Africa, Black Consciousness became the impetus for the student movement in the 1970's,

_

³ As a white South African who works in this sector, I am assured and cautioned by Few's observation that 'how the standpoint is articulated matters more than the color of the researcher' (Few 2007:460).

Corinne Knowles

because it reasserted the values and culture of black people that were denied their humanity by white people and the apartheid regime (Biko 1978). More recently, Daniels argued during the sometimes violent 2015 student protests, that 'righteous anger is not arbitrary. It is, in fact, sparked by an intellectual engagement with the brilliant black consciousness writers of the past and present, and it is the driving force behind organising for transformation' (Daniels 2015). Black Consciousness as a theory became a praxis during these protests, as students reclaimed recognition and agency in their demands for curricular and cultural transformation (Erskog 2015).

African feminism locates the struggles against colonialism and oppression firmly in community, using expanded epistemologies. Pushing against the individualism of western feminism, African feminism approaches social justice and human rights in a 'delicate balancing act... between personal needs and broader family or community needs' (Motlafi 2015). Oloka-Onyango and Tamale warn us against the representations of western feminism, arguing that it is disconnected from the continental struggles against colonialism (1995: 692), and the ongoing effects of apartheid. African feminism calls for using the African woman as a lens, which will reveal things like the importance of spirituality as a 'political tool' so that we can 'be whole and fight the injustices, positioning the academic as one who fuses within this knowledge the head with the heart to understand the world' (Motsemme 2017). In a conversation with Elaine Salo, Amina Mama argues for an African feminist presence in universities because 'these are arenas that we must imbue with our own concerns, transform into places that serve our collective interests, instead of leaving them to continue perpetrating intellectual and epistemic violence against us' (Mama 2001:60).

These are strong ideas, and not new. Critical race feminism, Black Consciousness and African feminism are relevant to our thinking about foundation programmes, because they represent a shift in the kinds of exclusionary ways that decisions have been made about the programme up until now. They argue for the re-centring of the poor black student in our thinking and planning, to see her as a whole person, in community, rather than a generic object of our deliberations, so that we can use pedagogies that translate into an expanded notion of what 'success' is. All the theories emphasize the centrality of the narratives of marginalised groups, and the interplay between these and the social, political, and economic social structures that impact on students and staff on the programme. Locating marginalised

groups as central in our thinking reminds us that our students are successful when they can think beyond their own individual benefit, to include a sense of belonging in a community that requires their expertise to overcome the challenges of poverty and racial oppression. Critical race feminism speaks of 'the importance of narratives, storytelling, and counternarratives to disrupting taken-for-granted and normative views about the world' (Childers-McKee & Hytten 2015:395). Critical race feminism, Black Consciousness, and African feminism ask that the theory itself becomes porous, dynamic, in a praxis (Carter 2012: 4; Few 2007: 257-259) that is shaped by re-centring the object to become a subject in the constant generation of the theory. In this way, research participants become co-researchers (Mkabela 2005; Ntseane 2011).

While the theories have been briefly introduced here to clarify their main views and methods, they will be expanded in the discussion that flows through two key ideas which are related to each other, and to how we think about success: the reconnection of mind, body and spirit; and the university as a public good. In a society that is groaning under the weight and oppression of global capitalism, universities have taken on an increasingly neo-liberal tone that regards students as customers; that has a top-down approach to massification and its consequences for teaching and learning; and that disconnects students from their social and political realities to emphasize their economic value or burden (for example, Muller 2018). In this way, students entering a foundation programme are set up: they anticipate a life-changing opportunity, and instead become invisible in the way universities operate. The alienation that arises from this, profoundly affects the mental, psychological and physical health and wellbeing of staff and students and shapes the contributions we could be making to society. In this context, vulnerability and resilience are unequally experienced, in that the university tends to have a generic approach to students (and staff) and their emotional and social wellbeing, and intellectual expectations. As a result, those who fall outside of the parameters of who is recognised as a student, and what counts as a 'good' student, are made increasingly vulnerable, disconnected from themselves and their dreams, as those with power decide on their behalf what interventions, if any, are appropriate. This mirrors the unequal relations in society. As was experienced in the 2015 and 2016 student protests in South Africa, those who try to fight the slowness of transformation in the university system could feel the full might of state apparatus to silence them through violence, arrest or exclusion (see for instance Sesant et al. 2015). Linked to the reconnection of

Corinne Knowles

mind to bodies that are socially structured, is the re-assertion of the university as a public good, using the theories to clarify what is good and who the publics are in South African society in this context.

Mind, Body and Spirit: Reconnecting for the Public Good

Part of the struggle in universities globally, and increasingly in South Africa, is the influence of neoliberalism on how we think about and treat students. Baatjies (2005) passionately critiqued this trend more than a decade ago, arguing that the introduction of the norms of 'efficiency and effectiveness' in political discourse at the time would corporatize the university, making the economics of institutions more important than the social contributions of intellectual work. The problems associated with the neoliberal trend are widespread, and profoundly affect the kind of education and experience available to students. Massification, the demand for better throughput, outsourcing teaching as contract posts, and regarding students as consumers, all contribute to a pedagogy that must be rationalised to separate the mind from the body.

When we do this separation, consciously or unconsciously, we erase the experiences, wisdoms and ways of knowing that our students bring, in their bodies and minds, to the university; and we also limit what we know of students to a mind that is generic, individual, and separated from social, material and spiritual context. When a lecturer faces a class of 600 or more students, it is rare and difficult to engage students in the making of knowledge, and in getting to know who the students are. As has been my experience in teaching a Sociology 1 course, an introduction to African feminisms, it is not an impossible task, but it takes a lecturer's commitment and orientation, with regular opportunities for student feedback, to inspire students to co-produce knowledge that is relevant for society. As Muller observes, this becomes difficult when financial incentives for staff are linked to student success, and in some cases, where there is 'the introduction of student throughput rates in academics' performance contracts, attempting to use formal punitive measures to force academics to pass students, regardless of their calibre and performance' (Muller 2018). I argue that throughput does not translate into success if students are not recognised and enabled to make the necessary contributions to the transformation of our unequal society.

Neo-liberalism sets up particular kinds of performances. There is a decrease in curiosity; a reluctance to push students (or staff) to discuss and think through their own prejudices; a paucity of complicated and layered discussions around inequalities in society or in lecture rooms. Instead, students are categorised generically and survive or not according narrow assumptions and a separation of mind from body. The danger is that this western inspired Cartesian dualism creates 'a false division between mind and body in experiential learning that obscures our physical internalization of social realities' (Nguyen & Larson 2015: 335).

Student protests at South African universities in 2015 and 2016 highlighted the need for relevant pedagogy, and a curriculum that was responsive to the experiences and challenges of students. Many protesters were poor black students. As Mkhize (2015) wrote at the time,

The students were talking about pedagogy, freedom, methodology—and they were not doing it for 100 marks; they were articulating an intellectual vision for a more humane society and critiquing our universities for paying lip service to transformation.

In effect, students were asking to have their bodies and experiences recognised in the kinds of intellectual work they are exposed to in universities. This orientation would compel a different idea of what 'success' means in universities: it would expand the gaze of our pedagogies to include their relevance to the kinds of contributions that graduates can make to the undoing and transformation of race and class inequalities in South African society. The protests were, on the whole, a missed opportunity for university leaders, lecturers, and students to negotiate together the necessary shifts in the pedagogies, theories and thinkers that shape our work in universities.

Theories that emphasise dialogue and narrative methodology ask for a reconnection of mind, body and spirit that resists neo-liberalisation. Hooks speaks of the need to have a flexible agenda, responsive to who students are and what they bring to an encounter (hooks 1994:7). She argues that students need to be understood in 'their particularity as individuals' rather than as generic. The only way to do this, is for the lecturer to genuinely value the contributions of students, and to create a learning community. When students are not only recognised for their minds, but for their bodies and unique experiences, lectures become dynamic spaces of excitement through collective

effort (hooks 1994: 8). Berry (2010: 25) argues that Critical Race Feminism helps us to understand the 'the multiplicative and multi-dimensionality of being and praxis' of marginalised groups, for instance such as foundation programme students. We do this through letting students speak for themselves, in lecture room debates, discussions and reflections; and in research that challenges our assumptions and makes and uses theories that are relevant to our shared worlds. Hooks argues that this has implications for how we teach – she argues that when 'education is the practice of freedom' (1994: 21), for instance from poverty and the legacies of apartheid, students are encouraged to express themselves, and to connect 'the will to know with the will to become' (hooks 1994: 19), or the mind to the body. Lecturers too, she claims, must be willing to grow in this process, and 'must practice being vulnerable in the classroom, being wholly present in mind, body and spirit' (hooks 1994: 21). The implications of this would be that how we think about foundation programmes, and pedagogy, and universities, and students, must be influenced by giving voice to students, and by an awareness that our institutions are shaped by social structures that have silencing effects on the most vulnerable in our universities. When the vulnerable and silenced voices in our society, our universities, and our foundation programmes, are enabled to speak for themselves, they can shape the content and purpose of our pedagogies.

If our institutional cultures continue to mirror a neoliberal economy and state, and if our theories are not making the marginal more visible, we miss out on an opportunity to provide hope, for individuals and the public, that a more socially just and humane society is possible. Poor black students have spoken about the alienation they feel in formerly white universities. For instance, Centwa (2013), a so-called poor black student from the local township at a formerly white institution, writes that 'the pressure is on for me to pretend to be who I am not'. Ellis warns of 'artificially formed determinants of Black identity created by the images of the twenty-first century' (Ellis 2002: 65). Applying a Black Consciousness lens to young black males in American society and universities, Ellis advises that in a context where racist, negative assumptions are made about young black males, it is up to them to find and articulate their own identities, their own academic directions, their own supportive networks, and to 'prepare themselves for success' in their academic journeys so that they might contribute to society and their communities (Ellis 2002:70). But how do, as an example, foundation programme students (or academics who write about them) think about and do this finding and articulating of identities, as Ellis suggests? Moodley, using Black Consciousness to think about South African society, argues that 'apartheid society also produced self-hate' (Moodley 1991: 238), because the 'limited range of opportunities' led black people to believe that they were to blame for their predicament, but also that the status quo was right. These ideas are decades old. And yet, in a neoliberal university of 2018, racism remains indelibly imprinted on the covert and sometimes blatant frameworks, theories and structures of our pedagogies and curricula. The racism is now exacerbated by class, and as always, intersecting with gender. The violence of non-recognition, of separation from the self, has profound effects.

Black consciousness reminds us that disconnecting students from their cultural selves, separating the mind from the body and spirit, results in the annihilation of the self. Moodley goes on to argue that 'liberation was sought through a return to African values of communalism, shared decision-making, and more personal communication styles, in contrast to the individualism of white consumer' (Moodley 1991:238). These are the values that, if they are encouraged in our pedagogies and planning in foundation programmes and in mainstream university disciplines, will build capacity to make meaningful contributions to society. Although it has been critiqued for its sexist practices and the erasure of women in its articulations, a black consciousness lens can help us to understand the violences of oppression, even at universities, based on race. African feminism can orientate us towards the regeneration of the connection between mind, body and spirit, for the healing of staff and students.

African feminism reminds us of the African women whose histories and experiences have been marginalised and silenced. Masola argues that 'it matters that their names should not be forgotten. It matters that we find more writers from the past who were women. This will enrich us and our history, which has often shrunk the image of black women' (Masola 2018). Knowing the stories of the erased enriches the lives of all, and not just the individual. This is relevant for the thinking around foundation programmes because the success rates (Pather 2018) and potential to thrive in universities continues to show the same dire race, class and gender inequalities that characterise South Africa as the most unequal country in the world. Motsemme (2002; 2004) writes powerfully about how to piece together the fragments of beings that are worn down from constantly absorbing the violence of erasure and disconnection. Arguably, the students on the margins of success and failure in our institutions, including foundation programme students, including students

Corinne Knowles

who are disadvantaged by mental health, financial, family, community, and linguistic burdens, are not being sufficiently nurtured or heard. The frameworks we use to define our pedagogies and programmes do not necessarily provide the means to break the silences, and the bonds of poverty and erasure, unless they include the voices of those who denied entry into the conversation about a better future for all. Motsemme (2002:649), speaking of women who endured apartheids' violences, cautions that,

Silence takes on meaning it was perhaps never intended for. It is transformed into a voice of defiance and self protection (1999). So speaking becomes both freeing and full of anxiety for black women. And in encouraging women to break silences, how do we ensure that patriarchal legacies are simultaneously undermined?

We are reminded that if our programmes and pedagogies are not undermining the unequal power relations that perpetuate inequality in our universities and society, they could increase the risk to those who are vulnerable. Thinking about foundation studies cannot be separated from the pedagogies that define the rest of the university – especially if the university is not addressing, powerfully and carefully, the race and class inequalities of society. We could use this lens to consider those students who fail to thrive academically or socially, who drop out for one reason or another at some stage of their degrees, who attempt suicide, who protest, or who quietly get their degrees without ever having been heard, or challenged, or transformed. We could do this differently, for instance if we used a pedagogy that recognised students, by using authors that speak to their realities, examples that are lifted from our local worlds, by engaging students in debates that did not shy away from uncomfortable topics and prejudices, by encouraging reflections that inspired self-learning. This would lead to the transformation of students who are stuck in poverty and racism, to students who are acutely aware of who they are and how they are located in the national transformation of inequality.

If we were to reconnect how students think, act and believe in how we think about foundation programmes, it would require us to do rigorous research that involved student perspectives in ways that recognised the structural inequalities that affect what they can think or say. It would mean that researchers negotiate power dynamics to relinquish our hold on the direction of research (Mkabela 2005). The research would aim to find empirical data

through a framework that notices the structural challenges, listens for the silences, recognises how power is being facilitated. This kind of research recentres students to be part of the research process that affects them. It reconnects theory with the idea of a public good.

If we shift our thinking about students to see them as co-researchers in our theorising about foundation programmes, we have the opportunity to tap into the rich repository of experience that they bring with them to the university. We can anticipate that they will leave us with a sounder sense of themselves and an understanding of society and the contribution they can make. When students and their worlds become central in how we think about our curricula, readings, pedagogy and assessments, it implies that we are practicing the kind of democratic freedom imagined in the Freedom Charter (1955), which proposes that 'the aim of education shall be to teach the youth to love their people and their culture, to honour human brotherhood (sic), liberty and peace'. Centring the poor black student with a view to successful graduation leads to more than individual success, but also emphasises their (and our) obligation to building a better country for all. Speaking of universities, Baatjies urges that 'these institutions need to be protected as spaces which represent the values of a substantive democracy and sites of struggles for education as a public good' (Baatjies 2005: 1).

As academics who work in the field of foundation programmes, we can help to champion the cause of poor black students, so that they remain central to our thinking. Vally argues that 'Academics must lead the defence of higher education as a public good and an autonomous sphere of critical democratic citizenry, and resist commercial and corporate values to shape the purpose and mission of our institutions' (2007:25). He recommends that part of our work is to link the ideas and theories we teach to 'community needs and struggles' that recognise the cultures and contexts of our students. Students are our connection to the community, and by recognising their realities, and by using thinkers and authors who write with them in mind, we open up a university education that is useful to the poor black student, as well as to society.

Conclusion

This paper has argued for a different set of theories to think about foundation studies – Critical Race Feminism, Black Consciousness, and African feminism.

Corinne Knowles

The theories have been selected for the way that they place the object of our concern (the poor, black student) as a subject, central to the thinking around these programmes. These theories remind us of the need to reconnect the mind, body and spirit of our students when we devise programmes to support them, moving away from a more neoliberal approach which tends to see the student as an economically viable entity, and which orientates our pedagogies to see students as generic intellectual beings, rather than as whole people who are structured socially and politically.

The dilemma that we face in this sector in South African universities is this: while we might approach teaching and learning in the foundation programmes with a more holistic, student-centred approach, the university is becoming more neo-liberally orientated. The paper reminds us of the idea of the university as a public good. Situated as it is in a profoundly unequal society, the university's purpose as a public good is to stimulate and facilitate contributions that address the deeply etched class and race divides that shape our society in South Africa. How our students, and in particular, poor, black students, experience these social structures is relevant to the content and pedagogies of our teaching strategies in universities and in foundation programmes. The paper argues that the theories we use to think about foundation studies must recognise and include those who are least advantaged in society and the university system, so that they are equipped and inspired to contribute meaningfully to the necessary transformations in our country. The theories look at foundation studies as an integral part of the university as a whole, in that if both are not aligned to a political project of social justice and transformation, the foundation studies will set students up for failure. If, however, we re-orientate our theories about the university, by re-centring the poor black student, we make their relevant contributions to South African society a very real possibility. This is the kind of 'success' that is contemplated in this paper – not a narrow individual benefit, but a shift in how foundation studies, graduates and universities can help to shape the transformations of race and class inequality in South African society.

References

Appiah, K.A. 2006. Cosmopolitanism: Ethics in a World of Strangers.

Penguin: London

- Baatjes, I.G. 2005. Neoliberal Fatalism and the Corporatisation of Higher Education in South Africa. *Quarterly Review of Education & Training in South Africa* 12,1: 25 33.
- Badat, S. 2001. Re-Inserting the 'Public Good' into Higher Education Transformation: Introduction. *KAGISANO Higher Education Discussion Series: Re-inserting the 'Public Good' into Higher Education* 1: 4 8.
- Badat, S. 2011. *Scholarship in a Context of Transformation*. Lecture, Academic Orientation Programme, Rhodes University.
- Berry, T.R. 2010. Engaged Pedagogy and Critical Race Feminism. *Educational Foundations* 24: 19 26.
- Biko, S. 1978. Black Consciousness and the Quest for a True Humanity. *Ufahamu: A Journal of African Studies* 8,3.
- Boughey, C. 2010. Rhodes University Extended Studies Review Report. Available at:

 https://www.ru.ac.za/media/rhodesuniversity/content/institutionalplanning/documents/Self%20evaluation%20report%20ESU%20final%20draft%20April%2009.pdf
- Centwa, S. 2013. Tales of a Divided City: Not a Place for Peasants. *Grocotts Mail*. http://grocotts.pl-dev.co.za/2014/03/10/tales-of-a-divided-city-not-a-place-for-peasants/ (Accessed June 2018.)
- CHE Report of the Task Team on Undergraduate Curriculum Structure 2013. A Proposal for Undergraduate Curriculum Reform in South Africa: The Case for a Flexible Curriculum Structure. Pretoria: CHE. Available at: https://www.che.ac.za/sites/default/files/publications/Full_Report.pdf
- Chengeta, G. 2018. '#RUReferenceList: The Fear of Repercussions still Lingers.' *Mail and Guardian*. Available at: https://mg.co.za/article/2018-07-06-00-rureferencelist-the-fear-of-repercussions-still-lingers (Accessed June 2018.)
- Childers-McKee, C.D. & K. Hytten 2015. Critical Race Feminism and the Complex Challenges of Educational Reform. *Urban Rev* 47:393 412. https://doi.org/10.1007/s11256-015-0323-z
- Daniels, P. 2015. Rhodes University's Black Student Movement Responds to Jonathan Jansen. *The Daily Maverick*. Available at:

 https://www.dailymaverick.co.za/opinionista/2015-03-29-rhodes-universitys-black-student-movement-responds-to-jonathan-jansen/#.WyEu40iFPIX

(Accessed June 2018.)

- Ellis, C.M. 2002. Examining the Pitfalls Faced by African American Males. In Jones, L. (ed.): *Making it on Broken Promises: African American Male Scholars Confront the Culture of Higher Education*. Virginia: Stylis Publishing.
- Erskog, M. 2015. Transformation in Action. *Daily Dispatch*. Available at: https://www.dispatchlive.co.za/news/opinion/2015-04-14-transformation-in-action/ (Accessed June 2018.)
- Few, A.L. 2007. Integrating Black Consciousness and Critical Race Feminism into Family Studies Research. *Journal of Family Issues* 28,4. https://doi.org/10.1177/0192513X06297330
- Freedom Charter 1955. South Africa. Available at: http://scnc.ukzn.ac.za/doc/HIST/freedomchart/freedomch.html (Accessed October 2018.)
- hooks, b. 1994. *Teaching to Transgress. Education as the Practice of Freedom.* London: Routledge. https://doi.org/10.3366/para.1994.17.3.270
- Jones, L. (ed.). 2002. Making It on Broken Promises: African American Male Scholars Confront the Culture of Higher Education. Virginia: Stylus Publishing, LLC.
- Knowles, C. 2014. Vulnerability: Self-study's Contribution to Social Justice Education. *Perspectives in Education* 32,2: 89 101.
- Mama, A. 2003. Restore, Reform but do not Transform: The Gender Politics of Higher Education in Africa. *Journal of Higher Education in Africa* 1,1: 101 125.
- Mahlangu, B. 2012. Interviewing Bantu Biko Extracts from his Quotes. News24. Available at: https://www.news24.com/MyNews24/Interviewing-Bantu-Biko-Extracts-from-his-Quotes-20120912 (Accessed January 2019.)
- Masola, A. 2018. Women who Wrote Themselves into History. *Nal'ibali*. Available at; https://nalibali.org/women-who-wrote-themselves-into-history# (Accessed June 2018.)
- Mkabela, Q. 2005. Using the Afrocentric Method in Researching Indigenous African Culture. *The Qualitative Report* 10,1: 178 189. Available at:

http://www.nova.edu/ssss/QR/QR10-1/mkabela.pdf

Mkhize, N. 2015. Tenacious Belief in the Ideal of the University. *Business Day*. Available at:

https://www.businesslive.co.za/bd/opinion/columnists/2015-05-05-tenacious-belief-in-the-ideal-of-the-university/

(Accessed June 2018)

- Moodley, K. 1991. The Continued Impact of Black Consciousness in South Africa. *The Journal of Modern African Studies* 29,2: 237 251. https://doi.org/10.1017/S0022278X00002731
- Motsemme, N. 2017 in Wils, L. 2017. Gender, Sexuality and Transformation in Higher Education. *Mail and Guardian Special Report*. Available at: https://mg.co.za/article/2017-09-29-00-gender-sexualithy-and-transformation-in-higher-education (Accessed October 2018.)
- Motsemme, N. 2002. Gendered Experiences of Blackness in Post-Apartheid. *Social Identities* 8,4: 647 673. https://doi.org/10.1080/1350463022000068406
- Motsemme, N. 2004. The Mute always Speak: On Women's Silences at the Truth and Reconciliation Commission. *Current Sociology* 52,5: 909 932. https://doi.org/10.1177/0011392104045377
- Muller, S.M. 2018. The University is not a Factory. *Mail & Guardian*. Available at:

https://mg.co.za/article/2018-10-12-00-the-university-is-not-a-factory/?fbclid=IwAR0zqL1Ht9-3mI52MLF4kIHiud8A3D9zBoEpLK6a4pvkjHG__C7BSmrHYJI

(Accessed 23 November 2018.)

- Muzenda, M. 2018. South Africa: Why has Rhodes University Silenced Student Activism? *This is Africa*. Available at: https://thisisafrica.me/rhodes-university-silenced-student-activism/ (Accessed June 2018.)
- Ngugi wa Thiong'o [1986] 1998. Decolonising the Mind. In Rivken, J. & M. Ryan (eds.): *Literary Theory: An Anthology*. UK: Blackwell. https://doi.org/10.1177/039219219804618409
- Nguyen, D.J. & J.B. Larson 2015. Don't Forget about the Body: Exploring the Curricular Possibilities of Embodied Pedagogy. *Innovative Higher Education* 40,4: 331 344.

https://doi.org/10.1007/s10755-015-9319-6

- Ntseane, P.G. 2011. Culturally Sensitive Transformational Learning: Incorporating an Afrocentric Paradigm and African Feminism. *Adult Education Quarterly* 61,4. https://doi.org/10.1177/0741713610389781
- Oloka-Onyango, J.J. & S. Tamale 1995. The Personal is Political, or Why Women's Rights are indeed Human Rights: An African Perspective on International Feminism. *Human Rights Quarterly* 17,4: 691 731. https://doi.org/10.1353/hrq.1995.0037
- Pather, S. 2018. South Africa: The High Drop Out Rate of First-year University Students. *Inside Education*. Available at:

 https://www.insideeducation.org/featured/south-africa-high-drop-rate-first-year-university-students/
 (Accessed November 2018.)
- Reddy, T. 2004. Higher Education and Social Transformation: South Africa Case Study. Available at: http://open.uct.ac.za/handle/11427/22067 (Accessed January 2019.)
- Salo, E. & A. Mama 2001. Talking about Feminism in Africa. In *Agenda, African Feminisms* I, 50: 58 63.
- Sayed, Y. 2008. Education and Poverty Reduction/ Eradication: Omissions, Fashions and Promises. In Maile. S. (ed.): *Education and Poverty Reduction Strategies*. Pretoria: HSRC Press.
- Sesant, S., A. Eliseev & S. Grootes 2015. 30 Students Arrested during #FEESMUSTFALL Protests. *Eye Witness News*. Available at: https://ewn.co.za/2015/10/22/Fee-Must-Fall-campaign-sees-30-students-arrested (Accessed November 2018.)
- Singh, M. 2001. Re-Inserting the 'Public Good' into Higher Education Transformation. *KAGISANO Higher Education Discussion Series: Reinserting the 'Public Good' into Higher Education* Issue 1: 8 19. https://doi.org/10.18820/9781928357056/01
- Skade, T. 2016. Black Graduates, Mainly Women, at Highest Risk of Unemployment. *Destiny Man*. Available at:

 https://destinyman.com/2016/04/05/women-and-black-graduates-face-highest-unemployment-risk/?fbclid=IwAR0scvniGRwEeZXpZPSC6GwnRtVgKq5Dhdv7U4E7
 5Ba0Cub7cXLmbpgEvzE (Accessed 20 November 2018.)
- Statista 2018. Available at: https://www.statista.com/statistics/813010/youth-unemployment-rate-in-south-africa/ (Accessed 20 November 2018.)

Critical Race Feminist, BC, and African Feminist Perspectives

- Vally, S. 2007. Higher Education in South Africa: Market Mill or Public Good? *JHEA/RESA* §,1: 17 28.
- White Paper for Post-School Education and Training 2013. Department of Higher Education and Training, South Africa. Available at:

http://www.dhet.gov.za/SiteAssets/Latest%20News/White%20paper%20for%20post-school%20education%20and%20training.pdf

Corinne Knowles Humanities Extended Studies Rhodes University c.knowles@ru.ac.za

New Materialist Perspectives for Pedagogies in Times of Movement, Crisis and Change

Delphi Carstens

Abstract

Theoretical perspectives that are useful for a pedagogy – one that aims to be beneficial in these times of socio-economic crisis, environmental destruction and climate change – need to account for *materiality*. Our time – referred to as the Anthropocene (the geological age of man) or, perhaps more accurately, the Capitalocene (the age of global capitalism) - is a time of unprecedented material movements, crises and changes for all Earthlings. Given the scope of the crisis for life itself (the currently unfolding 'sixth extinction' of biological life) from which humans are not materially exempt, we are called upon to account for our materiality (as well as its effects and affects) in ways that take critically take stock of the 'microorganisms' and 'diverse species' with which we are co-constituted, the 'material artifacts and natural stuff that populate our environment' as well as the 'socioeconomic structures that produce and reproduce the conditions of our everyday lives' (Coole & Frost 2016:1). New materialist theories present us with ethical, epistemological and ontological ways of rethinking our teaching practices in order to make them more alive to the material world as well as to the enormous problems that are now besetting it. This theoretical paper aims to demonstrate why this is the case by providing a broad outline of new materialism and its pedagogical usefulness. First outlining the nature of the crisis that requires materialist intervention, it then presents some of the topoi, or key principles, by which we might come to a critical understanding of new materialist perspectives and their value for Higher Education and Extended Curriculum Provisions (ECP).

Keywords: Capitalocene, Anthropocene, Linguistic Turn, Materiality, Sympoeisis, Agential Capacity, Affect, Relationality, New Materialism, Ethicoonto-epistemology

Introduction

Theoretical perspectives for pedagogies that aim to take matter and materiality onboard in ways that are critically appropriate to the Anthropocene/ Capitalocene can broadly be termed new materialist. While they are a pluralist enterprise, such perspectives are constructed around common themes – namely, the taking onboard of scientific foundations about the 'stuff' or materiality of the world, as well as the simultaneous problematisation of standard historical and scientific materialisms that are invested in the ideology of progress and the 'fantasy of the [human] subject's autonomous self-containment' (Schaefer 2015: 65). Instead of enforcing illusory conceptual gaps between the subject and object of knowledge or cutting up the world into discreet partitionings, new materialist interventions – whether termed posthuman, agential realist, vital materialist, etc. – seek to make connections between the vibrant agential and affective capacities of matter as well as the intermeshed entanglements of material things, objects and subjects.

In the process of making relational entanglement more visible, new materialist practitioners jump the fences erected between disciplines and areas of knowledge production, crafting ontologies and epistemologies that are premised on an ethics of immanence rather than transcendence. Defying what Donna Haraway (1991: 189) refers to as the 'god-trick' of Western-Enlightenment androcentric and anthropocentrically-invested modes of thinking-doing that are situated at one remove from the world, pedagogies premised on new materialist theoretical frameworks embrace an 'ethics of mattering' that takes stock of the 'radical historical contingency for all knowledge' whilst simultaneously making a 'no-nonsense commitment to faithful accounts of a 'real' world' (1991: 187).

For Haraway, this does not imply ditching scientific rigour, but rather paying close attention to the poison of metaphysical individualism that cuts us off from taking notice of human relationality. What educators and researchers need to impart, as Karen Barad, writes, is a sense of 'responsibility and accountability for the lively relation-alities of becoming of which we are part' (2007: 393). This raises the matter of eco-materialist views – evinced in the work of various thinkers that fall under the banner of the new materialisms (such as the forgoing, Stacey Alaimo, Elizabeth Grosz, etc.) – which are, as I argue, especially serviceable to the task of rethinking foundational pedagogies in relation to contemporary issues.

The Anthropocene/ Capitalocene Crisis

We are living in what has been termed the *Anthropocene*, 'a historical epoch of our planet during which human activity has become the dominant influence on climate, environment, geology and ecosystems' (Clarke 2018: 11). There is manifestly a calamity – 'the Anthropocene crisis' – that urgently necessitates new ways of thinking and teaching about ecology, materiality and relationality in ways that enable students to not only grasp the nature and scale of the crisis but also to think beyond it (Carstens 2016). A mere 200 years after its inception, 'globalised' industrial civilization has presented the world with several pressing socio-economic and environmental problems such as 'climate change, water pollution, the rapid disappearance of growing numbers of species ... a desperate shortage of clean water for many people, enormous disparities between rich and poor' (Shotwell 2016: 111). There are also urgent problems for Higher Education. Reframing students as passive consumers of services and the recipients of narrowly defined market-orientated 'outcomes,' the neoliberal climate also smothers lecturers under perpetual performance reviews and personal development outcomes while, in the case of Extended Curriculum Provisions (ECP), guaranteeing them little in the line of job security or institutional visibility.

While many in ECP find themselves laboring on temporary contracts, their students face the 'no-future' prospects of the global marketplace, where the costs of living (and the chances of falling into a perpetual debt cycle) go up and up while the prospects of finding a decent job decrease with each looming financial collapse. Educational systems under neoliberal capitalism, as Mark Fisher (2009) observes in a disquieting account of his experiences as a lecturer in a Further Education college in the UK, perpetuate the psychic brutalities of the marketplace, circulating apathy, cynicism and mental agitation amongst students and teachers alike. Like Fisher, new materialist pedagogues insist that we should make the causes, conditions and outcomes of neoliberal capitalism more visible in our curricula (no matter what discipline is being taught, whether Arts or Science-based). These include the colonial eradication of indigenous peoples, the spread of industrial civilization with its world-changing technologies and inappropriate lifestyles, the perpetuation of inequality and the economization of all life (whether human, plant or animal) for extractive profitdriven motives. The outcomes of these interlocking motifs are dire indeed; not only have they produced terrible disparities amongst the world's human populations, but they have triggered a potential collapse of the planet's

carrying capacity for life. Finding ourselves 'shadowed by futures that will surely need repair', writes Alaimo (2016: 188), we are confronted with the necessity of forging critical teaching and research practices that preclude the taking of 'straight paths' – paths of progress and reductive reason that have led us to the trouble of the Anthropocene/Capitalocene. New materialist theories present ways of making our teaching practices alive to the world, offering a 'swirl[ing] together' of 'ontology, epistemology, scientific disclosures, political perspectives, posthuman ethics and environmental activism' and more besides (Alaimo 2016: 188). From a new materialist perspective, the contemporary world is filled with clarion calls for us to rethink the ways in which matter has been taught and thought.

The Anthropocene is only one of several proposed names for our current era of planetary crisis. An alternative, the *Capitalocene*, coined by Jason Moore, captures the role played by capitalism in the overarching reorganization of contemporary social, economic, and biological processes (Clarke 2018). 'Imagining the human since the rise of capitalism entangles us with ideas of progress and with the spread of techniques of alienation that turn both humans and other beings into resources', writes Anna Tsing (2015: 19), urging pedagogues to teach about progress narratives as well as the shared human/nonhuman precarities and vulnerabilities they have engendered. As Elaine Gan, Tsing and others point out in their seminal anthology of new materialist perspectives Arts of Living on a Damaged Planet (2017), in the Anthropocene/Capitalocene the task of reforming the ways in which we teach about the world is more urgent than ever: relationalities and 'living arrangements' - ecosystems, in other words, from the human microbiome (undone by artificial hormones and chemicals) to coral reefs and rainforests – 'that took millions of years [of biological evolution] to put into place are [now] being undone in the blink of an eye' (2017: G1). We are therefore urged to incorporate the nonhuman world of ecosystems, species and symbioses (as well as what makes them tick) into our teaching practices. In doing so, we can certainly begin to do something in our classrooms and research practices about tackling this industrially-produced ecological ruination (which is most certainly our own too). By 'rethinking relations among organisms and the metaphors by which we describe them', educational practices can help shift how we humans 'value other beings' and how we might re-orientate ourselves towards them (Hejnol 2017: G92). My argument in this paper is that new materialist theoretical perspectives provide critically important tools for

Delphi Carstens

reconceiving ethical, epistemological and ontological questions and, in the process, making them more central to our pedagogical practices.

Coming to Grips with New Materialist Pedagogical Perspectives

While the forging of critical citizenship seems, at first glance, to be an unappealing remnant of Western Enlightenment-derived educational agendas. there is still much at stake in such an endeavour for Higher Education and ECP pedagogies that aim to take new materialist principles seriously. While fascism, xenophobia and profit-driven greed are making problematic inroads into contemporary global and national politics, capitalism, as Fisher (2009) writes discourages pedagogy from the task of producing critical subjects who can resist such moves. Under neoliberal regimes of power, he writes, Higher Education has been thoroughly monetised and managerialised, with students rendered into the passive 'consumers of educational services' (2009: 21). For these reasons, the notion of forging critical citizenship needs to be recuperated by educators as they strive to nurture nuanced, and more importantly, productive, social awareness in these Capitalocene times of change and crisis. Doing so, from new materialist perspectives, requires that pedagogues pay close attention to the ways in which the immaterial is entangled in the material, the societal in the environmental, the political in the ecological, the local in the global, etc.

Although there are varied new materialist genealogies, to my mind the work of Deleuze & Guattari – by insisting that ideality is not separate from but immanent to materiality – captures the gist of the shared ethos. Grosz (2017) writes that the pathbreaking work of these continental philosophers constitutes a radical departure from epistemological systems that privilege form over matter / subject over object. There are also shared 'onto-ethical' matterings 'at the heart of new materialisms, and in the tradition of Deleuze-Guattarian thought', writes Chantelle Gray (2018: 470), adding that in both, 'we find that categories previously deemed binary are now held to be part of a complex co-imbricated ontology'. By investigating how economies, ecologies, societies, languages, bodies and affects are entangled – not only with one another, but also with ways of thought, technological networks, ethical practices, nonhuman others, as well as diverse physical materials – Deleuze and

Gauttari's separate and collaborative work, especially evident in *A Thousand Plateaus* (1988), can be said to typify new materialist approaches aimed at building a critical understanding of how matter comes to matter. It is not amiss to claim, as Deleuze and Gauttari (1988) frequently do, that foregrounding material factors as well as fundamentally 'reconfiguring our very understanding of matter' are crucial responsibilities for a pedagogy that seeks to do more than peddle an economized 'service' (Coole & Frost 2016: 2) From such vantages, the task of educators is to take a stand against the contemporary growth of narrow-minded fascisms and morally-bankrupt economizing by 'supplying students with a 'plausible account of [material] coexistence and its conditions in the twenty-first century' (2016: 2). From new materialist perspectives, this means teaching students how to critically account for the material practices by which contemporary humans are implicated in material processes of world-building or 'worlding' with innumerable others.

While contemporary sciences (particularly the natural sciences) have started to move on from dangerously outdated worldviews, Higher education systems and ECP provisions (even in science-related education) are still promoting, often by default, the by now archaic Western ontology of a 'passive' world that humans can supposedly rightfully 'master' by studying law-like causal relations. New materialisms ask that educators work to undermine this fallacious anthropocentric ontology and epistemology, which persists in the ideology of progress that underpins industrial practices and marketised educational paradigms. There are clear ethical reasons for pedagogues to desist from promoting outdated world-views, along with treacherous systems of knowledge-production and neoliberal practice: if we persist in doing so, then we are actively complicit in the vast networks of inequality and planetary harm that these obsolete worldviews, praxes and skewed ethical modalities have produced. More crucially, as educators, we will have prevented our students from 'opening', ethically and immanently, to the 'unpredictable and indeterminate materialisations', that make up the world as well as from waking up 'to the growing uncertainties' of our existing 'geopolitical and socioeconomic structures' (Snaza et al. 2016: x). From new materialist perspectives, all living things - human or not - are powerful agential subjects and we are being urgently called upon to attend more ethically in our classroom practices to their capacities to affect and be affected, and to enter into assemblages with other objects, things and powers.

In their introduction to Pedagogical Matters (2016), Snaza, Sonu, Tru-

Delphi Carstens

man and Zaliwska identify four general principles or *topoi* by which educators might come to an understanding of the new materialisms:

- (1) that we need to exhume materialities lost in a decades-long fetishization of texts and discourses by the so-called linguistic or cultural turn;
- (2) that education needs to be more attentive to developments in the contemporary life sciences;
- (3) that matter has some form of agency; and,
- (4) that entities do not precede their relations but rather emerge from them.

These principles are worth taking into consideration because, I argue, they can be directly related to ethical, epistemological and ontological concerns in Higher Education and ECP pedagogy. New materialist theories, as I demonstrate via examples from my own teaching, assist us in reworking these concerns into what Barad (2007) terms an integrated 'ethico-onto-epistemology' – a cohesive relational approach appropriate to the tangled material conditions of the twenty-first century.

Topos 1: Unearthing Materialities Lost in a Decades-long Fetishization of Texts and Discourses by the So-called Linguistic/ Cultural Turn

Insisting that there can be no unmediated access to 'nature,' the linguistic turn – dominant in sociology and other arts-based fields (including education) since at least the 1970s – has concerned itself with anthropomorphised idealities (such as language, discourse, culture, and values) while problematising any straightforward overture toward base matter or material experience (Snaza *et al.* 2016). While this turn, as Donavan Schaefer (2015:10) writes, succeeded in 'dismantling nineteenth century colonial hierarchies of the primitive and civilized', and therefore served as 'an important corrective to racist colonial logics', it also enshrined a 'Kantian logic that traffics in linguistic fallacy' by reestablishing an archaic Greek fiction that 'language is the medium of power and the primary analytic locus' of all cultural and scientific discourse. While new materialisms attempt 'to give material factors their due in shaping society

and circumscribing human prospects' (Coole & Frost 2016: 3), the linguistic or cultural constructivist turns in theory appear to have deprivileged materiality altogether by reducing bodies, cultures, economies, religions, pedagogies to 'a network of discursive regimes' (Schaefer 2015: 112). New materialist theories, by contrast, are more interested in the 'dynamic interplay between language, sensing bodies and things in the world' (2015: 112). Yet, as Elizabeth Wilson (2015) writes even when they explicitly deal with bodies, much of existing feminist, sociological and pedagogical practice continues to rely on 'methods of social constructionism, which explore how cultural, social, symbolic, or linguistic constraints govern and sculpt the kinds of bodies we [humans] have ... [while] tend[ing] not to be very curious about the details of empirical claims in genetics, neurophysiology, evolutionary biology, pharmacology or biochemistry' (2015: 3). Shaeffer, like Wilson, urges pedagogues toward explorations of 'histories that start before texts: phylogenetic histories originating with prelinguistic bodies – including non-human bodies – driven by forces outside of language' (2015: 11).

New materialist perspectives and practices call upon pedagogues to account, in their praxes, for how human bodies fall within a field of animality and shared human/nonhuman vulnerabilities. This is a perspective that necessitates responses orientated toward an ethics of immanence. Grosz suggests that moving the attention of our students away from the ethics of 'discreet individuality' promoted by the linguistic turn (and by Western discourse as a whole) towards one of immanence or radical relationality necessitates paying close attention 'to the pre-human [and] the inhuman' world of animals and affective relations; a process that will enable both educators and their charges to discover surprising new 'human ways to invent and create' (2017: 259). We are urged to ethically consider and teach about human subjectivity as the effect (and affective play) of 'broader, largely disavowed, plays' of power relations as well as nonhuman agencies, and to think of these 'others' – whether human, cosmic or geological force, microorganism, animal, plant, insect, material artifact, chemical toxin, radioactive isotope or affective assemblages of emotive intensity (such as fear/repugnance or love) – as agential and political 'entities toward which we must be ethically and politically orientated' (Coole & Frost 2016: 6). Rosi Braidotti (2013: 92) urges pedagogues of all stripes to orientate their practices in accordance with an ethics of immanence that takes up Deleuze & Guattari's 'vitalist' call to construct a pedagogy of 'mutual trans-species interdependence'. Constructed around principles of 'ecosophy', Braidotti calls for pedagogues to make connections between 'the multiple layers [both human and nonhuman] of the subject, from interiority to exteriority and everything in between'.

The ECP course that I teach explicitly takes up Braidotti's invitation to set up a relational ecosophic pedagogy. Beginning the year with an exploration of the origins of the material human body and human society in processes of cosmic, geological and biological and cultural evolution, it proceeds via a series of readings, short films, and class discussions that explore the human body and human society not as a cultural, political and scientific object, but as a dynamic relational assemblage and human and nonhuman components. Local nature-poet Ian McCallum's easily digestible transdisciplinary ecosophist musings in Ecological Intelligence: Seeing Ourselves in Nature (2005), as well as Anthony Synnot's accessible The Body Social (1993) provide some core readings, which I supplement in lectures with some carefully explained new materialist insights. Judging by enthusiastic student responses, there is indeed much pedagogical use-value in teaching the human body as part of a nonhuman continuum (along with other bodies and material forces). Schaefer explains that 'it is not only other human bodies that our bodies need, but the array of materialities [both] living and nonliving, that make up animal life-worlds' (2015: 100). For myself and my students, the opportunity to 'see ourselves in nature' is both deeply sensuous and ethical. As we have discovered, discourse and language can be redirected away from the fiction of discreet individuality and mobilised towards a vision of 'the self' as 'part' of the world, instead of 'sovereign, alone and transcendent' (2015: 112). It is indeed affectively liberating to discover that we are all Earthlings -'material bodies, existing on a single plane of substance; 'a plane of immanence' in Deleuze-Guattarian terms, alive with transformation' (2015: 101). What a thrill it is for myself and my students to discover that all bodies (human and not) possess a capacity for 'activity and responsiveness' (2015: 101) and to realise that all bodies (both human and not) are driven by 'compulsions', as well as 'historically derived complexities' of powers that either constrain or liberate them (2015: 103).

Topos 2: Education Needs to be More Attentive to Developments in the Life Sciences

While the first topos challenges pedagogues to develop an ethical stance of

radical relationality and immanence, the second foregrounds epistemology. Braidotti (2013) writes that new materialist theories challenge longstanding Western humanist presumptions about what being human means and how it is that humans come to know and relate to the world. These are epistemological questions that new materialism frequently approaches from the context of developments in the sciences. Haraway, for example, (2017: M29) finds herself 'undone and redone by the New Synthesis' now unfolding in contemporary biology – 'an intellectual, cultural, and technical convergence' that she finds best exemplified by the figure of biologist Lynn Margulis who, aside from her pathbreaking scientific work on symbiogenesis (co-evolution), was also a 'peerless and much-loved teacher'. As 'an adept in microbiology, cell biology, chemistry, geology, and paleogeography, as well as a lover of languages, arts, stories, systems theories, and alarmingly generative critters', Margulis' work as both scientist and pedagogue embodies, for Haraway, precisely the kind of transdisciplinary ontological and ethical engagements that new materialism foregrounds as fundamental to the task of pedagogy, no matter what the discipline being taught (2017: M27). If new materialist approaches towards pedagogy can be summed up in a single word, then it would, as Haraway (2017: M25) suggests, be 'sympoeisis' (literally, 'makingwith'); 'a word proper to complex, dynamic, responsive, situated, historical, sociological and ecological systems ... a word for worlding', a concept central to what it means to know in the twenty-first century, and therefore central to the task of Higher Education.

'It is not so difficult to love nonhuman life, if gifted with knowledge about it', writes biologist E.O. Wilson (2004: 134). With this sentiment in mind, a carefully chosen chapter from Wilson's *The Future of Life* (2004), worked through in lectures with carefully explained insights from Margulis, Haraway and the example of cephalopods (which will shortly be discussed), helps my students think through invisible networks of microbes, fungi, and invertebrates (in soils and animal microbiomes) as well with as the radically entangled bacterial/plant/animal relations that sustain the Earth's ecosystems and biosphere. Working through these biological epistemologies is challenging – particularly for ECP students seeking to enter Arts and Law-related fields. Many lack biology as a high-school subject and most struggle, initially, to grasp why thinking with knowledge from the life-sciences – or epistemology in general – could possibly be relevant. Yet – based on exceedingly high levels of class participation, good reading-comprehension test scores, as well as

enthusiastic responses to essay topics such as 'thinking with the Gaia hypothesis' – this difficult work is also, in the end, unexpectedly affirmative and pedagogically rewarding. The gusto of my students is hardly surprising. E.O. Wilson (2004: 134) writes that our ability to 'know the world intimately' and pleasurably, as well as our 'capacity and the proneness to do so, may well be one of the human instincts – *biophilia* – defined as the innate tendency to affiliate with [and derive affective pleasure from] life and lifelike forms'.

What does it mean to know when, as cognitive biology shows, cognition, communication, information processing, computation, learning and memory can be seen at work in bacteria, plants and diverse 'lower' animals (Hejnol 2017)? A favourite classroom stratagem of mine is to help students think about epistemology from new materialist perspectives with the aid of cephalopods. These astoundingly beautiful photogenic, performative and curious creatures (octopi, squid and, cuttlefish), possess bodies that are really extended nervous systems (or extended brains, to be precise, without a wholly centralised executive processing unit). Amazingly, they live completely outside of the usual body/brain divide assumed by Enlightenment science to be necessary for intelligence. Moreover, they illustrate the absurdity of the Cartesian dictum (cogito ergo sum) that not only assumes that thought is not materially bound, but privileges brains over bodies, ideality over materiality, and intelligence-possessing humans over all other forms of life (Ponting 2007). Until recently, many cognitive theories, as historian Peter Watson (2001: 702) writes, viewed 'higher intelligence' (the possession of episodic, procedural and semantic memory) as the exclusive provenance of certain 'higher' mammals (namely, humans) endowed by Darwinian evolution with a 'reptilian core' (the seat of basic drives), 'a paleomammalian layer' (the seat of emotions) and a 'neomammalian brain' (the seat of reasoning, language and other higher functions). Significantly, intelligent cephalopods possess none of these centralizing organs of consciousness; instead, their 'brains' are extended nervous systems distributed throughout their entire bodies (Godfrey-Smith 2016). Despite having diverged from the evolutionary branching that produced reptiles and mammals over 600 million years ago, cephalopods exhibit extremely complex learning, adaptive and linguistic behaviours on par with socalled higher mammals (Godfrey-Smith 2016: 41). Cephalopods can be viewed as avatars of new materialist theories that emphasize the vibrancy of material bodies and the immanence of ideality and materiality. While they are 'material objects', relegated to purely mechanistic being by Cartesian science,

cephalopods with their 'body-brains are protean, all possibility' (Godfrey-Smith 2016: 76). Although they are 'the closest we are likely to get to meeting an intelligent alien' (2016: 200) they are also cognitive kin that remind us that epistemology, as Sadie Plant puts it, boils down to an 'epiphenomenon of fluid transmissions within and between all organisms' – a marvel with deep oceanic origins (1999: 249). The cognition of all living things, including bacteria, 'evolved in the ocean' and 'the Earth and its oceans made the bodies of all critters', including humans, whose 'water-filled cells bounded by membranes still carry remnants' of that entangled oceanic origin that all earth-life shares in (Godfrey-Smith 2016: 200).

From new materialist perspectives, singular, reductive deterministic stratagems (including those of science) could never account for the full variation of the world's becoming. What this means in classrooms is that other ways of knowing – both human and nonhuman – must be considered and brought into conversation. All of earths creatures, including humans in all their diversity 'relate, know, think, world and tell stories through and with other stories, worlds, knowledges, thinkings, yearnings', writes Haraway (2017: M45), adding that sympoesis and symbiogenesis should *not* be the exclusive ambit of life science classrooms (if, in fact, it has even made it into such classrooms at all), but should be the focus of pedagogies in all fields of knowledge production. Sympoeisis, she opines, is about crafting 'a more venturesome, experimental [and inclusive] natural history' that includes creative synergies and classroom conversations between indigenous ways of knowing, nonhuman intelligences and all manner of poetic, artistic and scientific modalities (2017: M45).

Topos 3: Matter has Some Form of Agency

The third topos, entangled with the first two, is related to ontology, or the sense of 'being' in the world. Scientific discoveries in physics and biology have revealed that 'materiality is always something more than mere matter: an excess, force, vitality, relationality, or difference that renders matter active, self-creative, productive, unpredictable' (Coole & Frost 2016: 9). New materialism, rather than reserving ontological agency to humans, vigorously asserts the power of all living matter to act or possess agential capacity. Even immaterial 'things' are seen to possess a kind of relational agency or vibrancy.

Delphi Carstens

In sum, new materialisms ask that we 'recognize that phenomena are caught in a multitude of interlocking systems and forces and consider anew matter's capacity for agency' (Coole & Frost 2016: 9). From a Deleuze-Gauttarian perspective, being is always co-constituted in relation to, or in 'alliance' with, multiple others, both human and nonhuman; being is never specific or remote but engaged in perpetual processes of becoming – 'a verb with a consistency all its own' (Deleuze & Guattari 1998: 238-239). In short, ontology, from new materialist perspectives, is inextricable from agential capacity and processes of becoming/worlding. Jane Bennet, working on such a premise, theorises 'a vitality intrinsic to materiality' - proposing a kind of vibrant materialism that seeks 'to detach materiality from the figures of passive, mechanistic, or divinely infused substance' (2010: xiii). Such shifts necessitate more complex ways of thinking about causality, change and the boundedness of material (and, in fact, even immaterial) entities or agencies. In classrooms, 'encounters with lively matter' – as my examples of teaching with McCallum's Ecological Intelligence, Wilson's The Future of Life as well as cephalopod cognition attest - might help to 'chasten fantasies of human mastery, highlight the common materiality of all that is, expose a wider distribution of agency, and reshape the self and its interests' (Bennet 2010: 122).

Iris van der Tuin (2014: 232) writes that the 'past considered ontologically [is] a condition of the passage into the living present'; a present in which we, if guided correctly, might come to think of ourselves as agential beings differently. Animated by such hopes, one section of my syllabus explores the brutal history of Western civilization and the ideology of progress in a manner that seeks to install a more affirmative counter-ontology based on sympoeisis. Assisted by class discussions enlivened by carefully explained new materialist principles, prescribed readings by popular environmental historians like Clive Ponting (2007), Jared Diamond (2004) and Ronald Wright (2005) supply the necessary background information. Students are asked to write critical essays on topics such as 'the problem with progress' and 'the allure of consumer capitalism.' During this section of my course students move away from conceiving the presence of the biological past and engage with the certain cultural pasts via progress continuation narrratives. colonial/capitalist power-regimes and a Western consumer aesthetics of 'conspicuous consumption' that are centuries in the making.

Alaimo (2018: 188) writes that the world of contemporary consumer capitalism is a world filled with 'strange agencies', in which 'banal objects'

such as smartphones, or even 'toothbrushes, plastic bottles, plastic bags, food containers, children's toys, and so forth' can be seen to possess 'weird', and sometimes even 'malevolent' powers. As Alaimo explains, and as I discuss with my class, consumer objects and practices have interesting implications for the contemporary situation (and sensation) of being in the world, raising significant questions about the future of agency and ontology. A chapter taken from Peter Watson's *A Terrible Beauty* (2000) on the information revolution in genetics and computing (as well as the heady debates it has sparked around questions of race, cognition and autonomy), helps my students to come to terms with some of these questions. As Patricia Ticinto Clough (2007: 62) points out, and as I debate with my students, these questions have bounced back at us, 'opening the human body' as well as human cognition and its metaphorical stratagems 'to matter's informational substrate, drawing on the bio-informatics of DNA in biology, or quantum theory's positing of information as a form of measure'.

Haraway (2017) and many other new materialist science-scholars have made much of recent attempts by cognitive biologists to assign ontological agency (the correct biological term is 'onticity') to all biological beings and even to adaptive systems such as ecosystems. This is something that we need to actively explore in our pedagogies. 'Onticity' might already, or perhaps very soon, extend to include 'intelligent' machines and adaptive machine networks. Relational agency, therefore, seems a good way of thinking and teaching about (or, rather with) things and objects. 'Thinking as [and about] the stuff of the world', as ourselves and our students should be doing, 'entails thinking in place, in places that are simultaneously the material of the self and the vast networks of material worlds', suggests Aliamo (2018: 187). Regardless of their apparent material intransigence, objects (even inanimate ones) are never completely unyielding. The journey of plastic bags and cellphones, for instance - from environment-trashing resource extraction processes, exploitative sweatshop labour practices to consumable items (via vast pettifogging supplychains) - make for compelling classroom storytelling. Texts such as the final chapter of Jared Diamond's Collapse (2005), an article by Elizabeth Kolbert called 'The Age of Man' (2001) and Jennifer Baichwal's haunting documentary, 'Manufactured Landscapes' (2007) helps me do this grim work with my students. Given the manifest dangers – the malevolent agency of microscopic plastic particulates, agricultural pesticides, and chemical poisons as they travel down food-chains into human and nonhuman bodies – these are essential classroom conversations to be having. As Isabelle Stengers (2015: 134) writes, the Anthropocene/Capitalocene challenges us to foreground ontology in ways that problematize the financialisation of life, the 'boredom' of non-innocent consumer addiction, as well as the frightening agency of contemporary humans; to talk, in our classrooms, about 'erosion, pollution, contamination, a monstrous accumulation of garbage, and of course a massive loss in biodiversity ... [which] tell, and will go on telling about us in a far-away future measured in geological time'.

Topos 4: Entities do not Precede their Relations but Rather Emerge from Them

The last topos embraces the first three and encapsulates the ways in which we might think and teach with a new materialist ethico-onto-epistemology. No matter which way we turn in our pedagogical practices, 'we find ourselves entangled with the world, and thus our ontology, our knowing relations, and our ethical orientation and practice are all invoked in action', writes Alexis Shotwell (2016: 116). If, armed with curiosity, intelligence and the right cues, we start digging around on the 'information super-highway,' (as I encourage my smartphone savvy students to do), we discover numerous online accounts of highly concentrated radioactive materials and plastic particulates making their way up food chains, enacting genetic mutations, bodily deformations and planetary-system changes as they go. We discover, to our horror, that humans, even highly individualised ones in ivory towers, are not magically innocent or free of all this messiness; a situation I explore with my students with the assistance of a fascinating open-access article by sociologist Andrew Jones called 'The Next Mass Extinction: Human Evolution or Human Eradication' (2009). Nils Bubandt (2017: G135-136), in an equally fascinating transdisciplinary discussion around Indonesia's anthropogenic Lapindo mud volcano, captures the gist of Jones' narrative when he writes that the present moment – the moment of Anthropocene/Capitalocene - 'invites us to imagine a world in which an alien geologist from the future detects in the strata of the ground evidence of the presence of humans long after they have gone extinct ... opening up to a retrospective reading of the current moment, a paleontology of the present in which humans themselves have become geological sediments or ghosts'. Students are fascinated by the temporal and agential entanglements enacted by such narratives and experience a tremor of fear when confronted by Jones apocalyptically-tinged discussion of impending annihilation. When asked to write a final essay that debates the relationship between capitalism and extinction, they often respond with startling passion. Many, to my great delight, succeed in articulating the fallacy of believing that 'things' – whether human, mud volcano or petroleum company – are free from the relations, sometimes damaging, they form with other things or forces. Nor is it all that difficult for many of them to grasp, in broad strokes, that entities like plastic bags or cellphones do not precede their relations but rather emerge from them. Objects, 'things' and bodies – the material 'stuff' of the world – as Haraway insists, are always and already 'actors and agents' of their own in relation to the knower (1997: 592).

Barad (2007) has drawn several important lessons from twentieth-century experiments in physics. She proposes that, learning from these developments, we consider entities as 'intra-active' as opposed to interactive. Subatomic physics has revealed that entities are not actually separate things that then enter into relations but rather that all entities emerge from relations. 'Each intra-action matters', she writes, 'since the possibilities for what the world may become call out in the pause that precedes each breath before a moment comes into being and the world is remade again, because the becoming of the world is a deeply ethical matter' (2007: 185). This foregrounding of the radical relationality of all things has been given many names in new materialist theories – transcorporeality (Alaimo 2016), intra-action (Barad 2007) and, of course, sympoesis (Haraway 2017). These theories, in turn, draw strongly on developments in the natural science and physics, as well as on the groundbreaking vitalistic ontology developed by Deleuze & Guattari in their combined and separate oeuvres. All of these approaches share in common a turn toward scientifically rigorous accounts and shifting, complex ontologies whereby entities are not conceived of as stable, bounded things but as assemblages of human, nonhuman, organic, inorganic, material and immaterial components.

Feminist new materialist scholars such as Grosz, Haraway and Barad urge us to leap across subject boundaries in our teaching practices by, for example, including literary, sociological, anthropological and philosophical narratives in our engagements with the sciences (and vice-versa) in order to reveal radical relational entanglements. No-one can argue, for example, that science doesn't have social implications or, in turn, is unaffected by economics. Although most institutions tend to view trans-disciplinary courses with distaste, nothing prevents lecturers from taking up transdisciplinary

Delphi Carstens

engagements in their classrooms, forming research groups to debate these matters (or from doing the legwork on their own, if needs be). There are also countless online and offline resources at the disposal of pedagogues who wish to explore the contours of the new materialisms. Alaimo's *Exposed* (2016), for example, transverses a multitude of fields from science and ecology to marketing and public relations. Transcorporeality, as she explains by exploring the multiple interconnections between bodies, societies, cultural practices, substances and environments, is a way of bringing together social-justice and environmental-justice concerns as well as research methodologies and teaching practices that 'perforate the borders that demarcate the human as such' (2016: 77). Many of the art-science and eco-social activisms that Aliamo (as well as Haraway 2017) discusses furthermore suggest compelling new uses to which social and other digital media can be put and thought about in classrooms.

Undeterred by the trouble of tackling difficult theory with her reluctant undergraduate class, Elspeth Probyn (2004: 36) wonders, 'how does one or could one teach theory, and especially theories of embodiment, in ways that engage the curiosity, the intellect and the emotions of students?' Her simple 'fairly low tech' solution – an affect-laden reworking of a standard large-classroom situation, much like my own – is worth quoting (2004: 36):

In my huge undergraduate class I can be much 'larger' than in a small seminar. It is incredibly freeing to be in front of 450-odd bodies comfortably seated and awaiting a show. I'm well-miked – with a lapel mike so as to wander – and I'm prepared with fabulous a/v material. I demand and command attention, peering into all those eyes. Gestures can and need to be big. The wonder of technology allows me to throw my voice and to intimately inquire of the girls at the back if they're having fun, or to tell them to shut up. The outlines of the theoretical points are on the overhead, and have been posted beforehand on the web along with salient quotes. This fairly low-tech support acts like parallel bars in gymnastics – as the underpinning allowing for the controlled display of a body in movement. Bad jokes, shared laughter and a complicity between teacher and students, and amongst the students themselves, allows for the contagion of the interest-excitement affect

New materialist educators like Probyn propose that we should seek ways of

productively entangling the local with the broader relational frameworks of environmental, social and economic contexts, while teaching modes of knowledge that are accountable, embedded, passionate and purposeful. Shotwell, for instance, writes that 'climate change, water pollution, the rapid disappearance of growing numbers of species ... a desperate shortage of clean water for many people, enormous disparities between rich and poor', are only some of the crises of entangled human/non-human embodiments arising from 'capitalist modernisation' that need to be critically explored in classrooms (2016: 111). As I observe elsewhere, 'our students are more aware of these issues than we might think; what they want is for us to teach them how to engage with these difficult entanglements' (Carstens 2016: 267). The purpose of a responsible pedagogy, as Alaimo (2016: 172) suggests, is to provide 'artful representations of realities that are not usually visible due to the scalar extremes and privatisation of space' in standard capitalist pedagogical systems and institutions that stress 'science, business, engineering and operational efficiency', while completely 'undervaluing' and neglecting the skills that are necessary for critical citizenship, such as 'philosophical reflection, ethical consideration, social and political analyses as well as literary musings'.

Conclusion

Deborah Bird Rose urges us to teach 'that the world is *not* composed of gears, cogs' and discrete objects – as it is still typically taught in many classrooms, 'but of multifaceted, multispecies relations and pulses' extending out in all directions and scales (2017: G55). She invokes the Yolngu word bir'yun or 'shimmer', defining it as one's 'capacity to see [the] ancestral power' of things, 'which call upon us to bear witness [to them] ... to tell more truthful accounts' of their relations as well as to 'radically rework our forms of attention' towards them and the assemblages they form or might yet form (2017: G55). It is only in their shimmering vitality that the bodies, things and powers of the world allow us to approach them in all their protean multiplexity. As Jane Bennett (2015) correctly observes, reductive science's claims about the discrete nature of the 'things' of the world constitutes only one of many rhetorical stratagems for knowing the world. New materialism, by contrast, urges pedagogues to counter human reason and its will to singular truths by rallying against the 'hubris of human exceptionalism' and affirming the 'vitality or creative [relational] power of bodies and forces at all ranges or scales' (Bennett 2015: 233). As Evelien Geerts (2019) writes, we are urged by the new materialisms to 're-think what is traditional and canonical' by working towards a 'pedagogy that is centred on critique and creativity, situatedness, geopolitical (self-)awareness, accountability, and an immanent ethical attitude that takes current-day political constellations and complications into account'.

While, as Gan, Tsing and others (2017: G1) write, 'the enormity of our present dilemma leaves many scientists, writers, and scholars in shock', or worse, in denial, there is still a chance to turn to tide of ruination, extinction and death if we pay attention, in our pedagogies, to 'the traces of more-thanhuman histories through which things, bodies and ecologies are made and unmade'. Shifting as our awareness of these matterings are, along 'a broad interdisciplinary front fraught with linguistic as well as conceptual complexities', it is new materialist philosophies with their nuanced understanding of rhetoric, argument and interpretation, that are well positioned to take us forward. The question now is whether pedagogues in Higher Education can engage with and foster the forms of noticing that are now urgently required. The new materialisms, as I have contended throughout, can show pedagogues how to productively hone research, metaphors and teaching stratagems as well as to suggest methodologies for facilitating transdisciplinary classroom conversations that are critically appropriate to the situation of the Anthropocene/ Capitalocene. Pedagogues in all fields, as Bennett writes (2015: 234) are being called upon by the new materialisms to 'respond intelligently' and timeously to the most disturbing of all events – 'signs of the breakdown of the Earth's carrying capacity for life'.

'Staying with the human trouble', as Rose writes (2017: G55), means that we *not* drop human 'cruelty' and our 'capacity for seemingly endless and wildly indiscriminate killing' out of classroom conversations'. 'At the very least', she continues, 'we who have not yet been drawn into the vortex of violence' and death-dealing of the Anthropocene/Capitalocene 'are called to recognise it, name it, and resist it; we are called to bear witness and offer care' (2017: G55). Yet it is not only our obvious and unique cruelty – towards members of other species, as well as to members of our own – that requires pedagogical redress but, above all, our poisoned and often quite passively assumptive hierarchical relations to the things, bodies and powers of this world. Gone, in any event, is the anthropocentric comfort of nature as boundless cornucopia, endlessly bestowing, free of charge, 'her' gifts to 'man.' Hierarchical fictions, neat divisions between subjects and objects, as well as

reassuring lines in the sand between past, present and future temporalities have all evaporated. In Anthropocene educational spaces, as Brubant (2017: G136) writes, 'the present proceeds from the future, because the possibility of cospecies survival [in the future] depends crucially on what we [educators] are going to do *now*, [in the present], in the midst of an increasingly [historically] given fate of ruination and extinction'.

References and Bibliography

- Alaimo, S. 2016. Exposed: Environmental Politics and Pleasures in Posthuman Times. Minneapolis: University of Minnesota Press. https://doi.org/10.5749/minnesota/9780816621958.001.0001
- Barad, K. 2007. *Meeting the Universe Halfway*. Durham: Duke University Press. https://doi.org/10.1215/9780822388128
- Bennet, J. 2010. *Vibrant Matter: A Political Ecology of Things*. Durham: Duke University Press. https://doi.org/10.1215/9780822391623
- Bennet, J. 2015. Systems and Things: On Vital Materialism and Object-Orientated Philosophy. Grusin, D (ed.): *The Nonhuman Turn*. Minneapolis: University of Minnesota Press.
- Braidotti, R. 2013. The Posthuman. Cambridge: Polity Press.
- Bubandt, N. 2017. Haunted Geologies: Spirits, Stones, and the Necropolitics of the Anthropocene. Tsing, A. H. Swanson, E. Gan & N. Bubant (eds.): *The Arts of Living on a Damaged Planet*. Minneapolis: University of Minnesota Press.
- Carstens, D. 2016. The Anthropocene Crisis and Higher Education: A Fundamental Shift. *South African Journal of Higher Education*. 30.3: 255 273. Available at:
 - https://doi.org/10.20853/30-3-650
- Clarke, A.E. 2018. Introduction: Making Kin not Population. Clarke, A.E. & D. Haraway (eds.): *Making Kin not Population*. Chicago: Prickly Paradigm Press.
- Clough, P.T. 2007. Notes Towards a Theory of Affect-Itself. *Ephemera* 7,1: 60 77.
- Clough, P.T. 2018. *The User Unconscious: On Affect, Media and Measure*. Minneapolis. University of Minnesota Press. https://doi.org/10.5749/j.ctt21c4tp8

- Coole, D. & S. Frost 2016. Introducing the New Materialisms. Coole, D. & S. Frost (ed.): *New Materialisms: Ontology, Agency & Politics*. Durham: Duke University Press.
- Deleuze, G. & F. Guattari. 1988. *A Thousand Plateaus: Capitalism & Schizophrenia*. Massumi, B. (trans.). London: Continuum.
- Diamond, J. 2004. Collapse. London: Viking.
- Fisher, M. 2009. Capitalist Realism. London: Zero Books.
- Gan, E, A. Tsing, H. Swanson & N. Bubant 2017. Introduction: Haunted Landscapes of the Anthropocene (Ghosts). Tsing, A. H. Swanson, E. Gan & N. Bubant (eds.): *The Arts of Living on a Damaged Planet*. Minneapolis: University of Minnesota Press. G1-16.
- Gan, E, A. Tsing, H. Swanson & N. Bubant 2017. Introduction: Bodies Tumbled into Bodies (Monsters). In Tsing, A., H. Swanson, E. Gan & N. Bubant (eds.) *The Arts of Living on a Damaged Planet*. Minneapolis: University of Minnesota Press.
- Geerts, E. 2019. Re-vitalizing the American Feminist-Philosophical Classroom: Transformative Academic Experimentations with Diffractive Pedagogical Tools. In Taylor, C. & Bailey, A. (eds.): *Posthumanism and Higher Education: Reimagining Pedagogy, Practice and Research*. London: Palgrave. https://doi.org/10.1007/978-3-030-14672-6_7
- Gray, C. 2018. Love at the Limits: Between the Corporeal and the Incorporeal. *Deleuze and Guattari Studies* 12,4: 469 - 485. https://doi.org/10.3366/dlgs.2018.0325
- Grosz, E. 2017. *The Incorporeal: Ontology, Ethics and the Limits of Materialism*. New York: Columbia University Press. https://doi.org/10.7312/gros18162
- Godfrey-Smith, P. 2016. *Other Minds: The Octopus, the Sea, and the Deep Origins of Consciousness*. New York: Farrar, Straus & Giroux.
- Haraway, D. 1991. *Simians, Cyborgs, and Women: The Reinvention of Nature*. London: Free Association Books.
- Haraway, D. 1997. $Modest_Witness@Second_Millenium$. $FemaleMan@_Meets_OncoMouse^{TM}$: Feminism and Technoscience. New York: Routledge.
- Haraway, D. 2017. Symbiogenesis, Sympoesis, and Art Science Activisms for Staying with the Trouble. In Tsing, A., H. Swanson, E. Gan & N. Bubant (eds.): *The Arts of Living on a Damaged Planet*. Minneapolis: University of Minnesota Press.

- Hejnol, A. 2017. Ladders, Trees, Complexity and Other Metaphors. In Tsing, A. H. Swanson, E. Gan & N. Bubant (eds.): *The Arts of Living on a Damaged Planet*. Minneapolis: University of Minnesota Press.
- Jones, A. 2009. The Next Mass Extinction: Human Evolution or Human Eradication. *Journal of Cosmology* 2: 316 333. Available at: http://journalofcosmology.com/Extinction108.html
- Kolbert, E. 2011. The Age of Man. National Geographic March: 70 76.
- McCallum, I. 2005. *Ecological Intelligence: Seeing Ourselves in Nature*. Cape Town: Africa Geographic.
- Plant, S. 1999. Zeros + Ones. London: Fourth Estate.
- Ponting, C. 2007. A New Green History of the World. London: Abacus.
- Probyn, E. 2004. Teaching Bodies: Affects in the Classroom. *Body & Society*. 10, 4: 21 43. https://doi.org/10.1177/1357034X04047854
- Rose, D.B. 2017. Shimmer: When All You Love is Being Trashed. In Tsing, A., H. Swanson, E. Gan & N. Bubant (eds.): *The Arts of Living on a Damaged Planet*. Minneapolis: University of Minnesota Press.
- Schaefer, D. 2015. *Religious Affects: Animality, Evolution and Power*. Durham: Duke University Press. https://doi.org/10.1215/9780822374909
- Shotwell, A. 2016. *Against Purity: Living Ethically in Compromised Times*. Minneapolis: University of Minnesota Press.
- Snaza, N, Sonu, D, Truman, S.E, Zaliwska, Z. 2016. Introduction: Attuning to the Materiality of Education. In Snaza, N., D. Sonu, S.E. Truman, Z. Zaliwska (eds.): *Pedagogical Matters: New Materialisms and Curriculum Studies*. New York: Peter Lang Publishing, Inc. https://doi.org/10.3726/978-1-4539-1648-3
- Stengers, I. 2015. Accepting the reality of Gaia: A Fundamental Shift. In Hamilton, C., F. Gemmene & C. Bonneuil (eds.): *The Anthropocene and the Global Environmental Crisis: Rethinking Modernity in a New Epoch.* New York: Routledge.
 - https://doi.org/10.4324/9781315743424-11
- Synnot, A. 1993. *The Body Social: Symbolism, Self and Society*. New York: Routledge.
- van der Tuin, I. 2014. Diffraction as a Methodology for Feminist Ontoepistemology: On Ecountering Chantal Chawaf and Posthuman Interpellation. *Parallax* 20, 3:231 - 244.
 - https://doi.org/10.1080/13534645.2014.927631

Delphi Carstens

- Watson, P. 2001. A Terrible Beauty: The People and Ideas that Shaped the Modern World. London: Phoenix.
- Weinstein, J. & C. Colebrook 2016. Introduction: Anthropocene Feminisms: Rethinking the Unthinkable. *Philosophia* 5, 2: 1 25.
- Wilson, E. 2015. *Gut Feminism*. Durham: Duke University Press. https://doi.org/10.1215/9780822375203
- Wilson, E.O. 2004. The Future of Life. London: Abacus.
- Wright, R. 2005. A Short History of Progress. London: Canongate.

Delphi Carstens Arts/ Law ECP University of the Western Cape carstensdelphi@gmail.com

Disruption by Curriculum Design: Using Steve Biko's *I Write What I Like* as a Tool for Participatory Parity in post-Apartheid Higher Education

Shannon Morreira

Abstract

In South Africa, teaching and learning initiatives put in place by DHETsupported programmes aim, in varied ways, to address historically-based disparities that have persisted into the higher education landscape in the intervention. present. This paper reports such on Introductory/Foundation course in the Social Sciences. The paper begins with a description of three levels of theory that were used in designing the course and in assessing its impact: decolonial theory (Mignolo 2011; Ndlovu-Gatsheni 2013); work on social justice and epistemic justice (Fraser 2009; Fricker 2007); and Karl Maton's (2014) work on knower and knowledge codes and gazes drawn from Legitimation Code Theory (LCT). The paper also reports on empirical data as a means of assessing the effectiveness of such theory-driven course design. The findings show that the course is very successful on a number of levels in challenging structural constraints. But the use of Biko's (1978) I Write what I Like as a seminal text in the course runs the risk of modelling, in Maton's (2014) terms, a (closed) social gaze, rather than a cultivated or trained gaze (which is where much of higher education pedagogy is aimed). The empirical data on student and tutor engagement to emerge from this course thus leaves us, as educators, with a serious question: Where is our ethical imperative as academic development practitioners? Is it 'transformation' and 'decolonisation' of our curricula to improve parity of participation; or is it 'schooling'/ 'disciplining' students into the university environment so that they succeed on the university's terms? Is it possible to do both?

Keywords: Foundation provision; decolonial thinking; higher education; social sciences; parity of participation; academic development

Introduction and Background: Post-Apartheid Practices toward Curriculum Change

Over the past two decades policy interventions in South African higher education have focused on shifting historical inequities in terms of access, enrolments, and student composition (Luckett and Shay 2017). The Department of Higher Education and Training (DHET) recognizes historically-based disparities that have persisted into the higher education landscape in the present, and provides, through funding models such as the Foundation Grant, structural interventions into the higher education landscape as a means of progressing towards distributive justice in South Africa. Teaching and learning and curriculum initiatives put in place by DHET-supported curriculum enrichment programmes and foundation provision thus aim to help students transition from school or work to higher education, as well as to improve teaching practices across the university more generally, in ways that allow for greater equity in participation for all students.

Whilst the DHET Foundation Grant provides an overarching framework, the forms that this takes differ institution by institution, and by Faculties within institutions, informed by the particular contexts in place in each space. This paper reports on one course within one such intervention in the Faculty of Humanities¹ at the University of Cape Town: a historically white, English-speaking, research intensive university.

Foundation provision at UCT is enacted through the lens of Education Development, with each Faculty at the University having its own Education Development Unit (EDU), which puts in place teaching and learning initiatives appropriate to the Faculty context. Within the Arts and Social Sciences, the Humanities Education Development Unit offers one such program, with a focus on providing access to first generation black² students, and to improving

² The term 'black' is used in the inclusive, post-apartheid sense, to incorporate all those who were structurally oppressed by the colonial and apartheid system. It thus incorporates all the 'non-white population groups' as used under apartheid: African; Coloured; Indian; and Chinese.

¹ This Faculty incorporates both the Arts and the Social Sciences.

retention and success rates. This is the largest such access program existent at the university at present, with admissions of approximately 200 new first year students each year. The students who are targeted for this intervention are accepted to the University for an extended 4 year BA or B. Soc. Sci undergraduate degree, on a separate program to so-called 'mainstream' students who are expected to finish their degree in a minimum of 3 years. The extended degree includes a foundation year which must include two of a suite of five Introductory courses all of which aim, in varied ways, to improve levels of student preparedness. Aside from these two courses, students take the same courses towards the same majors as students on the three year degree, but receive additional academic support on these courses through augmented tutorials which provide extra time on task, and closer engagement with the materials in a small group environment.

As an access program, the 4 year Humanities degree at UCT is only open to black students: such racialised marking, however, is often perceived by the students as 'ghettoization'. The wider context of UCT thus matters to the ways in which the process of racialization is perceived. The University intends such a move as positive discrimination, using the DHET Foundation Grant to provide a space through which to ensure better access and throughput for students from backgrounds that it perceives as disadvantaged. In this, University policy is in keeping with wider inherited institutional approaches to education development, in that the language of education development programmes often remains based on assimilationist models and hegemonic norms (Luckett et al. forthcoming; Luckett this issue) which position black students as 'disadvantaged', 'underprepared' and in need of development. This places the onus on black students to 'catch up' and overcome their structurally induced educational and cultural 'deficits' instead of recognizing the multitude of strengths such students bring with them such as, for example, multilingualism. It also removes the responsibility for change from the university itself. Such institutional positioning has not gone unnoticed by students or staff: UCT has been described by one of its Professors as 'a European greenhouse under African skies' (Nyamnjoh 2012:33), and was the campus on which the #RhodesMustFall Movement emerged in 2015 in protest against the continued coloniality³ of institutional culture. The space of

_

³ For a more detailed discussion of coloniality/modernity, see 'Theoretical Framework' below.

foundation provision at UCT is thus politically contentious. Within UCT, Education Development Units have at times acted as a focal point for dissatisfaction with university-wide teaching and learning issues within the context of racialised inequalities.

The foundation course being reported on here was designed with an awareness of this national and institutional context, and with an aim to provide careful, theoretically informed curriculum design and pedagogical intervention in light of it. The course is framed around Steve Biko's (1978) I Write What I Like and draws out social science concepts (for example, socialization; identity; race and gender) from this example, for further analysis. The first point to note is that Biko's work is not conventionally academic: I Write What I Like consists of a series of political essays, aimed at raising an ideological, race-based form of consciousness, in direct opposition to the material and ideological policies of apartheid. This is very useful in terms of exemplifying abstract concepts in ways that are familiar to students: notions of socialization, identity or race, for example, are easily located in Biko's work through concrete examples drawn from daily, familiar scenes in South African life (it is a telling indictment on the conditions of post-apartheid South Africa that much of what Biko described of black township life in the 1970s is still relevant today). The course does not leave it there, however: students also closely read a series of different disciplinary readings of Biko's work - how Black Consciousness has been used by political scientists; sociologists; historians and social psychologists, as well as literature on the core concepts employed by each discipline – in order to make disciplinary conventions unambiguous to the students. Rather than implicitly cultivating disciplinary gazes, as is usually the case in the social sciences (Maton 2014), the course thus seeks to make the ways in which those gazes are constructed explicit to those students who are most disadvantaged by the hidden curriculum.⁴

This paper reports on the pedagogical effectiveness of the above strategy in a foundation course, and in so doing it aims to intervene in current debates around foundation provision in two ways: firstly, by discussing the theory that underlies some of the teaching praxis that has emerged in foun-

_

⁴ The course also incorporates other forms of innovative pedagogy that are beyond the bounds of this paper. For a discussion of the use of translanguaging in the course (both in teaching and in students' written submissions) see Hurst *et al.* (2017).

dation provision in light of the complex context discussed above; and secondly, by providing some concrete discussion of the intended and unintended outcomes of such a turn. In order to fulfill this second aim I draw on empirical data collected from student and tutor feedback on the course between the years 2014 and 2017, as well as from essays submitted by students in the 2017 cohort. Data was collected as part of an ongoing project within the Humanities EDU to evaluate its teaching interventions. Ethical clearance was obtained for the project through the UCT Centre for Higher Education Development (CHED) Ethics Board, and data only collected from those students and tutors who had given informed consent to be participants in the project.

Theory to Think With: The Theoretical Framing of the Course

The course is informed by social theory operating at three levels: the macro level of societal organization and the hierarchies of persons and knowledge forms within society; the meso level of the forms of structural intervention that can be made to respond to such hierarchies with an aim to improving social equality; and, finally, the micro-level of social practice, and how knowledge is organized in a curriculum, or in a particular discipline. In what follows, I begin at the macro, and then focus in. Whilst this section is primarily concerned with laying the theoretical groundwork on which the course was based, at times it has been necessary to move between theory and a description of the course itself.

The design of the course was firstly influenced by the work of decolonial theory, as seen largely through the work of Latin American scholars such as Walter Mignolo (2012) and Anibal Quijano (2007); and as applied to the Southern African context by Sabelo Ndlovu Gatsheni (2013). Decolonial theory argues that the present world order, with regard to persons and to knowledge, is structured in a way which prioritises particular kinds of persons and particular ways of knowing, and minimizes the importance of, or even silences, others. Decolonial theory maintains that whilst the temporal age of colonialism may have been and gone, the epistemic logic of coloniality remains entangled in the present day. There is thus an important distinction to be made between decolonisation — a largely political and territorial project — and decoloniality — a largely ideological and epistemological one. Decolonial thinkers argue that one product of modernity has been the creation and maintenance of a 'colonial matrix of power' (Mignolo 2012, ix) consisting of

Shannon Morreira

interrelated forms of control such as patriarchy, racism, knowledge, authority, and the economy, which underlie Western civilisation. A key concept in decolonial theory is that of the inseparability of 'modernity' coloniality' meaning that because colonialism was constitutive of modernity (its 'darker side', in Mignolo's (2012) terms), the two concepts must be held together to describe a single power system that historically has served the demands of capitalist accumulation and the interests of Europeans (Quijano 2007). Modernity/coloniality continues in the present through a set of intersectional social hierarchies that privilege Western, hetereosexual, capitalist patriarchy. Such hierarchies also work in universities (both in the North and the South) through the domination of knowledge production by the North. In keeping with this thread of thinking (although strictly speaking not a decolonial theorist, but a Southern one), Raewyn Connell (2017:10) has argued that 'Contemporary universities are powerful institutions, interlinked on a global scale; but they embed a narrow knowledge system that reflects and reproduces social inequalities on a global scale.' In Southern Africa, Ndlovu-Gatsheni (2013) has applied the decolonial lens to universities to argue that there is a need for a suite of creative cultural shifts with regard to university practice. These shifts should encompass more than just the content of courses: he thus calls for 'a package of transformations in teaching, research, epistemology, curriculum, pedagogy and institutional culture, aimed at reanchoring higher education within African and the liberation trajectories of African people' (Ndlovu-Gatsheni 2013:179).

Course design was thus informed by a recognition that the set up of the modern university hierarchises persons and knowledges in particular ways. In a university that often saw courses designed with an imagined white and privileged South African student as the ideal learner, I set out to imagine how we might design materials to privilege a different kind of learner, and to validate other kinds of knowledge. The next level of theory that informed the course design was thus concerned with the ways in which persons are able to participate in the structures and hierarchies that we have inherited in present day South Africa. The starting point here is the recognition that the knowledge and cultural capital that first generation students bring with them to the university may not be recognised as valid forms of knowledge and as valid forms of cultural capital, particularly for those first generation students in research intensive, historically white, English-medium universities. For example, speaking in class in a mixture of English and a local language, as is

common in much day to day interaction in South Africa, is largely unheard of in most UCT learning spaces⁵, which are English-medium (and often a particularly academic form of English at that). Students who attempt to translanguage in spoken or written work, then, find themselves at a disadvantage in the academic space: even though such a skill is clearly advantageous in social life outside of the university.

The philosopher Miranda Fricker (2007) refers to such unequal participation in the legitimated system of shared meanings that constitutes culture as instances of 'epistemic injustice', while Nancy Fraser (2009) terms it 'misrecognition.' It is worth taking a look at each theorist in turn, as each brings something slightly different to an understanding of social relations in the postcolony, which can be applied to the classroom setting, particularly for classes based on DHET foundation provision.

Fricker's (2007) notion of epistemic injustice essentially posits that a person can be treated unfairly in their capacity as a knower: which is to say, in addition to social or political injustices, categories of people can face injustices with regard to the ways in which they can be heard, or their knowledge recognised as legitimate. Fricker differentiates between two kinds of epistemic injustice: testimonial injustices, where a person's position means it is impossible for their claims to be recognised as valid, because the speaker has a deficit of credibility; and hermeneutical injustice, where it can be literally impossible for someone to make a claim because people lack the shared social resources to put a label on the experience that makes it 'knowable.' Fricker uses the example of sexual harassment in the workplace to unpack these ideas: prior to 'sexual harassment' being a recognised term, women could find such harassment impossible to report, as the category wasn't known or knowable (a hermeneutic injustice); and even once it had become a valid, shared concept, women may still struggle to be believed when they report harassment, due to a deficit of credibility by virtue of their very position as women (a testimonial injustice). Examples more relevant to contemporary South African higher education can also easily be found: student protesters highlighting, for instance, that the emotional weight of black pain was not recognised as valid exemplifies a hermeneutic injustice; and the fact that it is not enough for a

⁵ This is beginning to shift in some few spaces at UCT, particularly those influenced by Education Development practitioners (see Hurst *et al.* 2017; Madiba 2014).

student to lay claim to such pain, but rather that medical certificates are required by universities to attest to the experience before it can be heard as legitimate, would constitute a testimonial injustice.

Fricker's work is thus very useful in making sense of the forms of silencing that can occur in higher education. She goes on to argue, however, that *individuals* need to cultivate epistemic virtues in order to counteract epistemic injustices – a reflexive awareness of the sorts of positioning that occurs in society. Hermeneutical injustices, however, are structural problems. While it is useful for lecturers, for example, to attempt to cultivate epistemic virtues, at a curriculum level structural, rather than individual, changes need to be implemented to counteract structural injustices. In thinking through this in relation to Foundation provision, the work of Nancy Fraser (2009) has been extremely useful.

Nancy Fraser (2009) pushes further than Fricker with regard to social justice, to argue for the conditions that need to be in place for parity of participation to occur. By this, Fraser means the structural conditions which allow all social actors to participate in social arrangements on an equal footing. For Fraser, this is the ultimate goal of social justice. Fraser suggests a threepronged structural approach, arguing that we need to meet the conditions of redistribution, recognition and representation if we are to achieve participatory parity. Fraser argues that recognition is cultural: individuals may be consistently misrecognized, or not seen as equal peers, because of societal status inequality. In this, Fraser's notion of misrecognition is similar to Fricker's idea of hermeneutical injustice. Individuals are not able to participate as equals, or cannot be heard, by virtue of their social positioning. Unlike Fricker, however, who leaves the work of counteracting misrecognition or hermeneutical injustices to the individual, Nancy Fraser recognizes another two structural categories that also need to be fulfilled before participatory parity can occur: redistribution, and representation. Redistribution is an economic category, in that people cannot take part in social arrangements if they don't have the resources. The final category Fraser argues for is that of representation. Here, she focuses on political and social belonging, with regard to who can make claims for social justice and how those claims are read. For Fraser, all three of these dimensions are entangled, and the work of social justice needs to be towards all of them if parity is to be achieved.

How might we use such theory to inform our practices in higher education, and specifically in foundation provision? To start with, Foundation

programs are structured by redistributive logics: the DHET Foundation Grant attempts to redress historical imbalances through redistribution of resources within the university and, from here, to wider society. Justice, as imagined here, is distributive. But student protests against 'ghettoization' into redistributive programs show us very clearly that redistribution is not enough. The work we do also needs to address recognition and representation, allowing for forms of being and belonging to be cultivated in the classroom and wider university space that aim towards parity of participation. As has long been clear in Education Development, physical access, then, is not enough, and there is a need to work creatively towards deeper forms of epistemic access (Morrow 2009; Muller 2012). Where decolonial thinking and Fraser's ideas take us further, however, is in a recognition that even more than epistemic access may well be necessary: rather than simply training our students in ways that allow them to enter into the discourses of the disciplines, we may well need to be thinking very seriously about how to shift the terms of engagement such that the epistemes of South African higher education are more receptive to different ways of being. Justice as it is imagined in decolonial thinking, then, is more than distributive, and is concerned not just with reversing historical wrongs or undoing prior transactions, but with widening the forms of knowledge that are considered legitimate and valued in the present. Thus far we have considered two levels of theory: the globalized matrix of power that structures knowledge and universities in a particular way; and the meso-level of forms of participation and recognition available to students as knowers within such structures. I turn now to a final theoretical consideration: that of a microanalysis of the ways in which knowledge itself is organized, in order to analyse the work that is done by the key text used in this course. To do this, I present one particular element of Karl Maton's (2014) Legitimation Code Theory (LCT). LCT in its entirety is complex and theoretically dense: located within the paradigm of social realism, and extending upon the work of Basil Bernstein, it seeks to provide a theory for investigating the forms of knowledge structures at play in higher education, and the roles available to knowers within that. Much of the complexity of LCT is beyond the scope of this article: I wish to focus in here on Maton's discussion of knowledge and knower codes, and, more specifically, on the kinds of 'gazes' that occur within such specialist codes.

LCT posits that fields of knowledge are composed of social as well as epistemic relations. While the epistemic relation concerns what can be known,

and how it can come to be known or developed, the social relation is that between such knowledge, and the person/s or agents making the knowledge claim. In other words, Maton's social relation reflects who it is that can legitimately know, and the power relations that legitimate such knowledge. For Maton, then, agents are viewed in relation to one another and to the structures that exist in a field of relational struggles. Maton does not see social and epistemic relations as a dichotomy, but rather proposes that academic disciplines can be analysed in terms of the relative strength or weakness of the epistemic and social relations, along a Cartesian plane. Disciplines can then be placed within this topography on the basis of the strength or weakness of their epistemic and social relations. Where epistemic relations are stronger and social relations weaker, one gets disciplines composed of knowledge codes where the object of study matters more than does the attributes of the social actor doing the studying (for example, in conventional Natural Sciences). Where epistemic relations are weak and social relations strong, one gets disciplines composed of knower codes, where the attributes of actors matter more than does the specialized object of knowledge (such as in standpoint theories based on, for example, gender).

Prior to the development of the wider BA and B.Soc. Sci. extended degree curriculum of which the foundation course discussed here is part, Luckett and Hunma (2014) used LCT to map four disciplines within the Humanities and Social Sciences at UCT. In terms of the social sciences, their work took disciplines from two ends of the spectrum: history and psychology. Through analysis of curriculum documents and exam scripts, Luckett and Hunma (2014) showed that while Psychology as practiced at UCT constituted a knowledge code, as with many of the Humanities and Social Science subjects. The foundation course being reported on here thus needed to be designed in such a way, then, to allow extended degree students access to very different sorts of disciplinary discourses, and in some instances the right sorts of (often tacit) attributes that would allow success in their wider degrees.

The decision was therefore made to examine different disciplinary positions in the course. In the first incarnation of the course, offered for the first time in 2013, the course was designed in such a way that students spent two weeks at a time on one of a number of various disciplines, starting with a reading that outlined the key concept of a particular discipline, and then moving in to an example of a research article in the discipline. Key concepts

were drawn from this. After offering the course in this way for two semesters, however, it seemed to me not to be working as well as it could, for two reasons. Firstly, it was difficult for students to move between so many positions and theorists; and secondly, the core texts (which were chosen on the advice of specialists within each discipline being explored) were often deeply theoretical, and even the exemplifying research-based texts were usually hard to relate to the lives of extended degree students. In 2014, then, I redesigned the course to respond to these two issues, one of which was, of course, in Fraser's (2009) terms, an issue of recognition. To this end, I chose to introduce Steve Biko's (1978) I Write What I like as a seminal text, and to draw out the disciplinary positions from there. We now spend three weeks closely reading three chapters of Biko at the beginning of the semester; once students are familiar with this theory, we then move on to the ways in which different disciplines have mobilized the ideas of Biko and Black Consciousness in their work. We still read the 'dry' theoretical texts that outline the key concepts/positions/interests of each discipline, but we are then able to look carefully at what the discipline chose from Biko's theory as 'useful' to them in order to exemplify that disciplinary position and make the underlying, covert discourse of the discipline more clear.

One final level of theory from Maton's (2014) work is useful in thinking through the course design, and this concerns analytic work he has done at the level of knower codes, as a means of explicating the kinds of knowledge and knower that can be made (or encountered) within knower codes. Maton further breaks down knower codes in terms of the degree of openness of the code to potential knowers. He builds on Bernstein to distinguish between four types of 'gazes: the 'born gaze', which is the most exclusive, and only open to knowers with a particular genetic or biological background⁶; the 'social gaze' is relatively exclusive, based on belonging to

-

⁶ It is worth noting here that Maton is a critical realist, in that he views social relations as historically structured and thus 'real' in their effects. For Maton, knowledge is socially constructed reality; as such, it is a product of social struggles about what should be valued. All of Maton's 'gazes', then, as discussed above are 'social' and speak to processes of socialization rather than inherent dispositions. What Maton is doing with the gazes is to point out the ways in which forms of knowledge are created, presented and, centrally, accorded value, within sets of social relationships.

particular social categories such as race, class or gender; the 'cultivated gaze' is more inclusive, based on forms of belonging and enculturation that can be developed through the right sorts of education; and the 'trained gaze' is the most inclusive, potentially open to all knowers based on training in disciplinary processes and methods. Much of higher education pedagogy in the Arts and Social Sciences is aimed at creating the right sort of cultivated gaze, in terms of disciplinary conventions. Maton's categories are useful, therefore, in unpacking the texts we set, and the work that students produce, in terms of what sort of a gaze is presented in the text, and then what sort of a gaze is reproduced in student writing.

In what follows, I draw on empirical data from student and tutor feedback on the course, as well as student exam scripts, as a means of analyzing the effectiveness of the course as a structural intervention to improve parity of participation. The findings from student and tutor feedback, as well as student assignments which require them to define and exemplify concepts, show that Biko's work provides a locally relevant space to ground abstract social science concepts from across the disciplines, and that it, in combination with other learning interventions implemented in the course, opens a space to challenge structural constraints. But data from student exam essay scripts shows that, for some students at least, using a non-academic text like Biko's runs the risk of modeling, in Maton's terms, a social gaze, rather than an enculturated or trained gaze that would be recognized as a legitimate form of writing in courses and disciplines that students will encounter in their wider degree.

Disruption by Curriculum Design: Implementing Theory in the Classroom

How successful, then, is the course at doing the sort of work it sets out to do, in terms of the above theoretical framing?

At a macro-level, mobilizing a text that has a definite political message, and one that directly addresses issues of racialised hierarchies and the effects of these upon the daily world, is a move that is responsive to the calls made by decolonial thinkers to lay bare the colonial matrix of power as a first step towards dismantling it. Similarly, making the usually opaque conventions of different disciplines clear to students in their first year also upends power relations to some extent. The course has been the subject of a study (Mona 2017) which aimed to examine the ways in which the course

responded to issues of race; coloniality; canonical selection; and cultural capital in terms of its curriculum and pedagogy. After a year of research into the course, including sitting in lectures and tutorials, examining student assignments, and examining course evaluations, Mona (2017:ii) concluded that,

DOH1009⁷ stands as an example of a socio-culturally relevant curriculum. The manner in which the course is positioned in South Africa's local context; the multilingualism; and the cultural sensitivity, among other findings, qualify DOH1009 as a relevant and exemplary case study.

Though not the only important factor, Mona found the use of Steve Biko in the course as a central element to this process of 'decolonising.' He thus further writes that,

The author selection [in DOH1009] is a political device in that it first shifts power from the traditionally canonical Western authors by prioritising local African authors. Secondly, by so doing, the course suggests that Africa can produce thinkers who are worthy of being placed in the curriculum. Such placement of African thinkers in the curriculum has the potential to elevate the self-esteem of black students who may have been overwhelmed by a largely Western range of thinkers in their other courses (Mona 2017:22).

At the level of responding to macro-issues of coloniality within higher education, then, the course could be said to be successful; and the use of Biko as a seminal text from which to first understand key concepts and then different disciplinary positions has played a large role in that. At a meso-level, in terms of providing a means towards addressing hermeneutical injustice and/or misrecognition, the text is also extremely successful. Student and tutor feedback showed that using this particular text rather than any other as a way of illustrating quite complex concepts like socialization, race, gender and identity, was valued because of the work it did towards recognition. For example, one tutor responded to a questionnaire about their experience of the course design with the comment:

⁷ The course code for the course as used at UCT.

Shannon Morreira

I think using Biko was really important. Firstly because it was something students in the class could relate to. It was also a more relaxed text as opposed to the unnecessarily confusing texts that are usually used. The language in the Biko text is accessible and deals with stories that the students are familiar with. Once again, the fact that the students related with Biko, whether or not they agreed or disagreed ... it is important to them to feel like issues of black identity, inequality are not being ignored in academic life but engaged in great detail.

In Fraser's (2009) terms, the final sentence from the tutor above shows a particular value being accorded to the work that close engagement with such a text does in terms of recognition. It was also valued for the scaffolding work it was able to do in relating abstract social science concepts through familiar examples (which we can argue is also an issue of recognition). Student responses also valued both these elements, as shown in the response below from a course evaluation question which asked what they had valued about the course:

I loved that we used Biko. Biko brings up many social issues that we have in South Africa, and we can use Black Consciousness as a way of understanding many of the social sciences. I found it useful that we have incorporated Black Consciousness and used it as a base to understand social science concepts. We can also relate to BC.

Both students and tutors, then, highlighted two kinds of work being done by the text, both of which are to do with recognizing student identities in the classroom. At one level this operated with regard to providing contextual examples of global theory through Biko. This can be seen in the comments from students below, given in response to a question in a mid-term evaluation run in the first year that Biko was used in the course, which asked what students had found most useful or interesting about using Biko's work:

- The examples that are used in Black Consciousness provide us with clear understanding of concepts.
- His work is applicable to many genres across the Humanities that are relevant in the course and our majors.

• His style of writing is interesting, it gives us a drive to engage with the chapters because they are understandable and interesting to read.

Beyond the work done in making concepts clear and coursework interesting, recognition was also valued at a sociocultural level: in response to the same question, students wrote that:

• I like that we are reading Biko, who is black, so it shows that current UCT is trying to incorporate everyone (even us blacks) and that it is respecting our heroes. Great work.

And.

 He had brilliant ideas that actually made a change. It matters to me to be learning about that at university. It makes me feel like I can contribute.

While the structure of the extended degree of which this course forms a part could thus be seen as an example of redistribution as a step toward social justice, the use of this particular text gave space for recognition as well. The final sentence of the quote given above: 'It makes me feel like I can contribute,' as well as Mona's (2017:22) comment that 'it has the potential to elevate the self-esteem of black students,' also shows that using such texts can lay the ground for different forms of representation in the university, in that it opens the potential for students to feel like full citizens of the university space. I would argue that the use of translanguaging in assignments and some tutorial spaces also contributes to such an aim (see Hurst *et al.* 2017).

In many ways, then, the theory that lay behind the design of the course has had very positive results. Using Biko's *I Write What I Like* allows for access to a way of knowing that is deliberately positioned within a local geocultural and political context that overtly grapples with ideas of identity and structural silencing. It thus provides a locally grounded space to articulate abstract social science concepts. It also opens up a space to challenge structural constraints: as such, it is successful in teaching students about epistemic injustice.

Analysis of exam scripts and the marks accorded by examiners, however, showed a potential flaw in using a non-academic author for a seminal text. Despite the fact that numerous other academic texts are also used in the

Shannon Morreira

course to illustrate various disciplinary voices, positions and concepts, some exam scripts showed students' drawing upon a particular style of writing in their answers that was poorly assessed by examiners. One arm of foundation provision is to enact academic literacies with students, but at times Biko models a way of thinking and writing that is not endorsed by the academy. The text is emotional, personal, overtly political and contains no academic references to the work of other thinkers (even though it is closely modelled upon the work of other black radical thinkers such as Fanon). If we examine the work being done by the text at a micro-level, then, in Maton's terms Biko's writing is done through the social gaze, which is only open to knowers who belong to particular social categories and, by virtue of this belonging, have taken on a particular set of dispositions. (It is perhaps worth repeating again that such a gaze is, of course, a product of socialization: the social gaze is relatively exclusive because of the influence of social actors and historical configurations of power relations in shaping ways of knowing, being and doing, not because of any inherent attribute on the part of the knower.) Consider the following excerpt from *I Write What I Like*:

Being black is not a matter of pigmentation. Being black is a mental attitude. Merely by describing yourself as black you have started on a road to emancipation, you have committed yourself to fight against all forces that seek to use your blackness as a stamp that marks you out as a subservient being.

From the above observations, therefore, we can see that the term black is not necessarily all inclusive, i.e. the fact that we are all not white doesn't necessarily mean that we are all black. Non-whites do exist and will continue to exist for quite a long time Black people – real black people – are those who can manage to hold their heads high is defiance rather than willingly surrender their souls to the white man (Biko 1978:52).

For Biko, to be 'conscious', then (or, in Maton's terms, to be a specific kind of knower enmeshed in a web of historically configured relationships with other knowers), is to take on a particular set of dispositions granted firstly by virtue of membership to a particular category – those who are oppressed by apartheid – and then secondly by learning a political identity of blackness in response to that oppression. The gaze here is a deliberately social one.

Using such a political text, then, can run the risk for students of modeling a style not recognized as legitimate by the academy. This is obviously not to say that Biko is 'wrong' to present race in this way, or to write in such a style, but it is rather to comment on the norms of the academy itself, in which ways of claim-making, style and tone matter a great deal to how student work is assessed, such that examiners may mark down work that they see as overly emotional, or that they perceive as presenting race and identity in a particular way without adequate justification. It is of course possible in the classroom to work critically through such ideas as encountered in the text, and, indeed, many such critical conversations around Biko's ideas and style emerge in each iteration of the course (see Morreira 2015, for an example of debates around gender in the course). But an analysis of exam scripts showed that for some students, while writing in a time-pressured situation, forms of writing that are not well regarded by the academy emerged. For example, the following excerpt from a student essay shows the very different writing styles the same student used when writing about the work of sociologist Zimitri Erasmus (2008) on race, versus when writing about Biko on race:

Race does not exist, but racialization does (Erasmus 2008). In South Africa we are still in a cycle of thinking whiteness is superior. This stems from a history of structural oppression, which impacted upon people's sense of self and culture. Erasmus says that race is a social construct and that race is not fixed, the meanings constantly change. She says we need to unmake race. We live our lives according to social structures and these structures in some cases have flexibility but most of the time it does not allow for progression. For example, a white child being brought up in a household which says you should not trust black people, means that you're going to conform to that normativity because you do not want to be seen as other by your society. But sometimes these structures have also allowed for change in our thoughts and actions; sometimes there is room for agency and for people to act against the norms.

In this first paragraph, the student is taking on and reproducing an academic discourse that is seen in tone and in use of concepts. The following paragraph, however, taken from the same student essay, shows a strong shift in tone and style where the same student begins to write about Biko:

Shannon Morreira

During apartheid being black meant that you were worth nothing, you had nothing to give society and all you were worth was to be a white man's slave. Black people were stripped of their identities mentally and physically, they were given other names and made to think they weren't capable of anything. The Black Consciousness Movement aimed to produce people who no longer thought of themselves as appendages to whiteness, speak to the black man in his own language, reclaim the black man's identity.

Far fewer academic concepts are used by the same student in the second paragraph: she is mimicking Biko's style, and alongside style has taken on a different discourse around race, that has less emphasis on its socially constructed nature than is seen in the first paragraph. Another example can be seen when comparing the answers of two students to the same short-answer question in the exam about whether the 'natural' hair movement is natural or sociocultural:

Student 1 (answer given a low mark by the examiner): 'It is social. They are taking back their lost Black identity. They are reclaiming Black culture'.

This student uses a notion of culture and identity, that is similar to that propounded by Biko. In writing in a similar style, however, the student once again bypasses the socially constructed nature of that culture and identity; as such, the answer was read by the examiner assessing the piece as less nuanced. It was awarded a low mark. There is thus a risk of modeling a sort of writing and claim-making that is not endorsed by the wider university. Student 2, by contrast, answered,

Student 2 (answer given high marks by the examiner): 'It is social. These movements aim to rectify those claims that nice, long hair is best. They are reshaping black identity'.

Here, identity is fluid and contextualized. The student doesn't assume there is an innate black identity, but recognizes shifts over time. The examiner awarded a higher mark.

Using a text with a particular kind of writing therefore does not nece-

ssarily result in the discourse being taken on by *all* students, or even being taken on by the same student in every context. It does, however, raise the likelihood that some students will sometimes take on the discourse. Maton's LCT can therefore give us an interesting way of thinking about the subjective relations of knower gazes and the power relations at play in the forms knowledge takes, including the ways in which varied forms of knowledge are received by the wider academy. Where decolonial thinking argues that modernity/coloniality continues in the present through a set of intersectional social hierarchies that privilege particular ways of knowing, Maton's LCT is helpful in thinking through what forms that privileged knowledge might take in the social sciences.

Conclusion: Towards Parity of Participation

This paper has reported on the theory used to inform the design of a Foundation course at a historically white, research intensive university. In addition, the paper has reported on empirical data collected over three years of offering the course with regard to the effectiveness of implementing such theory in the classroom. I have argued that South African universities as currently constituted are part of a globalized set of knowledge relationships that value particular ways of knowing over others, and that can be experienced as alienating spaces by first generation university students. Foundation provision, as propagated by DHET, provides a mechanism for redistribution but, as Fraser (2009) has shown, such a step towards social justice is limited if there is not also room for recognition and representation. Data collected from students and tutors indicates that the course opens a space for recognition, and puts in place stepping-stones towards students' representation within the wider university. However, a micro-analysis of the gazes presented in Biko's work, and mimicked by some students, shows that some elements of the course run the risk of allowing students to present academic work through a social gaze. If this gaze is not endorsed by other parts of the university – in other courses, for instance – this is turn means students who produce such a gaze can be denied belonging to the wider political and epistemic community of the university, as their work would be marked down. The issues raised within this course thus lead to questions about the ethical imperative of Foundation provision. I would argue that, as education development practitioners, we should be designing our curricula in such a way that we improve parity of participation. But if we do

Shannon Morreira

this through 'decolonial' means that bring new texts and language practices into our classrooms, how do we work with the fact that we are endorsing discourses that are not (yet?) recognized as legitimate by the wider university? Is it possible to balance radical curriculum design in Foundation courses with training our students for a more conservative wider university, or should the role of education development in South Africa shift more towards 'developing' the wider curriculum towards more socially just pedagogies, and providing spaces for alternative ways of knowing to flourish?

I think the data above shows that there is room in Foundation courses to do things differently, with an aim to shifting inherited power dynamics, and that there is great value in so doing on a number of fronts. We are at a particularly enlivened moment in our universities in South Africa currently: a moment that is opening great potential for new pedagogies and, particularly in research-intensive universities where teaching has usually taken a back seat, a moment where pedagogy and curriculum issues are being taken more seriously than ever before. Foundation courses in the Humanities and Social Sciences are not usually linked to any one discipline: as such, they are a rich site for undisciplined practices such as translanguaging or learning academic concepts from emotive, identity-infused texts. The advantages of such moves seem to outweigh the disadvantages: and there are ways of ensuring those disadvantages are minimized. From our various positions within curriculum design and development across universities, education development practitioners are thus well-suited to bring such moves to the university more widely.

References

Biko, S. 1978. I Write What I Like. Johannesburg: Heinemann.

Connell, R. 2017. Southern Theory and World Universities. *Higher Education Research and Development* 36,1: 4 - 15.

https://doi.org/10.1080/07294360.2017.1252311

Erasmus, Z. 2008. Race. In Robins, S. & N. Shepherd (eds.): *New South African Keywords*. Johannesburg,: Jacana.

Fraser, N. 2009. Scales of Justice: Reimagining Political Space in a Globalising World. New York: Columbia University Press.

Fricker, M. 2007. *Epistemic Injustice: Power and the Ethics of Knowing*. Oxford: Oxford University Press.

https://doi.org/10.1093/acprof:oso/9780198237907.001.0001

- Hurst, E., M. Madiba & S. Morreira 2017. Surfacing and Valuing Students'
 Linguistic Resources in an English-dominant University. In Palfreyman,
 D. & C. van der Walt (eds.): Academic Biliteracies: Multilingual Repertoires in Higher Education. Bristol: Multilingual Matters.
 https://doi.org/10.21832/9781783097425-007
- Luckett, K. & A. Hunma 2014. Making Gazes Explicit: Facilitating Epistemic Access in the Humanities. *Higher Education* 67,2: 183 198. https://doi.org/10.1007/s10734-013-9651-7
- Luckett, K., S. Morreira & M. Baijnath (Forthcoming). Decolonizing the Curriculum: Recontextualization, Identity and Self-critique in a Postapartheid University. In Quinn, L. (ed.): *Reimagining Curriculum: Spaces for Disruption*. Stellenbosch: African Sun Media.
- Luckett, K. & S. Shay 2017 Reframing the Curriculum: A Transformative Approach. *Critical Studies in Education* 2017:1 16. https://doi.org/10.1080/17508487.2017.1356341
- Madiba, M. 2014. Promoting Concept Literacy through Multilingual Glossaries: A Translanguaging Approach. In Hibbert, L. & C. van der Walt (eds.): *Multilingual Universities in South Africa Reflecting Society in Higher Education*. Bristol: Multilingual Matters. https://doi.org/10.21832/9781783091669-007
- Maton, K. 2014. *Knowledge and Knowers: Towards a Realist Sociology of Education*. London: Routledge. https://doi.org/10.4324/9780203885734
- Mignolo, W. 2011. *The Darker Side of Western Modernity Global Futures, Decolonial Options*. Durham, NC: Duke University Press. https://doi.org/10.1215/9780822394501
- Morreira, S. 2015. Debating Gender in the Classroom: Black Consciousness and the Politics of Knowledge in South Africa. *AfricaFiles* 16,4:1 6.
- Morrow W. 2009. Bounds of Democracy: Epistemological Access in Higher Education. Cape Town: HSRC Press.
- Mona, M. 2017. Socio-cultural Relevancy and Inclusivity in Academic Development in an 'Afropolitan' University: An Analysis of DOH1009F at the University of Cape Town. Unpublished Thesis, University of Cape Town.
- Muller, J. 2012. Every Picture Tells a Story: Epistemological Access and Knowledge. Keynote Presentation to the *Knowledge & Curriculum in*

Shannon Morreira

- Higher Education Symposium UCT, 7 & 8 November 2012.
- Ndlovu-Gatsheni, S. 2013. *Empire, Global Coloniality and African Subjectivity*. New York & Oxford: Berghahn Books.
- Nyamjnoh, F. 2012. Potted Plants in Greenhouses: A Critical Reflection on The Resilience of Colonial Education in Africa. *Journal of Asian and African Studies* 47, 2: 129 154.
 - https://doi.org/10.1177/0021909611417240
- Quijano, A. 2007. Coloniality and Modernity/Rationality. *Cultural Studies* 21, 2-3: 168 178. https://doi.org/10.1080/09502380601164353

Shannon Morreira Humanities Education Development Unit University of Cape Town Shannon.morreira@uct.ac.za

Supporting Student Learning in Foundation Programmes and Beyond: Using Legitimation Code Theory as a Theoretical Lens to Think about Transition

Honjiswa Conana Delia Marshall Deon Solomons

Abstract

In South Africa, foundational provision and extended curriculum programmes (ECPs) have become one means of widening epistemological access to higher education and addressing high attrition rates among undergraduate students. Despite the evidence that epistemological access to the science disciplines is an ongoing process which extends beyond the first year, there is a paucity of research on the 'epistemic transitions' throughout the undergraduate curriculum, and in particular, the transition to second year. In this paper, tools from the Semantics dimension of Legitimation Code Theory (LCT) are used to analyse the pedagogical practices in ECP and second year physics and mathematics courses, as a means to develop insights into the challenges students face in making the transition to second year. Data is drawn from video-recordings and classroom observation notes, as well as from interviews with second year students. The LCT analysis highlights mismatches between the ECP and second year pedagogical practices, including increased pacing, a curtailed semantic range concentrated at an abstract level, less semantic waving, a narrower range of representations used (and less explicit unpacking of these), and less interactive engagement. Implications for second year pedagogical practices are discussed, in relation to normative and transformative approaches to foundational provision.

Keywords: foundation provision, extended curriculum programme, Legitimation Code Theory, transition, second year, Physics, epistemological access

Introduction

In South Africa, studies on student access, throughput and retention in higher education show that these remain skewed along racial lines (CHE 2013: Scott, Yeld & Hendry 2007). Within STEM (science, technology, engineering and mathematics) fields, in particular, these studies show high attrition at first year level, as well as low overall completion rate and a very small number of students who complete their degrees within the regulation time. Within the physical science field, specifically, only 21% of students at contact universities complete their degrees in the minimum time (three years). A recent review of undergraduate physics education undertaken by the Council on Higher Education and South African Institute of Physics (CHE-SAIP 2013) highlighted concerns about the under-preparedness of students entering first year physics and the level of graduate competence when completing their first degree.

In this context, foundational provision and extended curriculum programmes (ECPs) have become one means of addressing these equity and access concerns. Foundational provision in South Africa has a complex and contested history, arising a full decade before democratic change in South Africa (for an overview of the origins and educational philosophies underpinning science foundational provision, see Kloot et al. 2009; Rollnick 2010). In science ECPs, the educational orientations have included a focus on developing key conceptual foundations in disciplines (see, for example, Potgieter & Davidovitz 2011; Engelbrecht et al. 2010), developing academic literacy skills (Jacobs 2007) and developing approaches to enhance meaningful science learning (Starfield & Hart 1992; Short & Jurgens 2011; Grayson 2010). In the context of widening access, the concept of 'epistemological access' (Morrow 1993) has been a common framing of many foundational and ECP programmes. Here, attention is drawn to helping students to access the 'discourse' of a discipline (Gee 2005), comprising the disciplinary knowledge and norms. Taking on a disciplinary discourse entails not only a cognitive process, but includes notions of identity and affect (see, for example, Collier-Reed et al. 2010). Gee's notion of discourse/Discourse is useful for making clear that gaining access to a discipline entails both the knowledge practices (what could be seen as the 'little d' discourse), as well as the broader values, attitude and dispositions associated with the discipline (the 'big' D' Discourse) (Gee 2005). Research by Ellery (2017) on ECP students' experiences of a foundation course explores how students are inducted into the ways of thinking of science disciplines. Using the Specialisation code of Legitimation Code

Theory, she has explored the dispositions, values the ways of thinking (termed here, the 'gaze') ideally needed for success in undergraduate science studies.

Underlying the 'widening access' agenda of foundational provision is an intention to induct students into disciplinary knowledge on the one hand, and to develop a more critical stance in relation to that knowledge on the other hand. This dual-focus is taken up in the literature in several different, but complementary, forms. The academic literacies literature distinguishes between normative and transformative approaches (Lillis & Scott 2007): a normative approach emphasizes inducting students into the norms of a discipline, whereas in a transformative approach, the emphasis is on opening up the disciplinary norms and ways of knowing to critique and contestation. Similarly, Moje (2007) makes the useful distinction between *socially just pedagogy* and *pedagogy for social justice*. From this perspective, the intention of foundational provision in widening epistemological access to science studies can be viewed as *socially just pedagogy*, since the focus is on inducting students – traditionally marginalized from science studies - into the 'powerful knowledge' (Young & Muller 2013) of the sciences.

On the other hand, a *pedagogy for social justice* would entail taking a critical stance towards this so-called powerful knowledge. This might take the form of discussion on the wider social, historical and ethical dimensions of science, asking questions such as in whose interests this knowledge is used? Or discussing the limits of this knowledge in addressing issues such as climate change, sustainability and increasing inequality (Hugo 2016; Carstens 2016). It might also take a more critical angle on how scientific knowledge is often portrayed in traditional teaching; in other words, critiquing what has been termed the 'received view' of science (Cobern 1998:8) - as value-neutral, ahistorical and decontextualized from social contexts.

In the context of foundational provision in science, it could be argued that a normative approach, focusing on induction into disciplinary norms should precede a transformative approach, and that critique of those disciplinary norms may in fact destabilize students. However, as we have argued elsewhere (Conana, Marshall & Case 2016), transformative approaches to STEM teaching that include taking a critical stance towards science knowledge may in fact make science more accessible and less alienating to students. These approaches could include foregrounding the historical and human side of doing science, and challenging the perception of science as a body of knowledge developed in some other geographical location and

historical time period (Lemke 1990). These approaches could also explore science as a way of knowing in relation to other knowledge forms, to counter the 'scientism' perspectives often implicit in undergraduate science degrees (i.e. the view that science is the most authoritative viewpoint in relation to other forms of knowledge). These transformative approaches to foundational provision are particularly important in the current South African higher education context of debates on curriculum reform and 'decolonisation', which foreground perceptions that contemporary scientific knowledge may be experienced as alienating and lacking in relevance by students. Although elsewhere we have written about transformative approaches to foundational provision (Conana, Marshall & Case 2016), in this paper the focus is primarily on the induction of students into disciplinary knowledge.

The Transition to Second Year

In considering epistemological access to the sciences, induction into disciplinary knowledge is an ongoing process, which begins in the first year and extends beyond that. However, in the South African literature on foundational provision, there is not much research on the transition to second year. This is in fact an international trend, with most studies focused on students' experiences of the first year, or on their exit-level outcomes. This is despite the fact that the transition from first year to second year is noted as a challenge for many students in undergraduate programmes around the world (see, for example, Hunter *et al.* 2010; Yorke 2015).

One common challenge identified is that at the second year level, students often begin to engage with material with which they have had very little prior experience (Milsom & Yorke 2015). Another challenge identified in the literature on the transition to second year arises from the 'spiral curriculum' (Bruner 1960) structure of many higher education curricula. As Milsom & Yorke (2015: 17) note, since curricula mostly consist of several disciplines, there are 'potentially multiple spirals in operation at the same time'. For example, in a physics curriculum, certain mathematics concepts would be crucial prior knowledge required for physics courses, and so curriculum cohesion requires 'bridging between spiral strands' (Milsom & Yorke 2015:17).

In South Africa, the challenging transition from first year to second year is especially the case for students moving from a foundation or extended degree programme into the so-called mainstream second year. Lubben (2007) in study of an undergraduate extended physics programme noted that students struggled with the discontinuity in teaching approaches between first and second year physics courses. Smith, Case & Walbeek (2014:636), question 'the efficacy of a model that focuses largely on first year academic interventions'. They show that these models influenced students' performance in the first year but did not improve the overall graduation rate of students. Rollnick (2010) has suggested that changes to the curricula and pedagogies beyond the first year are what are needed. This is also argued in a recent CHE (2013) report which highlights the importance of 'epistemic transitions' throughout the undergraduate curriculum, and notes that curriculum reform needs to address these key transitions. The report argues that foundational provision needed to extend beyond the first year of a programme.

In this paper, we examine the transition that science students experience from an ECP physics course into their mainstream second year courses. Legitimation Code Theory (LCT) is introduced as a useful theoretical lens to think about this transition. We use LCT to characterize the sort of pedagogy prevalent in ECP programmes and then use LCT to identify some of the difficulties students experience in the transition to second year.

Context of the Study

The study is located in an extended curriculum programme in a Faculty of Natural Sciences. In the Physics Department, the programme centres on foundation provision in first year physics and mathematics courses, which are full credit courses spread over two years. This model can best be described as a 'slow-intensive' programme (Boughey 2010) with additional innovative course components, whose purpose is to address the 'articulation gap' (CHE 2013:17) between secondary and higher education in South Africa.

The ECP physics course covers the same topics as the mainstream first year course, but the extra time allows more curriculum space for foundational provision, which includes strengthening conceptual understanding, a focus on the nature of physics knowledge, and on the processes of scientific enquiry and modeling (van Heuvelen 1991; Etkina & van Heuvelen 2007). It also allows time for the development of students' social capital, through site visits, exposure to research taking place in the department, and class-visits by former students now in industry or research. The course is taught in a flat-space venue,

conducive to groupwork and enabling interactive engagement between lecturers and students. In this way a classroom learning community is created, in which discussion about science is fostered.

Drawing on the work of Gee (2005) and other studies in a sociolinguistics vein (Lemke 1990; Airey & Linder 2009), the course is framed by an explicit focus on helping students to access the disciplinary discourse of physics (for further details, see Marshall & Case 2010). This disciplinary discourse would include the values, attitudes, habits of mind that are particular to physicists ('the big D' Discourse) as well as the way the discipline represents itself semiotically (the 'little d' discourse). Here, the focus is on developing students' mastery of the multiple representations used in physics, including oral and written language, gestures, graphs, diagrams, mathematics etc. (for further details on developing representational competence, see Conana, Marshall and Case (in press). Drawing on physics education research, the teaching focuses explicitly on these multiple representations, in developing a 'representation-rich learning environment' (Rosengrant et al. 2009:010108-2), which helps students to learn how to use representations, and to appreciate the disciplinary affordances of representations (Kress 2010; Doran 2016). The course also presents the discipline of physics in its wider context social, historical and ethical contexts.

However, despite the extensive foundational provision of the ECP, seeming to give students a solid foundation in physics and mathematics, students' transition to second year remains an ongoing challenge. Second year Physics becomes more mathematically demanding, and students face the well-noted challenge of applying the mathematics learned in their Mathematics courses to their Physics courses (Bing & Redish 2009). As a Teaching and Learning specialist, one of the authors began to work alongside the second year physics and mathematics lecturers in order to better understand students' transition challenges. Tools from Legitimation Code Theory proved useful in characterizing the pedagogical practices in these courses, and in beginning to tease out the obstacles students experienced in making this transition.

LCT as a Tool for Thinking about Access to Science

As noted earlier, the ECP was framed in its design by insights from sociolinguistics-inspired studies on disciplinary discourse and science learning (Gee 2005; Lemke 1990; Airey & Linder 2009). In analyzing the disciplinary

discourse features of episodes in the physics classroom, we found that tools from the Semantics dimension of Legitimation Code Theory were useful for fine-grained analysis of physics teaching and tasks.

LCT is a sociological 'toolkit' (Maton 2014b:15) developed by Karl Maton, which incorporates and extends key concepts from the work of sociologists Basil Bernstein and Pierre Bourdieu, including Bernstein's code theory, knowledge structures and pedagogic device, and Bourdieu's concepts of field theory, capital and habitus (for a more detailed account of the develop of LCT, see Maton 2014b). LCT comprises five dimensions, but for the purposes of this paper we focus on the dimension of Semantics. Concepts from the Semantics dimension of LCT provide some useful tools to think about physics knowledge structure and to analyse physics pedagogical practices. The two concepts from the dimension of Semantics used as a conceptual framework in this study are semantic gravity and semantic density.

Semantic gravity is defined as the extent to which meaning 'is related to its context of acquisition or use' (Maton 2009: 46). When semantic gravity is weaker, meaning is less dependent on its context. Physics operates with abstract, decontextualised concepts and principles, which have weaker semantic gravity. These abstract principles can then be applied to a variety of specific physics contexts, with stronger semantic gravity. For example, abstract physics concepts (such as 'force' or 'energy') can be used in a wide range of specific contexts, ranging from small atoms to vast galaxies.

Semantic density is defined as the extent to which meaning is concentrated or condensed within symbols (a term, concept, phrase, expression, gesture, etc.) (Maton 2014b). Physics works with stronger semantic density, because meaning is condensed within nominalisations (that is, scientific words or phrases that are dense in meaning), for example, 'constant acceleration' or 'induction'. Meaning is also condensed within the multiple representations (for example, graphs, symbols, diagrams, mathematical formulae) that characterize the discipline.

To visualise the relative strengths of semantic gravity and semantic density (SG and SD) over time, Maton (2014b) has developed an analytical method of *semantic profiling*. This indicates in the form of a diagram how the strengths of SG and SD vary over time. The strengths of SG and SD are represented on the *y*-axis, with time on the *x*-axis. In the semantic profile, SG and SD are mostly portrayed as inversely related. However, this conflation of SG and SD may not always apply, and in such cases, representing SG and SD on

a semantic plane, or quadrant, is more useful, where SG and SD vary independent of each other (see Maton 2014b; Blackie 2014, for a chemistry example).

The semantic profile can be used to map practices as they unfold in time, whether in a student task (e.g., an essay or problem task), a single class-room episode, part of a lesson, a series of lessons, an entire course or even a whole curriculum. Semantic profiles can also be characterized as having a 'fractal application' (Maton 2014a: 44): as one moves towards a more macrolevel (e.g., from a classroom episode to a whole lesson), waves within waves become evident. For example, a semantic 'upshift' in a lesson may comprise several smaller up and down semantic waves within the overall 'upshift'.

Figure 1 shows three different semantic profiles: if these corresponded to three different lessons, then A1 would indicate a lesson in which the teaching remain at the abstract level (SG-), for example, a description of Newton's Second Law condensed in mathematical representations (SD+); A2 would indicate a lesson that remained at the concrete level (SG+), for example, describing the motion of common objects in everyday language; B would represent what Maton terms a 'semantic wave', which indicates shifts between context-dependence (from concrete examples of everyday objects to abstract principles) and the condensation of meaning (verbal descriptions of motion condensed into mathematical formalism). Profile B is said to have a greater 'semantic range' than either A1 or A2.

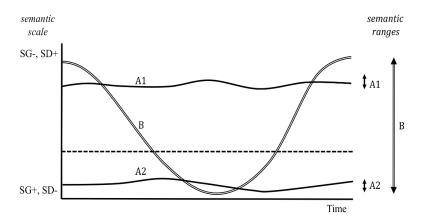


Figure 1. Diagram of semantic profiles and ranges (Maton 2013:13).

Maton (2013) argues that cumulative learning is enabled through this variation in strengthening and weakening of semantic gravity and semantic density with time. 'Upshifting' indicates where theorizing is emphasized, and where applications are used to build towards theory. Maton argues that in a pedagogical practice, there should be both 'downshifting and upshifting', and 'unpacking and repacking' of the concepts, in order to relate 'technical concepts to everyday examples' and to 'condense meaning to abstract theoretical ideas' (Maton 2014b:192). One weakness of this cumulative learning perspective is that it may take for granted the social and cultural embeddedness of 'everyday examples'. For example, common examples given in university physics textbooks of low friction surfaces are those of skiing or ice hockey, both with little relevance to most South African students.

However, with this caveat in mind, these LCT tools have proven useful in a wide range of disciplinary contexts for analyzing teaching practices and for assisting both academic development practitioners and discipline lecturers to improve pedagogical practices in higher education (see for example, Clarence 2016 & 2017; Blackie 2014). In this study of physics and mathematics pedagogical practices, the LCT theoretical tools were well-suited to characterizing the movement between abstract principles and concrete contexts that is entailed in physics pedagogy, as well as the ways in which meaning is encapsulated in the dense representations used in physics and mathematics.

In the next section, we draw on these concepts from LCT to construct semantic profiles of pedagogical practices in first and second year lectures. In this way, LCT was useful for examining the pedagogical practices that enable or hinder the transition to second year.

Research Methods

The broad aim of the study was to develop a fuller understanding of students' experiences of the crucial transition from the ECP to their second year courses. A starting point was to build an understanding of how the pedagogical practices of ECP and second year courses were related. This section describes the analytical framework, and how data was collected and analysed.

Developing an Analytical Framework

Bernstein (2000) introduced the notion of 'external language of description' as

a way of understanding the form taken by theory. An 'external language of description' offers a way of translating between theoretical concepts and empirical data, in order to show how concepts are utilized for a particular research context. In this study, the external language of description works as a sort of analytical framework, relating the concepts of 'semantic gravity' and 'semantic density' to the context of undergraduate physics. This framework draws on the work of Lindstrom (2010) and Georgiou (2012), who have presented ways of coding the relative strengths of semantic gravity in the context of physics lectures and students' responses to physics tasks. They use the label *abstract* to refer to statements of general principles or laws; *concrete* refers to a description of the characteristics of everyday objects; and *intermediate* (or *linking*) refers to instances where abstract and concrete constructs are linked. Table 1 below describes the external language of description for semantic gravity and semantic density used in this study to characterize pedagogical practices.

| Strength | SG | | SD | Strength |
|----------|---|--------------------------------|--|----------|
| SG- | New concepts | Abstract A | Representations (or nominalisations) | SD+ |
| \ | Familiar concepts used in a linking way | Linking (Intermediate) L | Unpacking or repacking representations | 1 |
| SG+ | Concrete/real-life situations | Concrete C | Linking representations to concrete situations | SD- |

Table 1. External language of description for semantic gravity and semantic density

The strengths of SG and SD were characterized as Concrete, Linking or Abstract, depending on the lecturers' actions and way of unfolding the concepts. At the *Concrete* level, semantic gravity is stronger: here the lecturer would be referring to a concrete situation or demonstration in class. At the same time, the semantic density would be weaker: representations would be unpacked and linked to the concrete situation usually in the form of a verbal representation. At the *Abstract* level, semantic gravity would be weaker: here the lecturer would be using new physics concepts or principles, mostly represented in semantically denser modes (graphical, diagrammatic or mathematical representations). The *Linking* level is characterized by the lecturer building on familiar concepts or principles in a linking way, between Concrete and Abstract; here, dense representations were being explicitly unpacked or repacked into their constituent parts or meaning.

Data Collection and Analysis

The first part of the study examines the pedagogical practices in the ECP course. Data was drawn from observation field notes and video-recordings of lectures. These were transcribed, capturing the audio data as well as all visual data (gestures used, writing on the board, etc.). As a form of data reduction (Miles & Huberman 1994), summaries of the transcriptions were prepared. Semantic profiles were constructed to map movement between abstract principles and concrete contexts in the teaching as well as the ways in which representations were used during each lecture. On the semantic profiles, coding (in the form of line thickness) is used to indicate the different forms of interaction in lectures (with a thin line indicating where only the lecturer is talking, and a thick line indicating lecturer-student interactions and engagement). In this way distinctive features of the ECP pedagogy were drawn out. Of the many lecture sequences observed and recorded, one is presented in this paper.

The second part of the study examined the pedagogical practices of a second year physics course (Classical Mechanics), and a related mathematics course (Advanced Calculus). For the second year courses, the data was in the form of field notes, rather than video data. This was because the analytical framework had been developed through a fine-grained analysis of the ECP data. Semantic profiles were constructed for the second year lectures; although these were not as fine-grained as the first year lectures, they captured the broad

shifts between abstract and concrete in the lectures. As noted in LCT research, semantic profiles are a useful heuristic device suited both for fine-gained discourse analysis of short classroom episodes, or for less fine-grained mapping of larger lecture sequences (see, for example, Clarence 2017; MacNaught *et al.* 2013). In conducting the classroom observations, developing a relationship of trust with the lecturers was key. One of the authors worked closely with the lecturers, firstly as an academic development practitioner with the physics ECP lecturers (see Marshall *et al.* (2010) for an account of this collaboration), and later as a Teaching and Learning specialist working alongside the second year lecturers.

In considering the validity of the data analysis, we draw on the concept of credibility (Lincoln & Guba 1985), more suited to qualitative research. Through 'prolonged engagement' (Lincoln & Guba 1985), many lectures were observed in each of the courses analysed, and the example lecture sequences presented here are representative of the teaching approaches in the other lectures observed. Another approach to ensuring credibility is what Lincoln & Guba (1985) term 'peer debriefing': here, the construction and analysis of the semantic profiles was shared with colleagues and with the lecturers themselves.

The third source of the data collected was interviews conducted with twelve second year students. The interviews were open-ended in structure, encouraging students to reflect on their experiences of the transition from the ECP to second year.

Research Findings: Analysis of Pedagogical Practices in ECP and Second Year Classes

In this section, we use tools from LCT to analyse the pedagogical practices in ECP and second year courses as a means to develop insights into the challenges students face in making the transition to second year.

We start with a brief analysis of pedagogical practices in the ECP, as a way to understand the learning experiences of ECP students. The data for this section is drawn from a larger study on ECP pedagogical practices in an introductory physics course (Conana 2016). As space is limited, this section merely provides a brief overview of distinctive features of the ECP pedagogical practices, and includes some illustrative examples to exemplify the discussion.

The analysis then turns to the pedagogical practices in the second year physics and mathematics courses. Using LCT as a theoretical lens, we identify certain key mismatches in pedagogical practices between the ECP and second year courses. These may shed light on the difficulties with transition that many students face.

Part 1: Analysis of Pedagogical Practices in ECP

A larger study of the pedagogical practices in the ECP course, framed using concepts from LCT, revealed the following distinctive features of the ECP pedagogy (Conana, 2016; Conana, Marshall & Case, in press):

- *Pacing*: In keeping with the extra time allocated, the pacing at the outset of the ECP was slower, allowing time for foundational additions. Towards the end of the ECP course, the pacing increased to be more consistent with the mainstream pacing.
- *Semantic range*: The ECP showed a large semantic range (between Abstract and Concrete), with more time spent at the Linking level, and frequent shifts to the Concrete level
- Representational modes: A range of representational modes were used during the lectures, including concrete demonstrations and gestures, sketches, force diagrams, graphs and mathematical equations
- *Interactive engagement*: student engagement in class was a common feature of all ECP lectures.

As an illustrative example, we present an analysis of one of the ECP lecture sequences (see Figure 2 below), to exemplify these features:

This lecture sequence took place towards the end of the first year, when the pacing had increased to be consistent with the pacing of the mainstream first year course. The topic here was Energy, and the physics concepts of 'conservation of energy' and 'conservative forces' were introduced. This was a sequence of two lectures of 60 minutes each.

The semantic profile in Figure 2 shows a large semantic range (moving between Abstract and Concrete), including frequent shifts to the Concrete level. The lecturer starts at the Linking level by eliciting students' prior knowledge about energy (from time 0-5 minutes). The students reply with variations of the familiar definition from school, 'energy cannot be created or

destroyed, but it can be transferred or transformed from one form the another'. The lecturer then unpacks the meaning of the terms 'transferred' and 'transformed' and relates this definition to a concrete demonstration (lifting a pen up above his head), to discuss concepts of potential energy and then linking this to the concept of 'work done'.

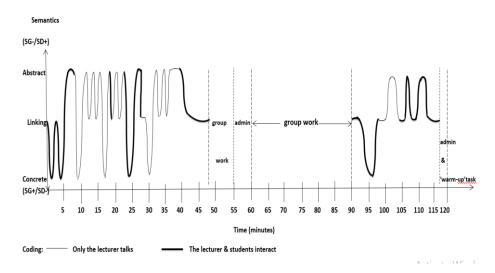


Figure 2: Semantic profile of a lecture sequence in an ECP physics course

In terms of the LCT concept of 'semantic waving' introduced early, the semantic profile in Figure 2 shows frequent movement up and down the semantic continuum ('downshifting and upshifting') in the lecture sequence, with explicitness in explaining and condensing ('unpacking and repacking') the concepts. This semantic waving is well-illustrated in the period 8-16 minutes on the semantic profile: the lecturer introduces the abstract concept of 'conservative forces', and then shifts down the semantic continuum to demonstrate this with a concrete example (moving his pen up and down). He then repacks this concrete example in theoretical terms relating to losses and gains in energy. From here, he abstracts further to the concepts of 'conservation of energy' and a 'conservative force'. From this Abstract level, he then shifts down again to the Concrete level and unpacks the concept of conservative force

using a different example, this time a spring oscillating up and down. From this more concrete example, we then see condensation of meaning occurring, as the lecturer shifts up the semantic continuum, moving from the demonstration and verbal description of an oscillating spring, to a sketch of the spring and then to a symbolic representation of the potential energy of the spring. This episode in the lecture points to the explicit use of a range of representational modes in the teaching, shifting between demonstrations, sketches, diagrams and mathematical symbols.

Finally, the semantic profile shows that student engagement was an important feature of the lecture: the line thickness coding on the semantic profiles indicates the many times during the lecture when there is student engagement, and a considerable amount of time is given for groupwork during classtime. After the first lecture, students complete a homework task (calculating the work done by a traveller carrying a suitcase up a flight of stairs). In the second year lecture, the first 30 minutes (from 60-90 minutes on Figure 2) is given to consolidating and discussing their solutions in groups, after which the lecturer discusses the problem and gives feedback. The lecturer starts at the Linking level with unpacking the problem statement with the students, then moves to a concrete enactment of the problem situation (he mimes carrying a suitcase). Through a process of building on students' solutions, he sketches the situation (to model the situation to capture the important features of the problem), represents the problem as a force diagram (identifying the key forces on the suitcase, and translating words to symbols), and finally represents the situation in a mathematical representation. The line-thickness coding during this period (from 90 – 115 minutes) indicates that the students themselves were engaged in enacting these semantic shifts between representations.

In summary, the ECP pedagogy was characterized by a large semantic range (between Abstract and Concrete levels), frequent 'semantic waving' up and down the semantic continuum, a wide use of representational modes (and explicit unpacking and repacking of these), and interaction engagement during lectures.

Part 2: Analysis of Pedagogical Practices in Second Year Classes The second part of the analysis looked at the pedagogical practices in the second year physics (Classical Mechanics) and mathematics (Advanced

Calculus) classes. The purpose of the analysis was to understand students' experiences in second year and the challenges students and staff faced. The data collected was in the form of classroom observation notes rather than video-data (to be less intrusive in these classes) and so it should be noted that the semantic profiles are not as fine-grained as in the ECP case. Nevertheless they fulfill a useful heuristic role in characterizing the overall semantic shifts in the lectures.

The analysis started with the Physics course, since this was a logical progression from the ECP Physics module the previous year. The semantic profile of a second year physics lecture is presented in Figure 3.

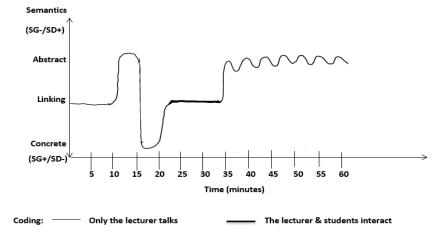


Figure 3: Semantic profile of a lecture in a second year physics course

At the start of the lecture, the lecturer introduces a problem situation at the Linking level, drawing on first year physics principles and linking to the first year mathematics concept of integration (from about time 0 to 10 minutes). He senses that the students are not following his explanations, and so responds to this by moving from the abstract concept of 'integration' to a concrete, illustrative example (at about minute 15). Here, the graphical representation of integration (taking the sum over smaller and smaller pieces under a graph) is related to an analogy of a sliced loaf of bread, and students are then given time (from about minute 20 to 35) to discuss the situation and work on representing the problem situation as a mathematical function.



Figure 4: Representations used in the second year physics course: graphical representation, sliced bread analogy, mathematical formalism

During the remainder of the lecture, the lecturer explains the advanced calculus in the problem and the explanation remained mostly at the Abstract level, moving between principles, and graphical and mathematical representations.

As noted earlier, one of the authors had been working with the physics lecturer in order to understand students' difficulties with second year physics. It was evident that students were struggling to use the mathematical principles and procedures of integral calculus in the physics course, and so the research interest turned to students' experiences of learning integral calculus in their second year Advanced Calculus course.

The semantic profile in Figure 5 gives an overview of the semantic range used in a representative Advanced Calculus mathematics lecture. At the start of the lecture, the lecturer introduces a problem situation at the Linking level, drawing on simple integration principles from first year mathematics. He then moves to a calculation of surface area using double integrals, and at this point the lecture is mostly at the Abstract level, using abstract diagrams and mathematical formalism. The students follow the notes presented and there is no interactive engagement.

In summary, the second year Physics and Mathematics pedagogy was characterized by a smaller semantic range than the ECP pedagogy, and less semantic waving than in the ECP pedagogy. The second year Physics lecture began with a useful concrete example on which to build toward mathematical abstraction; the Mathematics lecture remained predominantly at the Abstract level. While the ECP pedagogy explicitly incorporated a range of representational modes (and students actively engaged in the unpacking and repacking of these), in the second year pedagogy, there was less variation of representational modes. The Physics lecture included variation in representational modes – gestures, text, analogy, diagrams, and mathematical formalism; in the Mathe-

matics lecture, the representations used were mostly abstract diagrams and mathematical formalism. As might be expected in senior level courses, there was less interactive engagement than in the ECP pedagogy, although the responsiveness of the Physics lecturer to student difficulties was evident with the inclusion of the concrete example in the lesson.

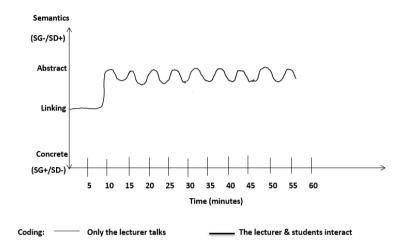


Figure 5: Semantic profile of a lecture in a second year mathematics course

Part 3: Students' Experiences of the Transition to Second Year Interviews with twelve students in the mathematics course about their experiences of the transition to second year reflected some of the pedagogical issues that the LCT analysis of pedagogical practices had highlighted.

Firstly, the students noted the difference in *pacing*, especially in the Mathematics course. This student notes that concepts are introduced very quickly in class, with the expectation that students will work through the notes and exercises at home:

In the second year maths, it's all about what you have to do at home, what you do for yourself You have to learn it very quickly, and absorb it very quickly as well. When you advance to second year maths,

you just get a shock. This year, in second year maths, the lecturer just reads the notes and explains a few concepts and just - you need to do it all at home. There's no time [as in the ECP] that you have to work on something for weeks, it's just about what you are doing at home.

Similarly, another student describes a sense of feeling overwhelmed by trying to keep up to date with the pace of the class:

I feel like there's lots of gaps this year. You have to constantly go back, which is, you have to do the stuff everyday in order to get it. But the more you go back, the more you fall behind and the more you create more gaps for yourself. Unless you can work very fast, your time will fall short. This year, it is all about how you use your time. In first year, it wasn't like this. When we started with second year, it was like 'Boom!' They were all throwing things on us, it is so overwhelming.

Although the students did not explicitly talk about *semantic range*, their comments reflected their experiences of moving to more abstract, theoretical courses. Some described experiencing a lack of perceived relevance due to the increased abstraction:

I've lost my motivation this year – it's just theory. There's something missing in terms of what is happening, this year. I've lost that 'Oomph' in Maths.

The students miss the explicitly building on their prior knowledge, which was more prevalent in the ECP pedagogy:

I can't see the links between what I'm doing here and last year. The way it is presented makes us think there is no connection.

Their comments also reflected the observation in the LCT analysis that a more restricted range of *representational modes* was used: while the ECP used a range of different representations, the second year lectures were more mathematically-focused. This is to be expected in senior physics and mathematics courses. However, what the students particularly noted was that

Honjiswa Conana, Delia Marshall & Deon Solomons

representations with stronger semantic density were often taken for granted and not explicitly unpacked in the teaching:

The problem is, now everything is abstract. We have to picture these problems. I struggle to visualise them. I tried to, but you have to capture all these concepts visually.

What's the purpose of sketching if I can't visualise what I'm drawing? It's very complicated.

Students describe how lecturers use representations, such as graphs, but don't explicitly help students to discern the important features and unpack the meaning:

Our lecturers teach us how to draw graphs but never teach us how to view them... I have a lot of sketches in my notebook that I still don't understand.

Working from 2D to 3D, it's a huge difference. So, you have to constantly translate how you did maths in 2D and transform it to 3D. And the problem now is that there is too much to visualise and it is graphical. But at the beginning, like taking and understanding limits from 2D to 3D is different. It's just there's a lot of things you have to keep in mind, the concepts just build up.

Finally, students miss the *interactive engagement* in class that was a common feature of all ECP lectures. Students noted that the fast pace precluded much interaction with lecturers:

Our lecturers are not interacting with us....They are so fast, they are just running with the notes.

Students also missed the groupwork approach which was fostered in the ECP:

It would be much better if we could work in groups, like in first year because you can work with someone else than working on your own, it was more effective. We are not interactively doing the work in class, most of us we are doing the work at home alone. I feel like we should do group-work.

Discussion

Using tools from the Semantics dimension of LCT, this study has highlighted some of the difficulties that students experience in the transition from an extended curriculum programme into second year. The analysis suggests that this transition may be exacerbated by some differences or discontinuities in pedagogical practices between the ECP and the second year.

Firstly, the *pacing* of the ECP is slower, and students struggle with the inevitable increase in pace in the second year. They note how they sometimes feel overwhelmed at the amount of new concepts and the expectation that so much of the learning will take place at home.

Secondly, the semantic range in the pedagogical practice diminishes with the transition to second year. In ECP, the semantic range is large (spanning Abstract and Concrete), with more time spent at the Linking level, and frequent shifts to the Concrete level. By contrast, the semantic range of the second year Physics and Mathematics courses was more narrow, predominantly at the Abstract level, which is to be expected in these more advanced courses. Some students experienced a lack of relevance due to the increased abstraction, which led to some describing a deflated sense of motivation. Students also struggled to link the concepts being dealt with in second year to their prior knowledge from first year.

Thirdly, the range of representational modes used in the second year narrowed. In the ECP, a range of representational modes were used during the lectures (concrete demonstrations and gestures, sketches, force diagrams, graphs and mathematical equations), whereas the second year lectures relied far more on the mathematical representations that inevitably become more prevalent in advanced courses. Students noted that there was far less explicit unpacking and repacking of semantically dense representations, such as graphs or diagrams, in the second year courses. This was evident in less semantic waving in the second year semantic profiles.

Lastly, interactive engagement was clearly a key aspect of the ECP pedagogical practices which was less common in much of the second year pedagogy. Students noted how they missed this form of interaction and would have welcomed more structured groupwork in their second year classes.

In summary, the LCT analysis – complemented with data from student interviews - highlights the mismatches between the ECP and second year pedagogical practices. These include: increased pacing, a curtailed semantic range concentrated more at the Abstract level, less 'semantic waving', a narrower range of representations used, and less interactive engagement between students and lecturer. Some of these aspects of pedagogical practices are also noted by Ellery (2017) in her Bernsteinian analysis of the transition to mainstream in a science extended curriculum programme, in particular increased pacing, high volumes of work at a high conceptual level, and less rapport with teaching staff.

Implications and Concluding Remarks

Much research on foundation provision in South Africa has focused on the transition from school to first year, and less so on the transition to second year or the other 'epistemic transitions' throughout the undergraduate degree. This study addresses this paucity in the literature of research on the transition to second year. The findings support previous arguments that foundational provision needs to extend beyond the first year of a programme (for example, Rollnick 2010; CHE 2013).

In the transition to second year physics and mathematics courses, an increase in abstraction and mathematical rigour is inevitable. However, the findings suggest that students still require a greater semantic range in the pedagogical practices, with more time spent unpacking dense representations and linking back to concrete examples wherever feasible. As Georgiou (2014) notes, in the context of physics learning, the 'connectivity' between abstract and concrete is not only associated with students' deeper understanding of physics concepts, but also with improved student engagement and positive attitudes towards physics. For some students, the lack of 'connectivity' between abstract and concrete with the increased abstraction at second year led to experiences of lack of relevance and demotivation. Students felt the load of many new concepts not familiar from high school or first year (which seems a common second year experience, as noted by Milsom & Yorke 2015). In this regard, they missed the more explicit linking to their prior knowledge which had been a key feature of the ECP pedagogy.

The findings also suggest that second year pedagogical approaches in physics and mathematics ought to continue to focus more deliberately on the

use of representations. Accessing a disciplinary discourse takes time and is a process that doesn't end at the first year. As Eriksson *et al.* (2014) note, students' mastery of disciplinary representations develops over an extended period of time. Yet, lecturers are often so familiar with disciplinary representations that they take these for granted, and 'no longer 'notice' the learning hurdles involved in interpreting the intended meaning of these representations' (Fredlund *et al.* 2014: 020129-4). This suggests that the careful 'unpacking' and 'repacking' of dense representations used in mathematics and physics is crucial for learning, even in second year. This is borne out in other studies that suggest that explicit focus on representations in a 'representation-rich learning environment' (Rosengrant *et al.* 2009:010108-2) supports student learning and hence enables epistemological access.

Perhaps the most notable mismatch in pedagogical practices between the ECP and the second year courses was the reduction of interactive engagement, particularly in the mathematics course. This contrasted with the ECP pedagogy, which had fostered the development of a 'classroom community' in which students often worked together and supported each other in class and outside of class. While it might be argued that the more advanced content in senior level courses limits the time for interactive engagement, physics education literature has shown that student engagement is critical for undergraduate science learning (Hake 1998; Mazur 2009; Wieman & Perkins 2005), and that interactive engagement is possible to implement even in senior level courses (for an example in quantum physics, see Singh & Zhu 2011). Besides the cognitive learning benefits, research also shows how groupwork and other social learning approaches have important affective benefits, helping students in developing social networks and supporting each other (see, e.g., Tinto 1997).

In conclusion, tools from Legitimation Code Theory (LCT) proved useful in analysing the pedagogical practices in ECP and second year courses as a means to develop insights into the challenges students face in making the transition to second year. The findings suggest that attentiveness to particular pedagogical aspects (pacing, semantic range, representational modes and interactive engagement) is likely to support students in accessing the disciplinary knowledge and in navigating the 'epistemic transition' to second year. However, as Clarence (2017) notes, the LCT analytical tools are useful not only for analysis of pedagogical practices, but they are also useful for academic staff development. As described earlier, one of the authors had been working alongside the second year lecturers in a staff development role. One

of the outcomes of sharing the findings of this study has been greater collaboration between the departments of physics and mathematics in terms of horizontal and vertical curriculum alignment. This has led to some changes in pedagogical practice at the second year level (including more semantic waving and more interactive engagement), which have led to significant improvement in student learning (see Conana, Solomons & Marshall 2019). This collaboration has also led to the fostering of a more holistic approach to undergraduate science teaching, focusing on the 'whole student' rather than just STEM knowledge and skills (Winberg *et al.* 2018).

As a final point, we return to Moje's (2007) useful distinction between socially just pedagogy and pedagogy for social justice. A pedagogy that makes the disciplinary discourse more explicit (through attention to semantic range, representational modes and interactive engagement) can be viewed as socially just pedagogy, since the focus is on inducting students into the specialized (socalled 'powerful') knowledge of the discipline and attending to the 'epistemic transition' to second year. In this paper, we have largely focused on the role of pedagogical practices in inducting students into disciplinary discourses. However, pedagogy that makes room for more interactive engagement would also create the space for adopting a more critical perspective on scientific knowledge itself. This could include exploring the wider social, ethical and environmental aspects of science, and allow for greater responsiveness to students' own lives and concerns, to counter student experiences of science as alienating and decontexualised. This then, would also enable a pedagogy for social justice, and open up the space for more transformative approaches to foundational provision.

References

- Airey J. & C. Linder. 2009. A Disciplinary Discourse Perspective on University Science Learning: Achieving Fluency in a Critical Constellation of Modes. *Journal of Research in Science Teaching* 46: 27 49. https://doi.org/10.1002/tea.20265
- Bernstein, B. 2000. *Pedagogy, Symbolic Control and Identity: Theory, Research, Critique.* Revised Edition. Oxford: Rowman & Littlefield.
- Bing, T.J. & E.F. Redish 2009. Analyzing Problem Solving Using Math in Physics: Epistemological Framing via Warrants. *Physical Review Special Topics Physics Education* 5: 020108.

https://doi.org/10.1103/PhysRevSTPER.5.020108

- Blackie, M. 2014. Creating Semantic Waves: Using Legitimation Code Theory as a Tool to Aid the Teaching of Chemistry. *Chemistry Education Research and Practice* 15: 462 469. https://doi.org/10.1039/C4RP00147H
- Boughey, C. 2010. Understanding Teaching and Learning at Foundation Level: A 'Critical' Imperative? In Hutchings, C. & J. Garraway (eds): *Beyond the University Gates: Provision of Extended Curriculum Programmes in South Africa*. Rhodes University: HELTASA.
- Bruner, J. 1960. The Process of Education. Cambridge, MA: Harvard UP.
- Carstens, D. 2016. The Anthropocene Crisis and Higher Education: A Fundamental Shift. *South African Journal of Higher Education* 30, 3: 255 273. https://doi.org/10.20853/30-3-650
- Clarence, S. 2016. Exploring the Nature of Disciplinary Teaching and Learning using Legitimation Code Theory Semantics. *Teaching in Higher Education* 2, 2: 123 137.
 - $\underline{https:/\!/doi.org/10.1080/13562517.2015.1115972}$
- Clarence, S. 2017. Surfing the Waves of Learning: Enacting a Semantics Analysis of Teaching in a First Year Law Course. *Higher Education Research and Development* 36, 5: 920 933. https://doi.org/10.1080/07294360.2016.1263831
- Cobern, W.W. 1998. Science and the Social Constructivist View of Science Education. In Cobern, W.W. (ed.): *Socio-cultural Perspectives in Science Education*. Dordrecht: Kluwer. https://doi.org/10.1007/978-94-011-5224-2
- Collier-Reed, B., K. le Roux & M. Rollnick 2010. Editorial: Using Discourse and Identity to Conceptualise Learning in Tertiary Science and Engineering. *African Journal of Research in Mathematics, Science and Technology Education* 14, 2: 6 12. https://doi.org/10.1080/10288457.2010.10740677
- Conana, H. 2016. Using Semantic Profiling to Characterize Pedagogical Practices and Student Learning: A Case Study of Two Introductory Physics Courses. Unpublished PhD thesis, University of the Western Cape.
- Conana, H., D. Marshall & J. Case 2016. Exploring Pedagogical Possibilities for Transformative Approaches to Academic Literacies in Undergraduate Physics. *Critical Studies in Teaching and Learning* 4, 2: 28 44.

- Conana, H., D. Solomons & D. Marshall 2019. Supporting the Transition from First to Second Year Mathematics Using LCT Research Findings. Paper presented at *The Third International Legitimation Code Theory Conference (LCT3)*, Johannesburg, South Africa, July 2019.
- Conana, H., D. Marshall & J. Case (in press). A Semantics Analysis of First Year Physics Teaching: Developing Students' Use of Representations in Problem-solving. In Winberg, C., S. McKenna & K. Wilmot (eds.): Building Knowledge in Higher Education: New Directions in Teaching and Learning. London: Routledge.
- Council on Higher Education (CHE) 2013. A Proposal for Undergraduate Curriculum Reform in South Africa: The Case for a Flexible Curriculum Structure. Report of the Task Team on Undergraduate Curriculum Structure. Available at:
 - http://www.che.ac.za/media_and_publications/research/proposalundergraduate-curriculum-reform-south-africa-case-flexible. (Accessed on 22 April 2017.)
- Council on Higher Education and South African Institute of Physics (CHE-SAIP) 2013. Review of Undergraduate Physics Education in Public Higher Education Institutions. Available at: http://www.saip.org.za/images/stories/documents/Reports/Undergrad_Physics_Report_Final-1.pdf (Accessed on 22 April 2017.)
- Doran, Y. 2016. *Knowledge in Physics through Mathematics, Image and Language*. Unpublished PhD thesis, University of Sydney.
- Elley, K. 2017. Framing of Transitional Pedagogical Practices in the Sciences: Enabling Access. *Teaching in Higher Education* 22,8: 908 924. https://doi.org/10.1080/13562517.2017.1319812
- Engelbrecht J, Harding A. & P. Phiri 2010. Are OBE Trained Students Ready for University Mathematics? *Pythagoras* 72: 3-13. https://doi.org/10.4102/pythagoras.v0i72.16
- Etkina, E. & A. van Heuvelen 2007. Investigative Science Learning Environment: A Science Process Approach to Learning Physics. In Redish, E.F. & P. J. Clooney (eds.): *Research-based Reform of University Physics*. Compadre: American Association of Physics Teachers.
- Eriksson, U., C. Linder, K. Airey & A. Redfors 2014. Introducing the Anatomy of Disciplinary Discernment: An Example from Astronomy. *European Journal of Science and Mathematics Education* 2:167 182.
- Fredlund, T., C. Linder, J. Airey & A. Linder 2014. Unpacking Physics

- Representations: Towards an Appreciation of Disciplinary Affordance. *Physical Review Special Topics Physics Education* 10: 020129. https://doi.org/10.1103/PhysRevSTPER.10.020129
- Gee, J.P. 2005. *An Introduction to Discourse Analysis: Theory and Method*: 2nd Edition. London: Routledge.
- Georgiou, H., K. Maton & M. Sharma 2014. Recovering Knowledge for Science Education Research: Exploring the 'Icarus Effect' in Students Work. *Canadian Journal of Science, Mathematics and Technology Education* 14,13: 252 268. https://doi.org/10.1080/14926156.2014.935526
- Grayson D. J. 2010. Design of the Engineering Augmented Degree Programme at the University of Pretoria. ASSAf Mind the Gap Forum October 21-22; Cape Town, South Africa.
- Hake, R. 1998. Interactive-engagement versus Traditional Methods: A Sixthousand Student Survey of Mechanics Test Data for Introductory Physics Courses. *American Journal of Physics* 66,1: 64 74. https://doi.org/10.1119/1.18809
- Hugo, W. 2016. Think Piece: What Education is of Most Worth in a World where we are Consuming the Future of our Children? *Southern African Journal of Environmental Education* 32:11 25.
- Hunter, M.S., B.F. Tobolowsky, J.N. Gardner, S.E. Evenbeck, J.A. Pattengale, M.A. Schaller & L. Schreiner (eds.). 2010. *Helping Sophomores Success: Understanding and Improving the Second Year Experience*. San Francisco, CA: Jossey-Bass.
- Jacobs, C. 2007. Towards a Critical Understanding of the Teaching of Discipline-specific Academic Literacies: Making the Tacit Explicit. *Journal of Education* 41: 59 81.
- Kloot, B., J.M. Case & D. Marshall 2008. A Critical Review of the Educational Philosophies Underpinning Science and Engineering Foundation Programmes. *South African Journal of Higher Education* 22,4: 799 816. https://doi.org/10.4314/sajhe.v22i4.25817
- Kress, G. 2010. *Multimodality. A Social Semiotic Approach to Contemporary Communication*. London: Routledge Falmer. https://doi.org/10.4324/9780203970034
- Lemke, J.L. 1990. *Talking Science: Language, Learning and Values.* London: Albex Publishing.
- Lillis, T. & M. Scott 2007. Defining Academic Literacies Research: Issues of

- Epistemology, Ideology and Strategy. *Journal of Applied Linguistics* 4,1: 5 32. https://doi.org/10.1558/japl.v4i1.5
- Lindstrøm, C. 2010. Link Maps and Map Meeting: A Theoretical and Experimental Case for Stronger Scaffolding in First Year University Physics Education. Unpublished PhD thesis, University of Sydney.
- Lubben, F.E. 2007. Success through the General Entry Programme for Science (GEPS): Reflections by GEPS Students in their Third Year at UCT. Report to the Academic Development Programme, University of Cape Town.
- Marshall, D. & J. Case 2010. Discourse in the Learning of Physics: The Design of an Introductory Physics Curriculum. *African Journal of Research in Mathematics, Science and Technology Education* 14,2: 6 12. https://doi.org/10.1080/10288457.2010.10740679
- Marshall, D., H. Conana, R. Maclons, M. Herbert & T. Volkwyn 2011. Learning as Accessing a Disciplinary Discourse: Integrating Academic Literacy into Introductory Physics through Collaboration Partnership. *Across the Disciplines* 8,3.
- Maton, K. 2009. Cumulative and Segmented Learning: Exploring the Role of Curriculum Structures in Knowledge-building. *British Journal of Sociology of Education* 30,1: 43 57. https://doi.org/10.1080/01425690802514342
- Maton, K. 2013. Making Semantic Waves: A Key to Cumulative Knowledge-building. *Linguistics and Education* 24,1: 8 22. https://doi.org/10.1016/j.linged.2012.11.005
- Maton, K. 2014a. A TALL order?: Legitimation Code Theory for Academic Language and Learning. *Journal of Academic Language & Learning* 8,3: 34 38.
- Maton, K. 2014b. *Knowledge and Knowers: Towards a Realist Sociology of Education*. London: Routledge. https://doi.org/10.4324/9780203885734
- Mazur, E. 2009. Farewell, lecture? *Science* 323: 50 51. https://doi.org/10.1126/science.1168927
- Macnaught, L., K. Maton, J.R. Martin & E. Matruglio 2013. Jointly Constructing Semantic Waves: Implications for Teacher Training. *Linguistics and Education* 24,1: 50 63. https://doi.org/10.1016/j.linged.2012.11.008
- Miles, M. B. & A.M. Huberman, 1994. *Qualitative Data Analysis: An Expan- ded Sourcebook.* 2nd Edition. Thousand Oaks, CA, US: Sage Publications.

- Milsom, C. & M. Yorke 2015. Defining the Second Year. In Milsom, C., M. Stewart, M. Yorke & E. Zaitseva (eds.): *Stepping Up to the Second Year at University: Academic, Psychological and Social Dimensions*. London: Routledge. https://doi.org/10.4324/9781315735771
- Moje, E. 2007. Developing Socially Just Subject-matter Instruction: A Review of the Literature on Disciplinary Literacy Teaching. *Review of Research in Education* 31:1 44. https://doi.org/10.3102/0091732X07300046001
- Morrow, W. 1993. Epistemological Access in the University. *AD Issues* 1,1: 3 4.
- Potgieter, M. & B. Davidowitz 2011. Preparedness for Tertiary Chemistry: Multiple Applications of the Chemistry Competence Test for Diagnostic and Prediction Purposes. *Chemistry Education Research Practice* 12:193 20. https://doi.org/10.1039/C1RP90024B
- Rollnick, M. 2010. *Identifying Potential for Equitable Access to Tertiary Level Science: Digging for Gold.* Dordrecht: Springer. https://doi.org/10.1007/978-90-481-3224-9
- Rosengrant, D., A. van Heuvelen & E. Etkina 2009. Do Students Use and Understand Free-body Diagrams? *Physical Review Special Topics: Physics Education Research* 5: 010108. https://doi.org/10.1103/PhysRevSTPER.5.010108
- Scott, I., N. Yeld & J. Hendry 2007. A Case for Improving Teaching and Learning in South African Higher Education. *Higher Education Monitor* 6:1 86.
- Short, S. & J. Jürgens 2011. Introducing Concept Mapping as a Teaching and Learning Technique for Life Science ECP Students. In Bozalek, V., J. Garraway & S. McKenna (eds.): Case Studies of Epistemological Access in Foundation/Extended Curriculum Programme Studies in South Africa. Cape Town: CPUT.
- Singh, C. & G. Zhu 2011. *Improving Students' Understanding of Quantum Mechanics by Using Peer Instruction Tools*. Physics Education Research Conference proceedings, Omaha, Nebraska, August 2011: 77 80. https://doi.org/10.1063/1.3679998
- Smith, L., Case, J. & C. Van Walbeek 2014. Assessing the Effectiveness of Academic Development Programmes: A Statistical Analysis of Graduation Rates across Three Programmes. *South African Journal for Higher Education* 28,2: 624 638.
- Starfield, S. & F. Hart 1992. Developing a Study Skills Course. South African

- Journal of Higher Education 6,3: 85 88.
- Tinto, V. 1997. Classrooms as Communities: Exploring the Educational Character of Student Persistence. *The Journal of Higher Education* 68: 599 623.
 - https://doi.org/10.1080/00221546.1997.11779003
- Van Heuvelen, A. 1991. Learning to Think like a Physicist: A Review of Research Based Instructional Strategies. *American Journal of Physics* 59,10: 891 897. https://doi.org/10.1119/1.16667
- Wieman, C. E. & K.K. Perkins 2005. Transforming Education. *Physics Today* 58,11: 36. https://doi.org/10.1063/1.2155756
- Winberg, C., V. Bozalek, H. Conana, J. Wright, K.E. Wolff, N. Pallitt & H. Adendorff 2018. Critical Interdisciplinary Dialogues: Towards a Pedagogy of Well-being in Stem Disciplines and Fields. *South African Journal of Higher Education* 32,6: 270 287. https://doi.org/10.20853/32-6-2975
- Yorke, M. 2015. Why Study the Second Year? In Milsom, C., M. Stewart, M. Yorke & E. Zaitseva (eds.): *Stepping Up to the Second Year at University: Academic, Psychological and Social Dimensions.* London: Routledge.
- Young, M. & J. Muller 2013. On the Powers of Powerful Knowledge. *Review of Education* 1,3: 229 250. https://doi.org/10.1002/rev3.3017

Honjiswa Conana Teaching and Learning Specialist, Faculty of Natural Sciences University of the Western Cape cconana@uwc.ac.za

Delia Marshall
Department of Physics and Astronomy
University of the Western Cape
dmarshall@uwc.ac.za

Deon Solomons
Department Mathematics and Applied Mathematics
University of the Western Cape
desolomons@uwc.ac.za

Congruence in Knowledge and Knower Codes: The Challenge of Enabling Learner Autonomy in a Science Foundation Course

Karen Ellery

Abstract

Learning objectives, pedagogic activities and assessment practices indicate the knowledge, practices and dispositions that are valued in a curriculum. In Legitimation Code Theory (LCT), what is valued and legitimised in a social practice is referred to as the 'code' of that practice. Success in a formal higher education context is dependent upon students both recognising the code and realising it through production of appropriate texts. Using two codes identified in an earlier study as a framework, this empirical case study examines the way in which the curriculum in general, and assessment practices in particular, signal what is required in a higher education science foundation course. Curriculum congruence within each of the codes is examined using data from course document analysis and observations of pedagogic interactions. Results indicate good congruence in the science-related knowledge code that is associated with students becoming and being knowledgeable scientists, but less so in the academic practices-related knower code that is associated with students becoming and being autonomous learners. Challenges associated with enabling the development of practices as well as dispositions and behaviours associated with learner autonomy are discussed, with strategic use of assessment practices, reflective exercises and diagnostic approaches being proposed as a means of guiding student learning.

Keywords: curriculum congruence, Legitimation Code Theory, learner autonomy, science access

Introduction

Success in formal higher education contexts is dependent upon students both recognising what is valued as well as realising this through producing the appropriate 'text' that is required by that context (Bernstein 2000). This 'text' may be as simple as participating actively in a tutorial setting or as complex as writing a well-argued essay based on multiple sources in an exam. Signalling to students what is required is based on a multifaceted set of processes that usually starts with articulation of aims and objectives of a course, these are supported through a range of learning activities, and culminate in, or are reinforced further by, a set of assessment practices. Biggs (2002) claims that student learning is enhanced if these components (learning objectives, learning activities and assessment practices) are well aligned. However, Biggs (ibid.) and others (Boud 1995; Gibbs 1999) also assert that whilst course aims and objecttives and learning activities obviously influence student engagement to some degree, students tend to pay close attention to assessment practices, particularly high-stakes ones, resulting in these practices being a primary driver of learning.

Expectations associated with assessment can be transmitted to students through three main practices: cognitive level of the task as well as provision and use of both evaluation criteria and feedback (Shalem & Slonimsky 2010: 762). Each practice in turn has the potential to influence student learning. In terms of cognitive level, lower-order tasks requiring recall and basic comprehension are likely to encourage rote and surface understanding, whilst higherorder questions necessitating application, analysis, evaluation or creation have the potential to shift students towards developing deeper understanding (Biggs 2003). In terms of evaluation criteria, several authors show that making criteria transparent and explicit can lead students to both recognise and realise what is required in the assessment context (O'Donovan, Price & Rust 2001; Price, Rust & O'Donovan 2003; Rust, Price & O'Donovan 2003). However, studies indicate that poor engagement with criteria or differential understanding of criteria (Rust, Price & O'Donovan 2003; Woolf 2004) may result in poor text realisation. Likewise, the importance of feedback in terms of enabling access is emphasised repeatedly in educational research (see Hattie & Timperley 2007 review). Developmental feedback with a formative function, as opposed to evaluative feedback with a summative function, is particularly useful in this regard (Price et al. 2010). However, again research shows that various considerations such as lack of student engagement (Duncan 2007; McCann &

Saunders 2009), poor guidance in use of feedback (Weaver 2006), inappropriate feedback (Carless 2006; Poulos & Mahoney 2008) and poor quality in feedback (Higgins, Hartley & Skelton 2002; Weaver 2006) may also hinder production of appropriate texts.

Collectively, the articulated objectives, learning activities and assessment practices indicate the knowledge, values and dispositions required by a curriculum. These have strong disciplinary or field links and can be conceptualised as the 'code' that underpins, and is being legitimised by, the curriculum. According to Legitimation Code Theory (LCT), the 'legitimation code' is thus the currency used or proposed by actors (in this case lecturers) to define the practice (Maton 2014:24). Whilst disciplines in the sciences tend to have a stronger focus on disciplinary knowledge, and are therefore usually considered to have 'knowledge' codes, disciplines in the humanities often place more value on student attributes and dispositions, signifying legitimation of a 'knower' code (Maton 2014:24). However, in a recent study on legitimation codes in a higher education science foundation course, it was clear that attaining access to the specialised science-related knowledge code required students to attain access to what was termed an academic practices¹related knower code through becoming and being particular kinds of science learners - which proved to be challenging for many (Ellery 2018). The aim of this follow-up paper is to investigate the ways in which these two codes are made visible through the curriculum components of learning objectives, learning activities and assessment practices in this science foundation course, and examine how well these components align in order to support student learning and enable access for success. This paper therefore draws conceptually on the notion of curriculum alignment or congruence as well as on knowledge, knowers and underpinning codes of LCT, which are outlined in the following section.

Conceptual Framework

Curriculum Congruence

Biggs (1996; 2003) developed the concept of constructive alignment to enable

_

¹ The term 'academic practices' is used in this study to invoke social practices underpinned by values, rather than the term 'study skills' which tends to engender the idea of neutral practices which can be learned generically.

better coherence in curricula. The 'constructive' component relates to how students construct meaning, and the 'alignment' component relates to alignment of course outcomes, learning activities and assessment practices (Biggs 2003:27). Whilst the concept has been used widely in teaching and learning literature (see Kandlbinder & Peseta 2009), there has been some criticism of its efficacy. In their critique, Jervis and Jervis (2005:9) point to a conflict in theoretical stance between the constructivist approach to student learning and what they term a behaviourist pedagogy as articulated in the learning outcomes that require students to 'enact verbs of understanding'. They also comment on the poor accommodation of broader transdisciplinary knowledge in learning outcomes of most curricula. Albeit from slightly different perspective, similar points are made by other authors when they speak of poor accommodation in the concept of students 'ways of thinking and practicing' (McCune & Hounsell 2005) or of students' knower dispositions and values (Millar & Bester 2008; Clarence 2016). Nonetheless, most authors recognise the value in Biggs' approach in terms of probing closely aspects of coherence in the curriculum. In this study I therefore draw instead on the notion of 'curriculum congruence', as proposed by McCune and Hounsell (2005), which obviates the invocation of any particular learning theory and also suggests less of a 'linear' approach to any curriculum. This study assumes that learning takes place in social ways through participation in a knowledge community with its dispositions and values, and instead of using outcomes as the driving process for congruence, as proposed by Biggs (2003), it instead uses the underpinning curriculum 'codes' from LCT.

Legitimation Code Theory

LCT is an analytical and conceptual framework that allows us to understand social practice (Maton 2014). It is based on the assumption that any practice is influenced by a number of underpinning principles that legitimate the practice. These principles are the legitimation codes, or 'rules of the game' of that practice as determined by the primary actors of the practice (Maton 2014). In this paper the science foundation curriculum (including pedagogy and assessment) is the practice and the lecturers are the primary actors.

LCT employs a number of dimensions to help unpack any practice, but this paper uses only that of Specialisation – which considers what is 'special' in a practice. It is based on the assumption that every social/educational practice is oriented towards something (knowledge) and by someone (knower) (Maton 2014:29). This allows for analytical distinction between epistemic relations (ER); between practices and their object (in other words, what can legitimately be claimed as knowledge) and social relations (SR) between practices and their subjects (in other words, who can claim to be a legitimate knower; ibid.). The epistemic and social relations in any practice can be weaker (ER- or SR-) or stronger (ER+ or SR+), and therefore can be represented on a two-dimensional plane as indicated in Figure 1. By examining the epistemic and social relations in a practice, we can establish whether and to what extent such relations are legitimated and plot them on the plane (Maton 2014). For example, an educational practice such as a chemistry curriculum typically legitimates chemistry knowledge and practices (i.e. has stronger epistemic relations; ER+) and does not value the opinion or stance of the learner (i.e. has weaker social relations; SR-) and would therefore be located in the upper left quadrant of Figure 1. Such a curriculum would have a knowledge code, which is considered relatively common code in science disciplines (see Chemwor 2017; Maton 2014; Howard & Maton 2011). In contrast, whilst a drama curriculum may require an expressive, networked, collaborative knower (i.e. stronger legitimation of social relations; SR+), the craft knowledge of acting may be somewhat less important for success (i.e. has weaker epistemic relations; ER-). Such a curriculum would be located in a bottom right quadrant and have a knower code, which is a relatively common code in the humanities and social sciences (see Clarence 2014; Luckett & Hunma 2014; Maton 2010). It has been argued that music curricula often legitimate strongly both musical knowledge (stronger epistemic relations; ER+) as well as having a musical 'feel' or disposition (stronger social relations; SR+) and would likely be placed in the upper right quadrant with an elite code (Lamont & Maton 2008). It is quite difficult to imagine a higher education curriculum with a relativist code where neither knowledge nor knowers are legitimated (i.e. ER-/SR-).

Any educational practice will legitimate to some degree both epistemic and social relations (or knowledge and knowers) but it is the primary focus that gives rise to the code. Whatever code is legitimated, there needs to be coherence between curriculum, pedagogy and assessment, otherwise there may be a code clash. This may happen when curriculum or pedagogy can legitimate a particular code, but the assessment requires something different. For example, the code in a tutorial interaction that requires students to express their everyday understanding and opinion on why some plants grow well in dry

conditions, would be different from an assessment task code that requires good botanic knowledge outlining specific adaptations.

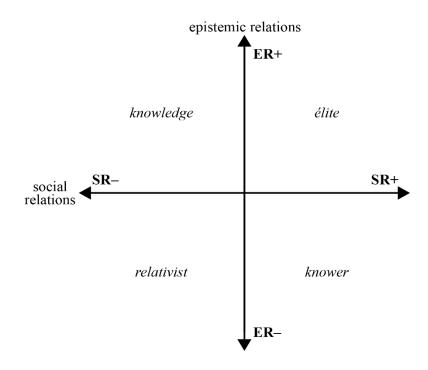


Figure 1: The specialisation plane: Four specialisation codes (knowledge, elite, knower and relativist) based on relative strengths of epistemic and social relations (source Maton 2016: 12).

An in-depth account of a multidisciplinary, science, higher education foundation course by Ellery (2018) showed that the curriculum is structured in such a way that two different codes are legitimated. The first is a *science-related knowledge code* which is enacted by a strong focus on disciplinary knowledge and practices such as identifying rocks in geology or performing an accurate titration in chemistry (representing stronger epistemic relations; ER+) and little regard is given to student opinions or values (representing weaker

social relations; SR-). Also included in this code is scientific literacies knowledge and practices which focus on stronger epistemic relations linked to how science knowledge is constructed (observation, measurement, experimentation) and the basis on which knowledge claims can be made (use of empirical evidence, recognising uncertainty in science; which represent stronger epistemic relations; ER+). Whilst students are expected to develop dispositions and values associated with becoming and being scientific knowers (amongst other things, being rigorous, accurate, honest, objective, logical, analytical, critical), which would appear to represent stronger social relations, the assessment criteria are always linked directly to the epistemic relations, resulting in the social relations having a weaker categorisation (SR-). In LCT terms, stronger or weaker categorisations are founded on the basis upon which success is achieved in a practice rather than on the often more apparent focus (Maton 2014:31). For example, attributes of honesty and objectivity may be part of the focus when students conduct an experiment, but success is rather based on the scientific outcomes and the claims they make in their final report, resulting in an ER+/SR- categorisation.

The second is an academic practices-related knower code in which the focus is on students becoming autonomous and independent science learners. In this code knower attributes and dispositions are valued such that students are reflective and engaged in studies, work independently but seek assistance when required, are willing to engage, participate actively and develop metacognitive awareness, representing stronger social relations (SR+). The knowledge required by this code is a practical knowledge of a non-specialised nature, such as how to access information, take notes, and review lectures, and therefore represents weaker epistemic relations (ER-). The overall finding of the Ellery (2018) study is that student access to the science-related knowledge code is constrained by poor uptake of the academic practices-related knower code. This paper is an extension of the Ellery (2018) study in that it uses these codes as an overall framework in which to examine curriculum congruence in the same course, to better understand enabling and constraining conditions to student access for success.

Study Context

As part of a year-long science foundation programme, Introduction Science Concepts and Methods (ISCM) is a foundation course at a research-intensive

university in South Africa that is designed for students whose social, economic and educational background may not have prepared them well for the rigours of higher education studies. The primary purpose of the course is to enable epistemological access such that students can be successful in their later mainstream science studies. As such, the focus of the course is threefold; developing conceptual understanding in four selected disciplines of physics, chemistry, earth sciences (geology) and life sciences (human kinetics and ergonomics - HKE), developing knowledge and dispositions related to becoming rigorous and critical scientists, and becoming and being autonomous learners able to develop depth understanding (Science Extended Studies Programme Review Report 2011). Specialists from their respective disciplines teach in formal lectures (two per week) and practical sessions (one per week). This disciplinary work, as well as aspects of learning in higher education, is supported by a 'scientific literacies' facilitator (myself, with a science background) and a 'language and literacies in the sciences' facilitator (a colleague with a language background) in less formal tutorial sessions (eight per week).

Assessment tasks are integral to the academic project in ISCM. The final November exam is the only assessment task in which there is no opportunity to learn from feedback and reflective processes. The four major assignments, which include an essay, a major laboratory report, an independent research project, and an abstract/summary assignment, all have draft phases that utilise appropriate criteria, in which there are structured opportunities for formative lecturer-, peer-, or self-evaluation. The six class tests, two examinations and four assignments are high-stakes and make up 80% of the final mark, and the other 20% comes from weekly low-stakes tasks completed in tutorial sessions.

Methodology

This is an empirical case study of a single science foundation course called Introduction to Science Concepts and Methods (ISCM). The primary source of data was course-related documents for a single year of teaching. These included semester outlines, course handouts (lecture, tutorial and practical sessions), resource materials (including chapters of books, journal and popular articles, YouTube videos), assessment tasks (tutorials, tests, exams and assignments), and written feedback on student work. These data enabled

identification and classification of the curriculum into categories of learning objectives (overall course objectives and specific task objectives), pedagogic activities (relating to lectures, tutorials and practical sessions), and assessment practices (relating to assessment task questions, evaluative criteria used in assessment, and feedback given to students), as well as recognition of congruence between these components. This analysis was conducted for each of the two previously-mentioned legitimation codes: if the purpose of an activity related to enabling student becoming better learners, it was placed in the academic practices-related knower code category, and if the purpose was to develop science understanding, it was categorised as a science-related knowledge code activity.

These data were supported by observations of learning activities. In order to support my role as a scientific literacies facilitator, I attend all lectures and practical sessions and some tutorials taught by colleagues, in which I make informal observations on both course content and learning interactions. Whilst observations for this study were not specifically focusing on knowledge or knower codes at the time, they were sufficiently detailed to provide additional data for ISCM learning activities, according to the two codes, beyond that which existed in the documents.

Whilst capitalising on the advantages of being an insider researcher, such as having easy access to documents and interactions as well as legitimacy amongst participants (Chavez 2008), I was acutely aware of attendant challenges. To partly obviate the overlapping roles of teacher, colleague and researcher, all data was generated whilst I was on sabbatical leave. In an attempt to prevent the context from being normalised due to my familiarity with it (Chavez 2008), I tried to be deeply and critically reflective. Furthermore, to ensure reliability and validity I consulted regularly with colleagues on my data analysis and interpretation, as is suggested for qualitative research (Maxwell 2012).

Results

No attempt was made to quantify data. Generally, there was ample documentary and observational evidence for the science-related knowledge code in all six curriculum categories of course learning objective, task objectives, learning activities, assessment task questions, criteria and feedback

(Table 1, column 1), as all lectures and practical sessions, and some tutorials, focus on this code. In the remaining tutorials the focus is on developing academic practices-related knowers. Documentary evidence indicates that support for the latter code occurs primarily in the first semester, with a reduced emphasis in the second semester.

In terms of the science-related knowledge code, broad disciplinary learning objectives, such as students being able to 'know, understand and apply scientific knowledge in different disciplines' are detailed in the course outline, and specific disciplinary practices and knowledge, such as balancing chemical equations, explaining the physical state of the earth's crust at different depths (geology), or determining the influence of gender on joint range of motion (HKE), are stated in learning activity documents and are addressed in class (Table 1). Likewise, broad scientific literacies learning objectives are articulated in the course outline and include knowing how scientific knowledge is constructed, communicating effectively, collecting and analysing data, and thinking critically in the sciences (Table 1). Specific objectives are also indicated for each scientific literacies learning activity. For example, an activity that focuses on aspects of scientific writing therefore articulates the objective clearly (students need to be able to recognise and describe the difference between every day and scientific writing) as well as has an appropriate associated task (students compare a popular and a scientific article on use of indigenous plants for medicinal purposes in order to identify characteristics of scientific text: Table 1).

In terms of assessment, both disciplinary and scientific literacies task questions are common in the ISCM curriculum (Table 1). These range from lower-order cognitive level questions (define, state, describe, list), but there are also mid-order questions (explain, identify, illustrate) as well as higher-order questions (argue, evaluate, analyse, predict, develop) in both low and high-stakes assessment tasks. Likewise, in terms of criteria and feedback, both disciplinary and literacies aspects of the codes are well supported. Criteria are provided in advance for high-stakes assignments (essays and reports) and are explicitly addressed in the feedback of high-stakes tests, or in preparation for such tests. Whilst written criteria are not always provided for the numerous low-stakes tasks in the weekly tutorials, these are often verbalised during the learning activity. Feedback is comprehensive in this code, either individualised or in a group context, or in 'model' answers when specific (for example, calculated) answers are required.

Table 1: Examples of empirical evidence for overall and specific learning objectives, learning activities, assessment tasks, assessment criteria and feedback for the two specialisation codes identified for ISCM

| | Science-related knowledge code (ER+/SR-) | ledge code (ER+/SR-) | Academic practices-related knower code (ER-/SR+) |
|------------|--|--|--|
| | Disciplinary aspects | Scientific literacies aspects | |
| Overall | Course outline | Course outline | Course outline |
| learning | Course purpose is to (a) | Course purpose is to (a) | Course purpose is to (b) prepare |
| savinasion | (practices) required by first year students in a science degree. | introduce concepts and sams (practices) required by first year students in a science degree. | Students should be able to: |
| | Students should be able to: | Students should be able to: | Cope well at university (manage |
| | • Know, understand and apply | Know how scientific | time, take notes, learn effectively for understanding, work |
| | scientific knowledges in | knowledge is constructed | independently, adapt to new |
| | different disciplines | Know the basis for making claims | situations) I ocate and use different conroes |
| | | Communicate effectively in | of information appropriately |
| | | different modes and genres | |
| | | Collect, analyse and present | |
| | | numerical and other scientific | |
| | | information | |
| | | Think and argue critically in | |
| | | science | |
| | | | |

| Specific task learning | Chemistry tutorial 4: Limiting reagents | Scientific literacies tutorial 3: Scientific writing | No documents with stated learning objectives |
|---------------------------|--|--|---|
| camadaa | By the end of the tutorial students should be able to: | By the end of the tutorial students should be able to: | |
| | Balance chemical equations Identify a limiting reagent Explain the concept of a limiting reagent | Recognise and describe the differences between everyday and scientific writing | |
| | | Scientific literacies tutorial 14: Scientific report writing | |
| | | By the end of the tutorial students should be able to: | |
| | | Identify the purpose of each section of a research report | |
| | | | |

| Learning | Chemistry lectures 3-8 | Scientific literacies tutorial 3: | Academic practices tutorial 4: |
|------------|---|------------------------------------|---------------------------------|
| activities | | Scientific writing | Note-taking |
| | Focus is on understanding | | |
| | concepts: the mole, chemical | Focus is on reading carefully | Focus is on taking sufficiently |
| | equations and stoichiometry, | two articles on the use of | detailed notes to learn from |
| | limiting reagents, chemical | indigenous plants for medicinal | |
| | equilibrium | purposes and unpacking the | Academic practices tutorial 1: |
| | | aspects of writing that identify | Consolidation of a lecture |
| | Chemistry practicals 3 and 4 | them either as popular or | |
| | | scientific writing. | Focus is on developing |
| | Focus is on performing | | understanding both the content |
| | titrations to determine | Scientific literacies tutorial 14: | detail and the 'big picture' by |
| | concentrations | Scientific report writing | modelling practices to be done |
| | | | independently in the future |
| | Chemistry tutorial 3: | Focus is on reading each section | |
| | Chemical equations and | of a laboratory report and | |
| | stoichiometry | identifying what is the main | |
| | | purpose of each. Stating how | |
| | Focus is on: | this purpose is achieved. | |
| | Balancing chemical equation Calculating grams or moles of substances Calculating Molarity | | |
| | 6 | | |

| Online reflective journal on feedback, term 4 | Discuss what you do when you receive feedback Reflect on how you may use feedback better Reflection after a fest, term 2 The questions I answered well/poorly were: Which lectures/ practicals/ tutorials covered this: This is how I prepared for these questions: This is what I could do to improve my preparation: |
|--|---|
| Scientific literacies poster assignment | Produce a scientific poster from your independent research project in which you demonstrate the effect of an environmental factor on plant growth. [100 marks] |
| Chemistry practice test question | Limiting reagents: (a) Describe the concept of a limiting reagent. Explain why the concept can be used in soap making. (6) (b) Note the balanced chemical equation and answer the following questions: 2 KMnO ₄ + 16 HCl → 2 KCl + 2 MnCl ₂ + 8 H ₂ O + 5 Cl ₂ If a reaction mixture contains 20g of KMnO ₄ and 10g of HCL, which is the limiting reactant in this reaction? Provide an explanation for your answer. (8) |
| Assessment task | questions |

| Criteria | Chemistry practice test | Scientific literacies poster | No written criteria provided |
|----------|------------------------------------|---|-------------------------------|
| | question criteria | assignment | (Formative assessment with no |
| | , | | marks allocated) |
| | In order to answer the question | Stated criteria for 'Discussion' | |
| | effectively, we will be looking | section [20/100 marks] | |
| | tor the following: | | |
| | | Clear and accurate | |
| | (a) First say what is a limiting | explanation of results | |
| | reagent in a general sense (2 | Link ideas back to literature | |
| | marks). Then talk specifically | Conclusion accurate and | |
| | about soap making - referring to | links to hypothesis | |
| | the compound that needs to be | Recommendations for future | |
| | limiting and why this is | study | |
| | important in soap making (4 | | |
| | marks). | | |
| | (b) This is a standard calculation | | |
| | you have been practicing in | | |
| | tutorials. You will be marked on | | |
| | showing all your working - | | |
| | including units (6 marks). | | |
| | The explanation at the end | | |
| | should refer specially to the | | |
| | calculations you did, and the | | |
| | reason for stating which was the | | |
| | limiting reagent (2 marks) | | |
| | | | |

| Feedback | Chemistry practice test question feedback (for individual student) | Scientific literacies poster assignment - written feedback on 'Discussion' section on | Dialogic comments on online reflective journal on how a student responds to feedback |
|----------|--|---|--|
| | | poster | |
| | Don't refer to soap in the first | ; | you have touched on several |
| | part of the question (it is a | You have repeated the | important issues regarding |
| | general question). (1) | description of results from the | feedback: firstly well done on |
| | | results section, and not given an | noting that feedback acknowledges |
| | You needed to provide a reason | explanation. You need to say | both your strengths and |
| | for the concept being important | WHY the plants with dung grew | weaknesses. You would be |
| | (because NaOH is corrosive - | better. Also, how does this link | surprised at how many students |
| | not a good thing in soap!) (2) | with what was said in the | miss that point! Secondly, I like the |
| | | literature? Furthermore, you | way you exchange papers with a |
| | Calculations and explanation | need to make clear the links | fellow student. In so doing you are |
| | excellent - well done. Don't | with the hypothesis (i.e. did the | actually exploring the power of |
| | forget to show units all the way | results support the hypothesis). | peer education. (Do you think it |
| | though the calculation. (7) | Your recommendations were | would be helpful if you practice |
| | | good. [8/20 marks] | giving feedback to each other |
| | | | before you hand in the |
| | | | assignment?) Finally you act on the |
| | | | feedback in your next assignment. |
| | | | |

Whilst only a small sample of evidence has been presented in Table 1, the overriding trend in data for the science-related knowledge code was good congruence between the different curriculum components. However, in the academic practices-related code there were some obvious gaps in the data, indicating poorer congruence.

The academic practices-related knower code is supported at the broader level where the course learning objectives state that since ISCM is preparing students for success in mainstream they need to be able to manage time, takes notes, learn effectively and independently, locate information, and adapt to new situations (Table 1). These learning objectives are addressed actively in tutorials that focus on, amongst other things, note-taking, modelling lecture consolidation and review, reflecting on feedback to help improve learning. Observational evidence indicates that explicit verbal instruction and encouragement is given to students to engage in out-of-class activities such as preparatory reading, locating appropriate explanatory sources, developing deep understanding instead of rote learning, managing their time effectively, or bringing questions to class. However, the lack of accompanying handouts, with specified learning objectives for these activities, indicates a gap in congruence of this code (Table 1).

This incongruence is carried forward into the assessment practices for this code. In some tasks, such as enabling lecture consolidation and review in a follow-up tutorial, student's work is seldom assessed. When work is assessed, this is done formatively with no allocated marks (no-stakes assessment), nor are criteria provided (Table 1). The tasks that receive formative feedback are mainly those that prompt students to reflect on their progress, challenges they face, their approach to work at university, and how they respond to feedback, etc. The feedback students receive is of a conversational, affirmative and remindful nature, to encourage further appropriate engagement with the issues at hand.

Discussion

The ISCM foundation course aims to enable learning in higher education science. It legitimises two different codes: a science-related knowledge code that focuses on knowledge and practices of four distinct science disciplines, as well as of a more generalised scientific literacies, and an academic practices-related knower code that focuses on enabling effective learning practices for a

higher education science context. This study indicates that congruence between stated learning objectives, focussed learning activities and assessment tasks, the latter of which exhibit a range of cognitive level questions in both high-and low-stakes tasks with frequent use of evaluative criteria and formative feedback, provide support for the science-related knowledge code. However, the curriculum is less congruent in the academic practices-related knower code. Notable by their absence are learning activity handouts with stated specific learning objectives as well as criteria and marks associated with the assessment tasks. Furthermore, the main support for this code is in the first semester only. It is suggested that this curriculum incongruence, which gives rise to inappropriate signalling to students about what is valued in ISCM, could be contributing to the generally poor uptake of this code, as identified by Ellery (2018). The rest of this discussion focuses on challenges associated with supporting and enabling access to the academic practices-related knower code, which is about being a self-directed and independent learner.

ISCM, as a foundation course, is attempting to enable autonomy in learning such that students can be successful not only in ISCM but also later in their higher education mainstream studies where learning support is less likely to be available. The expectation in higher education is that students will engage in learner-directed strategies and practices that enable developing good understanding, being responsible for their own knowledge, studying independently, judging and monitoring their own progress, and responding actively and appropriately where needed. These expectations are very different from those at school where, particularly in the South African context, students are relatively passive with teachers directing many aspects of student learning and being ultimately responsible for students' knowledge and understanding (Pym & Kapp 2013; CHE Report 2013). This makes the transition to higher education particularly challenging as many students simply continue to draw on learning practices utilised over 12 years of schooling. Unfortunately, this is compounded by the fact that most higher education contexts simply assume that students already know that their role is to work autonomously (Railton & Watson 2005) and, consequently, there is little guidance in this regard. ISCM does not make this assumption, as evidenced by its overt articulation of learning outcomes and numerous associated learning activities that attempt to support better learning autonomy. However, the lack of congruence between these learning activities and follow-up assessment activities needs to be addressed. This assertion is based on the understanding that assessment

practices are one of the most important aspects of the curriculum that influence student behaviours and can be used as a stimulus for learning (Boud 1995; Gibbs 1999; Biggs 2002). In this regard, the no-stakes assessment tasks of the academic practices-related knower code work, with no obvious direct benefit to students, are likely to engender much poorer engagement than the high-stakes tasks associated with the science-related knowledge code.

Since academic practices-related activities such as consolidating a lecture or doing preparatory reading have the potential to improve students' performance in the science-related knowledge code in the long term, they tend to not be assessed directly in ISCM. Lemanski (2011:568) refers to this as 'non-assessed learning' as it is 'learning that will be indirectly rewarded in terminal summative assessment rather than directly awarded via continuous formative or summative assessment'. However, in Lemanski's study on exploring incentives for independent study, one of the primary reasons given by students for not completing weekly readings was the lack of assessment. Similarly, whilst ISCM students recognise and articulate well the indirect benefits of independence and self-responsibility, they find it hard to realise this in concrete action, which they too link mostly to lack of assessment incentives (Ellery 2016:188-190). It is therefore suggested here that strategic use of summative assessment tasks in ISCM may have the potential to incentivise and motivate for appropriate autonomous student engagement. It is acknowledged, however, that the relationship between assessment and autonomy in learning is not simple, particularly when taking into account both epistemic and social relations.

As outlined earlier, to become effective science learners students need to acquire not only certain practices and knowledge (representing weaker epistemic relations; ER–) but also certain knower dispositions (representing stronger social relations; SR+). Practices relating to learner autonomy, such as managing time, accessing information, preparing for all learning activities, taking notes, and consolidating and reviewing work, amongst others, are actively taught, modelled and scaffolded in ISCM classes, particularly in the first semester. Whilst work produced in these activities are currently not assessed, they certainly could be. Although initially such tasks may be completed for instrumental reasons of attaining marks, as suggested by Dobozy (2008) and Lemanski (2011), rather than for developing own understanding or self-responsibility, this approach of using marks as incentive may prove useful to initiate student engagement with appropriate learning practices. Additional

motivation can be engendered through developing more direct links between the academic practices work and the disciplinary or scientific literacies work. For example, if one of the desired outcomes and means of attaining marks in practicals is being able to complete complex and time-consuming tasks efficiently and timeously, students will likely learn to prepare well for such practicals, particularly if the link between level of preparation and marks attained is made overt. Likewise, allowing students to utilise one-page summary consolidation notes during regular mini-tests can motivate for more consistent follow-up and engagement with disciplinary lecture content than may otherwise have been the case.

Whilst practices associated with autonomy in learning can be actively taught and relatively easily assessed, the required dispositions are less easily judged as they are not achievements per se, but rather are personal attributes that contribute towards achievement. Barnett (2009:433) defines dispositions are 'those tendencies of human beings to engage in some way with the world around them' and include a will to learn and engage, a preparedness to listen, explore and hold oneself out to new experiences, and a determination to keep going forward. He contrasts this with qualities, which are 'manifestations of dispositions in the world' and form part of an individual's character (Barnett 2009: 433) and can include courage, resilience, carefulness, integrity, selfdiscipline, restraint, respect for others, openness, generosity, and authenticity. However, in LCT, Barnett's dispositions and qualities appear to be encapsulated into what LCT refers to as 'knower dispositions'. For example, Barnett's quality of 'self-discipline' would simply be referred to as a knower disposition of 'being self-disciplined'. In this regard ISCM, through its academic practices-related knower work, is attempting to engender knower dispositions of being independent, self-disciplined, engaged, critical, curious, reflective, responsible and motivated.

Whilst some authors advocate assessing learning dispositions (Carr & Claxton 2002; Deakin-Crick & Yu 2008), Sadler (2002:49) makes the argument that such dispositions are 'context-dependent, situational, uncertain, and volatile', and suggests that any attempt at assessing learning dispositions in a generalised way is somewhat meaningless. He also makes the point that each individual will negotiate different paths and means of becoming a new kind of learner, depending on their own background context and the goals that motivate their current studies. In other words, students need to find for themselves the relevance of what they are doing, consider ways that work best

for them to ensure success and, consequently, develop or draw on the dispositions necessary to achieve this. Whilst the argument being made here is that developing new knower dispositions is an individualised process that is unlikely to be driven by external forces such as assessment procedures, it is proposed that the curriculum can serve to make aware, guide and motivate for particular desired dispositions. In ISCM it is possible the use of reflective learning portfolios (Dyment & O'Connell 2011) or diagnostic self-evaluation tools (Deakin-Crick & Yu 2008) could be used in more structured ways to raise student awareness of their own learning dispositions and possibly promote behaviour change. However, it is acknowledged that many learning dispositions and behaviours are well-entrenched and changing them would be a long-term process that is unlikely to be achieved in a single, year-long foundation course.

Conclusion

Whilst this paper has focussed on a science foundation course in the South African context, I contend the findings have broader relevance. With current trends in massification and widening participation in the higher education sector as a whole, there is an increasing need to consider means of supporting student access and success. This applies particularly to students whose backgrounds have not necessarily prepared them well for success in the higher education context.

The main contribution of this paper is to use the well-developed concept of curriculum alignment or congruence in a new way using LCT, to reveal a social dimension to science learning that may not otherwise have emerged. It is argued that to signal effectively to students what is valued and expected, a curriculum needs close congruence between learning objectives, learning activities and assessment practices. However, as Clarence (2016:66) indicates, the alignment/congruence approach focuses largely on pedagogy and curriculum enactment and does not easily account for knowledge in the curriculum, nor the kinds of knowers students need to become. The complementary use in this paper of LCT, which recognises both knowledge and knowers, allowed for a more detailed and nuanced unpacking of a curriculum in two ways. Firstly, it provided an overall framework of two separate but distinct legitimation codes. From this it emerged that curriculum activities supporting the academic practices-related knower code were less

congruent than the practices in the science-related knowledge code. Secondly, recognition of both epistemic and social relations within a curriculum provided a means to consider knowledge and practices, which are easily assessed, separately from knower dispositions and behaviours, which are not. This resulted in the fine-grained proposal that formative and summative assessment of both a direct and indirect nature could be used to support practices that enable independent learning, and that reflective or diagnostic approaches could be used to raise awareness and engender appropriate knower disposition development.

Whilst disciplinary knowledge tends to form the main focus of most science and other disciplinary higher education courses, becoming and being an independent learner is usually expected of students but is seldom explicitly articulated nor specifically supported, and therefore remains part of the 'hidden' curriculum. However, there is evidence that if students do not become the right kind of learners they cannot easily assess the powerful² disciplinary knowledge (Case 2013; Wolff & Hoffman 2014; Ellery 2018). This paper therefore adds its voice to the increased calls for pedagogies that make overt and support these expectations if higher education is to become accessible to an increasingly diverse study body.

Acknowledgments

Professor Chrissie Boughey is sincerely thanked for her contribution to this work. The study was supported by funding from the National Research Foundation (Grant no: 92685) and Rhodes University.

References

Barnett, R. 2009. Knowing and Becoming in the Higher Education Curriculum. *Studies in Higher Education* 34,4: 429 - 440. https://doi.org/10.1080/03075070902771978

Bernstein, B. 2000. *Pedagogy, Symbolic Control, and Identity: Theory, Research, Critique.* Lanham: Rowman and Littlefield.

Biggs, J. 1996. Enhancing Teaching through Constructive Alignment. *Higher Education* 32,3: 347 - 364.

 $\underline{https://doi.org/10.1007/BF00138871}$

_

² Young and Muller (2013).

- Biggs, J. 2002. Aligning the Curriculum to Promote Good Learning. Paper presented at the Constructive Alignment in Action: Imaginative Curriculum Symposium, LTSN Generic Centre, November. Available at: http://www.qub.ac.uk.
 - (Accessed on 03 February 2018.)
- Biggs, J. 2003. *Teaching for Quality Learning at University*. 2nd Edition. Buckingham: SRHE and Open University Press.
- Boud, D. 1995. Assessment and Learning: Contradictory or Complementary? In Knight, P. (ed.): Assessment for Learning in Higher Education. London: Kogan Page.
- Carless, D. 2006. Differing Perceptions in the Feedback Process. *Studies in Higher Education* 31,2: 219 233. https://doi.org/10.1080/03075070600572132
- Carr, M. & G. Claxton 2002. Tracking the Development of Learning Dispositions. *Assessment in Education: Principles, Policy & Practice* 9,1: 9 37.
 - https://doi.org/10.1080/09695940220119148
- Case, J.M. 2013. Researching Student Learning in Higher Education: A Social Realist Approach. London: Routledge.
- Chavez, C. 2008. Conceptualizing from the Inside: Advantages, Complications, and Demands on Insider Positionality. *The Qualitative Report* 13,3: 474 494.
- CHE (Council on Higher Education) Report 2013. A Proposal for Undergraduate Curriculum Reform in South Africa: The Case for a Flexible Curriculum Structure. Pretoria: CHE.
- Chemwor, E.K. 2017. Knowledge and Knower Structures in Relation to Reproductive and Sexual Health in School Curricula of Kenya and South Africa. Unpublished Masters dissertation. Nelson Mandela University.
- Clarence, S. 2014. Enabling Cumulative Knowledge-building through Teaching: A Legitimation Code Theory Analysis of Pedagogic Practice in Law and Political Science. Unpublished doctoral dissertation. Rhodes University, Grahamstown.
- Clarence, S. 2016. Knowledge and Knowers in Teaching Learning: An Enhanced Approach to Curriculum Alignment. *Journal of Education* 66: 65 84.
- Deakin-Crick, R. & G. Yu 2008. Assessing Learning Dispositions: Is the Effective Lifelong Learning Inventory Valid and Reliable as a Measure-

- ment Tool? *Educational Research* 50,4: 387 402. https://doi.org/10.1080/00131880802499886
- Dobozy, E. 2008. The Use and Usefulness of Non-assessed Online Learning: Tracking Students' Behaviour on LAMS. In Cameron, L. & J. Dalziel (eds.): Proceedings of the 3rd International LAMS & Learning Design Conference 2008. Perspectives on Learning Design, 5 December 2008. Sydney: LAMS Foundation. Available at: http://lams2008sydney.lamsfoundation.org/papers.htm. (Accessed on 10
 - http://lams2008sydney.lamsfoundation.org/papers.htm. (Accessed on 10 March 2018.)
- Duncan, N. 2007. 'Feed-Forward': Improving Students' Use of Tutors' Comments. *Assessment & Evaluation in Higher Education* 32,3: 271 283. https://doi.org/10.1080/02602930600896498
- Dyment, J.E. & T.S. O'Connell 2011. Assessing the Quality of Reflection in Student Journals: A Review of the Research. *Teaching in Higher Education* 16,1: 81 97. https://doi.org/10.1080/13562517.2010.507308
- Ellery, K. 2016. *Epistemological Access in a Science Foundation Course: A Social Realist Perspective*. Unpublished Doctoral Dissertation. Rhodes University.
- Ellery, K. 2017. A Code Theory Perspective on Science Access: Clashes and Conflicts. *South African Journal of Higher Education* 31,3: 82 98. https://doi.org/10.20853/31-3-1306
- Ellery, K. (forthcoming). Widening Access in Science: Developing both Knowledge and Knowers. In Maton, K. & Y. Doran (eds.): *Studying Science*. Forthcoming.
- Gibbs, G. 1999. Using Assessment Strategically to Change the Way Students Learn. In Brown, S. & A. Glasner (eds.): *Assessment Matters in Higher Education*. Buckingham: SRHE and Open University Press.
- Hattie, J. & H. Timperley 2007. The Power of Feedback. *Review of Educational Research* 77,1: 81 112. https://doi.org/10.3102/003465430298487
- Higgins, R., P. Hartley & A. Skelton 2002. The Conscientious Consumer: Reconsidering the Role of Assessment Feedback in Student Learning. *Studies in Higher Education* 27,1: 53 64. https://doi.org/10.1080/03075070120099368
- Howard, S. & K. Maton 2011. Theorising Knowledge Practices: A Missing Piece of the Educational Technology Puzzle. *Research in Learning*

- Technology 19,3: 191 206.
- https://doi.org/10.1080/21567069.2011.624170
- Jervis, L.M. & L. Jervis 2005. What is the Constructivism in Constructive Alignment? *Bioscience Education* 6,1: 1 14. https://doi.org/10.3108/beej.2005.06000006
- Kandlbinder, P. & T. Peseta 2009. Key Concepts in Postgraduate Certificates in Higher Education Teaching and Learning in Australasia and the United Kingdom. *International Journal for Academic Development* 14,1: 19 31. https://doi.org/10.1080/13601440802659247
- Lamont, A. & K. Maton 2008. Choosing Music: Exploratory Studies into the Low Uptake of Music GCSE. *British Journal of Music Education* 25,3: 267 282.
 - https://doi.org/10.1017/S0265051708008103
- Lemanski, C. 2011. Access and Assessment? Incentives for Independent Study. *Assessment & Evaluation in Higher Education* 36,5: 565 581. https://doi.org/10.1080/02602930903541031
- Luckett, K. & A, Hunma 2014. Making Gazes Explicit: Facilitating Epistemic Access in the Humanities. *Higher Education* 67: 183 198. https://doi.org/10.1007/s10734-013-9651-7
- Maton, K. 2010. Progress and Canons in the Arts and Humanities: Knowers and Gazes. In Maton, K. & R. Moore (eds.): *Social Realism, Knowledge and the Sociology of Education*. London: Continuum.
- Maton, K. 2014. *Knowledge and Knowers: Towards a Realist Sociology of Education*. New York: Routledge. https://doi.org/10.4324/9780203885734
- Maton, K. 2016. Legitimation Code Theory: Building Knowledge about Knowledge-building. In Maton, K., S. Hood & S. Shay (eds.): *Knowledge-building: Educational Studies in Legitimation Code Theory*. London: Routledge.
- Maxwell, J.A. 2012. *Qualitative Research Design: An Interactive Approach.* 3rd Edition. London: Sage Publications.
- McCann, L. & G. Saunders 2009. Exploring Student Perceptions of Assessment Feedback. York: The Higher Education Academy, Social Policy and Social Work (SWAP Report). Available at:

 http://oprints.lineals.co.uk/1832/1/SWAP. Assessment Feedback address.
 - http://eprints.lincoln.ac.uk/1832/1/SWAP_Assessment_Feedback.pdf (Accessed on 10 March 2018.)
- McCune, V. & D. Hounsell. 2005. The Development of Students' Ways of

Thinking and Practising in Three Final-year Biology Courses. *Higher Education* 49: 255 - 289.

https://doi.org/10.1007/s10734-004-6666-0

Millar, B. & M. Bester 2008. Moving beyond Constructive Alignment to Significant Learning. Paper presented at Higher Education Teaching & Learning in Southern Africa (HELTASA) Conference, Grahamstown, November 30 - December 3. Available at:

http://www.academia.edu/9026156/Moving_beyond_constructive_align_ment_to_significant_learning.

(Accessed on 10 March 2018.)

O'Donovan, B., M. Price & C. Rust 2001. The Student Experience of Criterion-referenced Assessment through the Use of a Common Criteria Assessment Grid. *Innovations in Education and Teaching International* 38,1: 74 - 85.

https://doi.org/10.1080/147032901300002873

Poulos, A., & M.J. Mahoney 2008. Effectiveness of Feedback: The Students' Perspective. *Assessment & Evaluation in Higher Education* 33,2: 143 - 154.

https://doi.org/10.1080/02602930601127869

Price, M., C. Rust & B. O'Donovan 2003. Improving Students' Learning by Developing their Understanding of Assessment Criteria and Processes. *Assessment & Evaluation in Higher Education* 28,2: 147 - 164. https://doi.org/10.1080/02602930301671

Price, M., K. Handley, J. Millar & B. O'Donovan 2010. Feedback: All that Effort, but What is the Effect? *Assessment & Evaluation in Higher Education* 35,3: 277 - 289.

https://doi.org/10.1080/02602930903541007

- Pym, J. & R. Kapp. 2013. Harnessing Agency: Towards a Learning Model for Undergraduate Students. *Studies in Higher Education* 38,2: 272 284. https://doi.org/10.1080/03075079.2011.582096
- Railton, D. & P. Watson 2005. Teaching Autonomy: 'Reading Groups' and the Development of Autonomous Learning Practices. Active Learning in Higher Education 6,3: 182 - 193. https://doi.org/10.1177/1469787405057665

Rust, C., M. Price & B. O'Donovan. 2003. Improving Students' Learning by Developing their Understanding of Assessment Criteria and Processes. *Assessment & Evaluation in Higher Education* 28,2: 147 - 164.

- Sadler, R.D. 2002. Learning Dispositions: Can we Really Assess them? Assessment in Education: Principles, Policy & Practice 9,1: 45 - 51. https://doi.org/10.1080/09695940220119166
- Science Extended Studies Programme Review Report 2011. Curriculum Review: Science Extended Studies Programme, Rhodes University. Unpublished report, Rhodes University, Grahamstown.
- Shalem, Y. & L. Slonimsky 2010. Seeing Epistemic Order: Construction and Transmission of Evaluative Criteria. *British Journal of Sociology of Education* 31,6: 755 778.
 - https://doi.org/10.1080/01425692.2010.515106
- Weaver, M.R. 2006. Do Students Value Feedback? Student Perceptions of Tutors' Written Responses. *Assessment & Evaluation in Higher Education* 31,3: 379 394.
 - https://doi.org/10.1080/02602930500353061
- Wolff, K. & F. Hoffman 2014. 'Knowledge and Knowers' in Engineering Assessment. *Critical Studies in Teaching and Learning* 2,1: 74 95.
- Woolf, H. 2004. Assessment Criteria: Reflections on Current Practices. *Assessment & Evaluation in Higher Education* 29,4: 479 493. https://doi.org/10.1080/02602930310001689046
- Young, M. & J. Muller 2013. On the Powers of Powerful Knowledge. *Review of Education* 1,3: 229 250.

https://doi.org/10.1002/rev3.3017

Karen Ellery
Science Extended Studies Programme
Centre for Higher Education Research, Teaching and Learning
Rhodes University
Grahamstown
k.ellery@ru.ac.za

What is a Gospel? Reflections on Developing an Integrated Literacy Lesson Cycle in a First Year Tertiary Module Using Legitimation Code Theory

Billy Meyer

Abstract

Basil Bernstein dedicated his work to finding solutions to problems in education, applying a series of concepts and toolkits to open up the structures of meaning and knowledge building (Moore 2013). In this same spirit, this paper is focussed on a key problem in South African tertiary education: how to develop an integrated, self-reflexive literacy pedagogy within an introductory first year module at a South African university. In the module Introduction to The New Testament, my aim was to simultaneously develop accurate reading of and writing about a relevant academic text alongside beginning to provide access to the language and terminology of the tertiary level discipline of Biblical Studies. The paper reports on one lesson cycle in this module which follows the pedagogic methodology of Reading to Learn (Rose 2007; 2011). The toolkits for analysis include Legitimation Code Theory (Maton 2014), particularly epistemic semantic density and epistemological condensation (Maton & Doran 2017a; 2017b) side by side with the Power Trilogy (Martin 2103) developed by the Sydney School of Systemic Functional Linguistics. I hope that my use of a 'grammar' of theoretical categories from a community of practice such as Legitimation Code Theory will have the further advantage that my self-reflection is not expressed in isolation, or in terms that cannot be replicated.

Keywords: Social Realist theories, Maton, Legitimation Code Theory (Semantics), Systemic Functional Linguistics, Bernstein, David Rose, Reading to Learn, integrated literacy, epistemological access

Introduction and Context

Twenty years of education reform in South Africa has only been partially successful (cf. Draper & Spaull 2015) in addressing the needs of young South Africans to read academic texts with understanding and then to translate this understanding into clear, relevant academic writing, especially in English, and particularly at a tertiary level. I have worked in the tertiary sector for the same 20 years, first as an academic literacy lecturer and more latterly in my discipline of Biblical Studies. In this paper I am presenting my initial thinking from an ongoing Masters Research project, in which I am trying to build on the cumulated knowledge of these professional experiences. My aim in writing the paper is to try and give a theoretical and reflective account of how, as a discipline specialist and an academic literacy specialist, I am trying to follow the suggestions of work such as Boughey and McKenna (2016) and attempt to lay both the foundations of the discipline of Biblical Studies and of academic literacy within the same module.

This paper will set out my methodology for preparing a text and analyse the pedagogic activities within and the work products arising from one lesson cycle in the module Introduction to The New Testament. The framework section of the paper explains the pedagogic methodology of Reading to Learn (Rose 2007; 2011), as well as introducing toolkits for analysis from Legitimation Code Theory (LCT) (Maton 2014). The methodology section explains my innovation of using the pedagogic moves from Reading to Learn side by side with toolkits from LCT (Semantics), specifically epistemic semantic density and epistemological condensation (Maton & Doran 2017a; 2017b). These toolkits enable me to unpack wordings, grammatical structures and sequencing of ideas within the text for the students, so that they can understand it more accurately before paraphrasing it in their assignments. In the last sections of the paper, LCT (Semantics) is used to analyse my pedagogic activities for unpacking information from Ancient History, as well as ancient and modern methods of studying the Bible, to help students understand the reading and then produce an assignment which answers the question 'What is a Gospel?'

Conceptual Framework

The theoretical framework which undergirds my approach to this study is a social realist sociology of education, which foregrounds knowledge and knowledge practices. This is an approach to knowledge which acknowledges

the constructed nature of what we know but also that there are structures beyond mere interpretation and perception underlying ways of knowing that also affect knowledge in powerful ways (Moore & Muller 2002; Maton & Moore 2010; Moore 2012). The approach in this paper originates in the Code Theory of Basil Bernstein (1971) and arguably the most successful contemporary extension of Bernstein's work, which is Legitimation Code Theory (LCT) (cf. Maton 2005; 2014). Maton's claim is that LCT brings Bernstein together with the field theory of Bourdieu into a powerful new tool for the analysis of the structures and sociology of knowledge (Maton 2014). As a result Maton has developed LCT as an explanatory framework for analysing the organising principles of knowledge and knowledge practices along several dimensions (Maton 2014), two of which, Specialisation and Semantics, have now been extensively researched (Maton & Doran 2017a:50). In this paper I will focus on the dimension of Semantics. Semantics construes two codes, namely semantic density (SD) and semantic gravity (SG).

Semantic gravity makes visible the degree of context-dependence or abstraction of meaning and semantic density makes visible the degree of condensation and complexity of meaning (Maton 2014:129).

I also place particular focus on a further development of semantic density, which is epistemic semantic density (ESD) and epistemological condensation (EC) (Maton & Doran 2017a; 2017b). ESD and EC attempt to analyse how meaning in English is condensed, *firstly* into technical words; *secondly* through grammar which brings these words together into definitions, taxonomies and other complex relationships; and *thirdly* through organizing, connecting and compressing meaning between sentences and paragraphs. This condensation of meaning is one of the issues which makes reading and writing academic texts so difficult for novice readers in schools and universities.

In recognition of this fact, there have been a number of research projects based at the University of Sydney using LCT and Sydney School Systemic Functional Linguistics as complementary frameworks in the study of classroom discourses (Martin & Maton 2017:37-39). Key to these studies is the frequent mismatch between the recognition rules required to see what academic discourses structures entail and the realization rules which are the pedagogic practices which may be used to make these discourses visible and usable for students (Bernstein 1990). This mismatch results in segmental learning and the lack of transfer of 'academic skills' between disciplines in the school system. Maton puts this down to a,

mismatch between [teachers'] aims of enabling students to acquire a cultivated gaze and their means of minimal guidance and modelling that leaves many students unable to recognize or enact what is required for achievement and reliant on common sense (Maton 2014:107).

In other words, we teachers are better at teaching rules for how to see the world academically than at showing students how to follow them. As a result, there is a need for explicit and visible instruction. *Firstly*, on how to recognize the structures and rules of a piece of academic discourse, by unpacking the key technical concepts, showing how the text is put together grammatically, and how it is composed into a recognised structure. But also *secondly* students must be taught how to repackage and display this kind of academic knowledge in different wordings. Instead most often teachings or instructions about plagiarism for instance, are misidentified by the misleading label of 'writing in your own words' and this vagueness often leads to a partial grasp of academic buzz words which students parrot uncomprehendingly in their academic writing.

The impulse for explicit instruction in the recognition and realisation rules of reading and writing has led the Sydney School of Systemic Functional Linguistics to develop genre pedagogy (cf. Martin & Rose 2012; Rose 2015a; 2015b). This paper will focus on Reading to Learn, one of the developments of this pedagogic movement which began to develop methodologies by which teachers can explicitly instruct learners in reading and writing behaviours that realise the structures of the different genres commonly used in schools and universities in order for them to produce their own appropriately written academic texts.

In this article I will reflect on how this kind of explicit pedagogy can lead to what Maton (2013:12) calls a 'semantic wave', which is the alternation between complexity and simplicity or abstraction and concreteness in order to build deep knowledge. A 'wave' in semantic gravity can capture the movement of meaning between abstraction and concreteness coded by arrows 'tending' up or down (SG $\uparrow \downarrow$). So, the unpacking of abstract, context-independent theoretical language from a discipline such as Biblical Studies into everyday, context-dependent language in the classroom is explained as a strengthening of semantic gravity (SG \uparrow). The opposite trend to instruct learners how to repackage meaning as abstract or generalized language is explained as a weakening of semantic gravity (SG \downarrow) (Maton 2014: 110-111). Both of these

moves (as part of the 'wave') are equally important for building the deep knowledge necessary for successfully understanding and rewriting academic texts.

Whereas semantic gravity (SG) provides one continuum of the topology for describing and explaining meaning in social symbolic fields, semantic density (SD) provides the other. Here, a 'wave' describes the unpacking and repacking of the 'internal relations among ideas and external relations to referents (Maton 2014:128)'. So the move to condense knowledge into a dense network of concepts or symbols, in the manner of technical scientific discourse, is explained as strengthening semantic density (SD ↓), while the opposite move of unpacking or defining key terms into a simpler, limited range of more everyday meanings that stand alone from the larger semantic network is explained as weakening the semantic density (SG 1) (Maton 2014:129-130). Maton (2013:14 -15) particularly highlights how the well-executed use of semantic waves in the classroom bridges the gap between the high stakes reading of academic texts from a discipline and high stakes writing of legitimate texts that students must reproduce for their assessments. In addition, Maton's research shows how high achieving student writing carefully deploys semantic waves to move between exemplification and theorizing, expansion, elaboration and condensation (Maton 2013:18-19).

The development of the dimension of Semantics in LCT has in turn prompted refinements by Jim Martin (2013) in his SFL genre pedagogy. In the context of training secondary school teachers in the implications of the higher semantic density (Mcnaught, Maton, Martin & Matruglio 2013), Martin and his team looked for relatively simple, and user friendly names, for expressing condensation of meaning. Therefore, technical terms, for example the cultural and historical meaning condensed into the term Greco-Roman, were branded 'power words' (2013:25). In addition, the semantic density of the language resources that SFL terms grammatical metaphor, are highlighted for the teachers as 'power grammar' (Martin 2013:28). For example, this could include nominalization, in which verbs are repackaged as condensed noun groups. Finally, by combining knowledge of the stages of relevant genres with how texts highlight thematic material and introduce new information, these teachers are trained to model 'power composition' (Martin 2013:31-33). This Trilogy of new pedagogic tools, inspired by the interaction with LCT, is then combined with the earlier strategy of genre pedagogy, 'deconstruction, joint construction, and independent construction' into a powerful knowledge

building and literacy intervention for teachers in discipline classrooms. Here, texts are elaborated, and similar texts are workshopped in class time before a further version of the information in the text is set as an assignment (Mcnaught, Maton, Martin & Matruglio 2013: 54, 62).

With beginner academic writers in a South African university, I concluded that this Power Trilogy would be an accessible way to begin to unpack semantic density. This is especially true since I was struck by the possibility of a relationship between Martin's formulations and the development of epistemic semantic density (ESD), which explores the epistemological condensation (EC) of meaning in definitions and technical language. This aspect of LCT Semantics, which enacts semantic density for the specific use of analyzing meaning in English discourse (Maton & Doran 2017a: 58f.) analyzes the strength of power wordings from the common wordings in everyday language, through to specialist wordings from everyday speech, and culminating in the compact wordings in technical language. In addition, Maton and Doran (2017b: 82-88) analyze the strength of power grammar through their clausing tool. This has the potential to distinguish epistemological condensation (EC) through study of how words are related into powerful clusters of meanings. Finally, the sequencing tool has the potential to uncover power composition by analyzing how the sequence of ideas bring together, summarize and repeat meanings between and within paragraphs. Beginning on 'Wordings', and following through 'Clausing' and 'Sequencing', below, I will show how this theory could begin to work in practice with the data from the lesson cycle. These are in the form of tables, also called Translation Devices, which set out the different levels of power words, grammar and composition in terms of their epistemic semantic density and give examples of these different levels from the text which I am unpacking.

Finally, in this framework section of the paper, I will further elaborate the integrated literacy pedagogy called Reading to Learn. Although it has no formal links to LCT, Maton (2013:17; cf. also Yi 2011:10-11) has identified it as one of the successful pedagogies that sets out deliberately to trace semantic waves through a set of pedagogic moves in the classroom. Like other pedagogies under the Sydney School banner, Reading to Learn is focused on teaching learners to read and write common school genres successfully (Martin & Rose 2012:1; Rose 2015a:4, 2015b:3) and as such is concerned with the gap between high stakes reading and high stakes writing (Maton 2013:18-19). This pedagogy was developed in the context of the education of indigenous and

other marginalized students in Australia which, like the majority of peri-urban and rural schools in South Africa, fails learners in two crucial areas:

- First, schools fail to teach reading skills explicitly, disadvantaging
 those students who come from less literate homes. Both upper primary
 and secondary stages focus on curriculum content rather than explicit
 literacy teaching. So, students who have been well prepared in their
 homes are more likely to succeed from such teaching practices.
- Second, the current pattern of classroom interaction helps to maintain the inequalities among learners. In other words, more successful students are rewarded for their good answers to teachers' questions while the least successful students are left frustrated after their responses are repeatedly ignored, negated or even criticized (Yi 2011:1-2).

In response to this invisible and socially unjust pedagogy, David Rose developed scaffolded methodologies, or classroom genres, linked with the Teaching and Learning Cycle (Rothery 1994). In order 'to enable all students to continually succeed at learning tasks no matter their class, language or cultural backgrounds' (Rose 2015b:15-16). Reading to Learn,

.... Consists of three stages with each divided into two phases. It begins with the deconstruction phase of Preparing before Reading and Detailed Reading. Then at the Joint Construction stage, the teacher and students proceed to Sentence or Note Making and Joint Rewriting. The last stage is Independent Construction which covers the phases of Individual Rewriting and Independent Writing (Yi 2011:1-2).

Below I set out how I prepared to teach the module *Introduction to the New Testament* (BIST110) showing how I bring the above framework into a methodology for use in the classroom.

Methodology: Reading to Learn Enhanced by LCT Semantics The lesson cycles and my classroom practice use a modification of the Reading to Learn teaching method, which focuses on extracting information from an academic text and rewriting the information using a high stakes written mode of expression. The first phase of the cycle is deconstruction, or unpacking a relevant text with appropriate content for first level students. The aim is to look at how the meanings in the text are packaged through the author's choice of wording, grammar and composition using Martin's 'Power Trilogy' (2013) to highlight,

the semantic power of technical terms as 'power words', the knowledge construing power of grammatical metaphor as 'power grammar', and the crafting and organization of whole texts as 'power composition' (Macnaught, Maton, Martin and Matruglio 2013: 51).

In my adaptation I conceived *power words* as identifying condensed technical words I needed to elaborate; *power grammar* as identifying means to talk about the kinds of condensed academic expression used in academic texts and modelling how to use it in writing in their own writing; and *power composition* as identifying the tools by which the texts were put together and modelling how students could also use the tools for coherent writing. This responds to what Macnaught *et al.* call,

The ongoing challenge of making educational knowledge accessible to students while retaining the complex meanings encoded in specialised pedagogic discourses (Macnaught, Maton, Martin & Matruglio 2013:51).

In particular, for South African students working in English as an additional or second language, I was also aware that I needed to explicitly define and concretize the status of certain words and wordings as technical and intrinsic to the discipline of Biblical Studies. This would assist students to become conscious of which vocabulary could be paraphrased or replaced with general synonyms and which words needed to be used with their technical meaning in order to maintain an acceptable degree of accuracy. Figures1-3 below set out my initial translation devices in which is a way of showing how I tried to fit Maton and Doran's schema and Martin's Power Trilogy together and then set out as tables which I reproduced for the students as a reference guide.

Wordings

| Most condensed | Power Words | Definition | Examples | | | |
|------------------------|----------------|---|--|--|--|--|
| Conglomerate | PW+++ | Terms consisting of two or more parts each with a separate technical meaning | GRECO ROMAN ANCIENT LIVES RABBINIC LITERATURE | | | |
| Compact | PW++ | Terms consisting of one part with technical meaning | Evangelist, the Law, Torah | | | |
| Specialist | PW+ | Happenings or qualities or pro- cesses expressed as things in the context of technical language | THE ETHICAL SIGNIFICANCE | | | |
| Generalist | PW+ | Happenings or qualities expressed as things in an everyday language context | Ethical teaching Moral teaching | | | |
| Nuanced | PW | Terms from the everyday within the technical language context | Biographical, rabbi. Mark, Peter | | | |
| Plain Most elaborated | PW- | Everyday wording well within an everyday language context | stories, sayings | | | |
| wiosi etaboratea | | | | | | |

Figure 1: Translation device for Power Words

The above table gives examples from the text for this lesson cycle which is reproduced below. In the method I am using, these would be identified by me in the text and labelled by the students on their own copies of the reading.

Clausing

| Most condensed | Power | Definition | Examples | | | | |
|--------------------------------------|---------|--|---|--|--|--|--|
| relationships of meaning | Grammar | | | | | | |
| Taxonomizing | PG+++ | Adds ideas together into a clearly ordered structure | The Gospels are a form of GRAECO-ROMAN BIOGRAPHY | | | | |
| Coordinating | PG++ | Adds ideas together mainly by showing how one causes or is related to the other | The HISTORICAL CRITICAL METHOD gave rise to all sorts of theories | | | | |
| Characterizing | PG+ | Adds a particular set of properties to a word | We should therefore expect their authors to include some of Jesus' ethical teaching | | | | |
| Establishing | PG | Adds a set of meanings to a word | | | | | |
| Most simple relationships of meaning | | | | | | | |

Figure 2: Translation device for Power Grammar

The table above sets out how I was trying to begin to illustrate ways meaning is condensed grammatically by setting up relationships between terms or word

Billy Meyer

groupings so that they show among other things the definitions of terms.

Sequencing

| Most condensed relationships of meaning | Power Composition | Definition | Examples |
|---|----------------------|---|--|
| Integrative | PC+++ | Composition that summarizes ideas from more than one sentence or paragraph | Most importantly this is a NARRATIVE GENRE |
| Subsumptive | PC++ | Composition that summarizes ideas from one sentence or paragraph to another | Signify = The significance Save = This salvation |
| Consequential | PC+ | Composition that adds meanings or ideas together to show how one causes the other, or is opposite or unexpected from the other. | Therefore, so, as a result However, nevertheless, by contrast, even though |
| Sequential | PC+ | Composition that adds ideas together into an order or sequence | Firstly, then, In addition, In ancient times, recently, |
| Sedimental | PC | Composition that repeats key ideas | In other words |
| Most simple relationships of meaning | | | |

Figure 3: Translation device for Power Composition

The above table highlights how the composition of the text begins to set up and draw attention to how meanings are condensed between sentences and paragraphs by among other things summarizing and repeating earlier knowledge.

Methodology for Preparing to Teach the Module

Illustrated by the extract from the course reading below I try to capture how I marked and analysed the text to highlight the power words (marked by bold font or small caps), the power grammar (marked by underlining) and the power composition (marked by brackets and indentations) in order to begin thinking about how to unpack these features for my classroom.

We have argued before, and elsewhere¹,

that the Gospels are a form of graeco-roman biography

{{{and therefore} need to be interpreted in the light of other **ancient** lives.}}

We should therefore expect their authors

to include some of Jesus' ethical teaching as part of their account of his life and ministry,

{{{and also} that their own views about morality might be evident in their writings}}

{{as} they paint their particular portrait of Jesus for their audiences.}} <<{Most importantly} this is a **narrative genre** ->>

{{{and} stories about people were a major method of imparting moral teaching in **the ancient world....**}}

I inherited this text from the previous teacher of the module, who marked had marked certain passages within a longer excerpt from a book by Richard Burridge. I retained these extracts in the module since they represented what I believed was a relatively simple, short introduction to some of the ideas about the genre of a Gospel. However, in 2018 I shortened the excerpts and typed them up into a single course reading for the students to study. The epistemic

¹ Extract from Richard A. Burridge. *Imitating Jesus: An Inclusive Approach to New Testament Ethics* (2007).

semantic density analysis then was a preliminary step to producing a script for presenting the Deconstruction Phase in the classroom. An example of how this could be done for the first sentence of the source text is set out below at Figure 4. The words in italics which follow, are a guide to the different sections of the script, which work together as I deconstruct this sentence. The *preparing for reading* section strengthens semantic gravity and weakens semantic density $(SG \uparrow SD \downarrow)$ by attempting to concretize and unpack the context of the text and the author's purpose, as well as stating the internal relations of meaning in the sentence in more everyday language. The *cues* and *highlighting* both primarily work with the epistemic semantic density of the sentence. This is to unpack the meaning of the different parts of the sentence and the relations between them and then to highlight the power words.

This unpacking of the power words as well as the power grammar of the sentence is further developed in the *elaboration* which highlights the way biography fits into the social and cultural context of the ancient world, attempting to weaken semantic Gravity and strengthen semantic density (SG \downarrow SD \uparrow) by connecting the students to content that will help their understanding of this sentence and linking it to ideas that will come up later in the text.

Preparing for Reading:

We are beginning here with Burridge linking us back to a whole lot of work he has done in the past and especially in the first three chapters of the book from which this passage is an extract. Most of the words in the sentence really just mean 'I have said this before'. What he is saying is that the Gospels are in some ways very like all the other life stories written in ancient times by Greek and Roman writers so we need to study them in the same way.

We have argued before, and elsewhere, that the Gospels are a form of Graeco-Roman biography and therefore need to be interpreted in the light of other ancient Lives.

Cues:

- At the beginning of the sentence, WHAT words mean 'I have said this before?'
- Next, WHAT is being talked about in this sentence?

- In the next part, WHAT are the Gospels described as?
- Just after that, WHAT are the connecting words for the second half of the sentence?
- In this second half, WHAT is he saying about how we should look at the Gospels?
- Lastly, WHAT is a synonym he gives for Graeco-Roman biography?

Highlighting:

The Gospels, GRAECO ROMAN BIOGRAPHY, interpreted, in the light of, ANCIENT LIVES

Power Trilogy:

Power Grammar: sentence setting up *taxonomizing* (PG+++) relations. Power words highlighted above.

Elaboration:

Greek and Roman culture of the elite put a lot of emphasis on the education of boys especially reading, learning and copying good literature, ancient poems taught them religion, examples of speeches taught them public speaking and life stories of teachers and great leaders taught them how to live a good life.

Figure 4: An example of a possible teaching script

This section has set out the methodology for preparing to teach the module. Below is a more detailed analysis of how this preparation translates into pedagogic moves through the lesson cycle.

Analysis: Semantic Waves and epistemic semantic density

In this section I will attempt to show how my script above and the Reading to Learn pedagogic moves through a lesson cycle begin to enact something like a semantic wave of epistemic semantic density. I will try to give an account of how the unpacking and repacking the power words, power grammar and power composition through the deconstruction and Joint Construction Phases of the Reading to Learn cycle resulted in the examples of student writing presented as evidence of the Independent Construction Phase.

Deconstruction Phase

What became clear in preparing this text, using the epistemic semantic density tools, is that the course reading created is far more complex than initially thought. In terms of the power words, the passage exhibits a number of clusters of technical wordings (Maton & Doran 2017a:58) clustered around the historical cultural terms Graeco-Roman and Rabbinic as well as Narrative. Genre and Christianity. Because this is a humanities text it does not display clearly multi-part or conglomerate wording (Maton & Doran 2017a:60) in the manner of scientific texts. However, a number of the wordings, for example GRAECO-ROMAN BIOGRAPHY, GRAECO-ROMAN GENRE, RABBINIC LITERATURE and RABBINIC TRADITION, can be considered conglomerate wordings which considerably strengthen the epistemic semantic density and epistemological condensation. They also begin to build students' field in the study of the New Testament by explaining crucial ideas for the study of the cultural context of Jesus and the production of the Gospels. This epistemic semantic density is then further strengthened by related *compact* technical wordings (Maton & Doran 2017a:60), for example, evangelist, Law and **Torah,** which cluster around the *conglomerate* wordings to supplement the building of field.

The strength of epistemic semantic density is supported by the way the power grammar and power composition in the text contribute to strengthening the epistemological condensation of this text. This is achieved by the manner in which the two clauses define the Graeco-Roman cultural background of the writing of the Gospels. I have analysed these as *taxonomizing* (underlined) clauses (Maton & Doran 2017b: 83-85), *classifying* the Gospels as a sub-type of Graeco-Roman biography.

The Gospels are a form of GRAECO-ROMAN BIOGRAPHY and therefore need to be interpreted in the light of other ANCIENT LIVES.

Here the power grammar is providing a complex set of ideas about historical and cultural genres condensed into two clauses which I needed to unpack. I also needed to ensure that the students understood the relationships between the power words.

Moreover, I analysed many of the clauses as enacting *coordinating* relations between ideas, implying *causing* or *correlating* relationships (Maton & Doran 2017b:85) between the ideas in the two halves of the clause.

THE DEVELOPMENT of the **HISTORICAL CRITICAL METHOD** gave rise to all sorts of theories about THE AUTHORSHIP AND PROVENANCE of the four gospels,

Here again are the power grammar and the power words, including three complex grammatical metaphors (Martin 2013:30) about how a particular academic movement viewed the gospels.

Finally, the power composition of many clauses expresses *cumulative* relations (Maton & Doran 2017b:89). Mostly these construe *consequential* and *sequential* relationships (Maton & Doran 2017b:90). Here bracketed with {} double brackets for the clause and single brackets for the conjunctions. For example, the clauses that follow the quote above:

```
...{{{While} REDACTION CRITICISM brought back the author as theologian,}}
{{which {also} led to hypotheses about the communities which preserved the texts;}}
{{{More latterly,} such community theories have come under serious scrutiny.}}
```

This power composition compounds the epistemological condensation of the text by moving swiftly through three clauses summarizing a number of complex developments in the field of Biblical Studies over almost half a century. The strength of the epistemological condensation is developed through clauses expressing *vertical* relations (Maton & Doran 2017b: 92) through *subsumptive* or *integrative* connections between ideas. The brackets << show the clauses which summarize or bring together meanings from more than one preceding clause. For example:

```
<<Their reasonable coherence within their diversity>>
{{{both} allows the search for the HISTORICAL JESUS}}
{{{and yet also reveals} how}}
<<th>*<their REDACTION of Jesus' teaching and ministry applied it to their own situations. >>
```

These power composition moves provide an experienced reader with connections back and forth to the different points about the gospels being made

in the text which need to be carefully unpacked for the first years in my classroom.

This analysis of the strength of epistemic semantic density and epistemological condensation through the power words, power grammar and power composition of the text means that what at a superficial glance appears, to the academic, trained in the discipline, to provide a nice introduction to the question, 'What is a Gospel?', turns out to present considerable difficulty for university students encountering these ideas for the first time.

Therefore, the teaching script set out above and the Deconstruction Phase (1) in general aims to set up a semantic wave alternating concreteness with abstraction as well as unpacking the complex meaning relations but then also building up new constellations of meaning so the students can read this difficult but relevant academic text with understanding. This building up or repacking of knowledge and meaning will take place to some extent in the Deconstruction Phase but will be more fully enacted through the Joint Construction Phase which I turn to next.

Joint Construction Phase

The Joint Construction Phase of the lesson cycle included activities with students working individually or in groups. They then worked on sentences in plenary and then try to construct paragraphs that accurately paraphrased an understanding of the source. The aim of these classes was also to translate the material from the larger purpose of the author into an academic assignment which set out key information about the cultural background, authorship and reception of the four Gospels. The comment below from my field diary captures some of the initial frustration I felt in trying to facilitate these further steps in academic writing.

The class was only partially successful. I am becoming more and more conscious of how much skill and translation it takes to extract relevant information from a source that has a slightly different purpose to the assignment.

However, the through the stages of the Joint Construction I did begin to move the students towards high stakes academic writing, particularly by focussing on building *horizontal* sequencing through conjunctions and focusing on

using the author's name as the thematic material at the beginning of their sentences (Butt *et al.* 2000: 142-143).

Activity 1: Working on Sentences

In this first activity the students were divided into groups to work on paraphrasing different sentences from the first paragraph of the source. We brainstormed some 'saying verbs' – *suggests, explains, implies, claims*- that would be useful for their joint constructions and I also instructed the students to foreground the author's name. The results of this exercise were as follows.

1.

Burridge explains that

the gospels are a form of GRECO ROMAN BIOGRAPHY.

2.

Burridge suggests that

the Gospel writers think of Jesus' ethical teaching as part of their good news about Jesus.

3.

Burridge implies that

the authors' understandings of morality are seen in their account about Jesus.

4.

He explains that

this is a form of GRECO ROMAN GENRE

that tells a story of an important teacher.

5.

Burridge claims that

stories about people imparted moral teaching in ancient times.

The immediate outstanding result of setting out these sentences and analysing the way they attempt to set out semantic relations in terms of the epistemic semantic density tools is to notice that the students followed the instructions to each begin with a clause attributing the knowledge in the sentence to the author. Other than this important move towards academic writing, these first jointly constructed sentences reproduced the power words, word groupings and power grammar from the original source text. The interesting exception to this

is Group 4 who added information from my elaboration in the Deconstruction Phase that Greco Roman biographies told stories of important teachers in order to illustrate how to live a good life.

Activity 2: Paraphrasing Paragraphs

Unfortunately, the classes during this phase of the lesson cycle were disrupted by a student strike. As a result, I was working with only the three students who attended. The texts below are the result of a process of drafting the paragraphs individually, and editing in plenary.

1. Burridge claims that

there are similarities between the gospels and Jewish Literature.

{{{However,} none of the material was used}}

to write about the life of a Rabbi.

He adds that

the Rabbis preserved the accounts and teachings of other Rabbi's about **the law**.

<<This means that>>

the law was the main focus of rabbinic stories.

{{In the gospels, {however}, the evangelists shifted the focus from the law to Jesus in the gospels.}}

2. The **Historical critical method** had theories about

who wrote the gospels.

//As an example redaction criticism had theories about the Gospel writers as theologians//

```
{{{as well as}} theories about their communities.}}
{{{More recently}}, these community theories have been carefully checked.}}
```

It was quickly accepted that there should be **four gospels** within **the early church**.

{{{Therefore} Tatian's experiment to make just one gospel was not accepted.}}

In these joint constructions we are clearly working towards the epistemological condensation and explicitness of high stakes academic writing. In particular, as well as reproducing wording and power grammar from the original, each paragraph is attempting to add *sequential* and *consequential* sequencing (see figure 3 above) which is not present in the source. The other notable feature in Example 1 is the creation of two plausible synonyms for what I had identified as *conglomerate* wording; 'Jewish' substituting for 'Rabbinic' in 'Rabbinic Literature' and 'stories' replacing 'tradition' in 'Rabbinic Tradition.'

With these joint constructions the students are beginning to experience a modelling of high stakes academic writing which enacts an appropriate level of semantic density in the form of epistemological condensation. At the same time, they are rehearsing and revising the content of the source text. Most importantly from my point of view as a teacher of academic writing, they are clarifying issues that are opaque in the source text, especially being more explicit about the relationships between ideas. From my point of view as a discipline teacher, they are learning crucial background to the Bible and also beginning to attribute these to an author, instead of writing as if these were self-evident truths.

Student Independent Writing

Following the Joint Construction Phase, the lesson cycle moved on to the Independent Rewriting Phase. Below is the prompt I set, which was designed to discourage the students from simply restating the ordering of the information in the source material.

Write a factual account about the four gospels. Begin with this sentence. 'Since ancient times, Christians have accepted that there are four genuine Gospels'.

This is an important new development because it moves students away from 'plagiarism' towards the elusive ideal of 'using your own words'. The examples of extracts from two students' essays below show that they are beginning to make some progress towards accurately restating ideas but also writing independently.

Student 1

```
{{{Firstly,} Burridge explains that}}

{{{since ancient times,} Christians have accepted that there are four genuine gospels.}}

{{{Hence} Tatian's idea of the formation of a single gospel was rejected.}}

{{{Nevertheless,}} the importance of the canonical acceptance of four gospels has been frequently questioned.}}
```

The absence of information about the creation and development of **the gospels** has led to presumptions.

//For example, the authoring of the **gospels** was done by specific **authors** in specific locations [according to **ancient Christian traditions**.//

```
{{Additionally,}} Papias claims that}}

Mark was Peter's interpreter

{{and} that Matthew collected Jesus' sayings.}}

{{Another example,}} Irenaeus' connection of Luke with Paul

{and} John as the beloved disciple.}}
```

Recently developed, **the historical critical method** introduced theories about the authorship and origin of **the gospels.**

Redaction criticism suggested that the authors were theologians,

leading to descriptive **theories** pertaining to their locations. <<These theories were subject to thorough examination.>>

This assignment shows creativity towards realising the rules of high stakes writing. Beginning with technical wording he is able not only to reproduce *conglomerate* and *compact* wording, from the source and the joint constructions, but also create accurate synonyms such as 'Ancient Christian Tradition.' In addition, he creates interesting examples of *specialist* wording, for example 'canonical acceptance' and 'rabbinic practice'. He also combines *specialist* wordings into embedded word groupings (Maton & Doran 2017a:66) such as 'the absence of information about the creation and development.' The net effect of this use of power words is to strengthen the epistemic semantic density of his assignment.

This ESD is supported by reproducing the epistemological condensation of the *taxonomizing* and *coordinating* clausing from the source, by following the joint construction in adding *sequential* and *consequential*

sequencing as well as ending two of his paragraphs with *subsumptive* sequencing, one of which he has created.

It is also necessary to draw attention to the fact that his efforts towards epistemic semantic density and condensation do result in a high semantic flatline (Maton 2014: 142) without much leavening of examples but this does capture the source that he is trying to rewrite.

Student 2

```
{{{Firstly,} Burridge explains that}}
{{{since ancient times} Christians have accepted that there are four genuine Gospels.}}
```

Burridge implies that there were many questions referring to why were there just four gospels in the canon.

```
{{Furthermore} he says
<< the background of these gospels were unknown,>>
{{but} the early church traditions made suggestions that the gospels were written by specific people in specific places.}}
```

Papias implies that Mark was associated with Peter as his interpreter

```
{{{and}} Matthew was the collector of [Jesus' sayings.}}
```

Irenaeus' association between Luke and Paul,

```
{{as John as the beloved disciple is {another good example}}}. {{{In addition} the historical critical method formulated theories about who wrote the gospels.}}
```

{{{Secondly,} Burridge explains that there are similarities between **Gospel** and **Jewish literature**.}}

{{{Although,} not even one piece of material was used to write about a **Rabbi's** life.}}

{{{Furthermore}} the accounts and teachings of the other **Rabbis** about **the law** were protected by **the tradition.**}}

He claims that the law was the main focus of the Rabbinic stories.

This assignment follows the pattern set by his classmates, shifting his writing towards building epistemological condensation. He reproduces power words and word groups that build epistemic semantic density and power grammar that alternates between *taxonomizing* and *coordinating*. In addition, he follows their explicit use of *sequential* and *consequential* sequencing. However, where his work stands out from the others, is by using a constant theme pattern to build coherent sequencing.

Analysing these assignments using the ESD and EC toolkit, begins to show that the process of the Joint Construction Phase had already begun to have a marked effect on the academic writing of these four students for this module. In particular, they have adopted theme and power composition patterns that had featured strongly in my Joint Construction pedagogy. This group of assignments all have at least coherent sequencing (Maton & Doran 2017b:95) building knowledge between clauses. Also they are all using the sequencing that was strongly modelled in the Joint Constructions. They have also shown a relatively strong facility with rearranging and reordering the discipline knowledge without the composition between clauses becoming incoherent.

Conclusion: Reflections on my Practice

This paper is the first fruits of a larger research project I have undertaken in the form of a Masters in Education. It is my first attempt to show an example of how I, the self-reflexive practitioner can work theoretically with sociological toolkits rather than feelings and hunches. I have tried to show how I used LCT Semantics to enhance and analyse an integrated Reading to Learn literacy pedagogy in a disciplinary classroom at a tertiary institution.

Firstly this work suggests that first year tertiary teachers should not follow my earlier example and assume that a reading that they prescribe is simple self-evident and will give the students the information that is intended. At the very least we should carefully read our prescribed texts and try to become be aware of how they may be misunderstood by students. My experience in this lesson cycle and indeed the module as a whole suggests that the effort of integrated literacy pedagogy bears fruit in clearer and better organized academic writing. My particular use of Reading to Learn and the epistemic semantic density and epistemic condensation tools are perhaps not essential, but I would argue that individual teachers could develop some form

of the deconstruction, joint construction and independent construction lesson cycle as one of their toolkits of pedagogic genres for delivering introductory content from foundational authors in their discipline.

My experience in this module also suggests that, in moving from deconstructing a text and unpacking its content into writing and paraphrasing in assignments, the concepts of power words, power grammar and power composition could be further powerful tools for the first year teacher. This is because power words will help to draw attention to technical wordings in the discipline as they occur in assigned reading and particularly point to their correct use and the acceptable range of synonyms which can be used to paraphrase them in assignments. Power grammar and power composition, in my experience and the Reading to Learn philosophy of scaffolding reading and writing of academic genres, point to a useful way of unpacking how texts are structured. Thus a teacher can use power grammar to highlight important language patterns in the discipline such as how to structure definitions, to express how one phenomenon causes another and to illustrate how to express ideas clearly in the target academic language, whether English or indigenous African languages.

In the writing of assignments the lecturer or tutors could continue to model the most powerful and appropriate ways to use these language patterns and thus begin to ensure more students produce assignments which approach high stakes academic writing. Power composition, on the other hand, is a tool for laying bear the structuring of academic language particularly where highly theorised academic writing makes this opaque. Lecturers or tutors could then also model explicitly how to structure assignments in a real world context of an actual assignment rather than in decontextualized tutorial on essay writing.

References

Bernstein, B. 1971. *Class, Codes and Control: Volume 1 – Theoretical Studies Towards a Sociology of Language*. London: Routledge & Kegan Paul. https://doi.org/10.4324/9780203011263

Bernstein, B. 1990. Class, Codes and Control. Volume 4: The Structuring of Pedagogic Discourse. London: Routledge.

Bernstein, B. 2000. *Pedagogy, Symbolic Control and Identity Theory, Research, Critique*. Revised Edition. London: Taylor and Francis.

Boughey, C. 2010. Academic Development for Improved Efficiency in the

- Higher Education and Training System in South Africa. Pretoria: Development Bank of South Africa.
- Boughey, C. & S. McKenna. 2016. Academic Literacy and the Decontext-ualized Learner. *Critical Studies in Teaching and Learning* 4, 2: 1 9.
- Burridge, R.A. 2007. *Imitating Jesus: An Inclusive Approach to New Testament Ethics*. Grand Rapids, Michigan: William B. Eerdmans.
- Butt, D., R. Fahey, S. Feez, S. Spinks & C. Yallop 2000. *Using Functional Grammar: An Explorer's Guide*. Second Edition. Sydney: Macquarie University Press.
- Draper, K. & N. Spaull 2015. Examining the Oral Reading Fluency among Grade 5 Rural English Second Language (ESL) Learners in South Africa: An Analysis of NEEDU 2013. *Stellenbosch Economic Working Papers* 09/15. https://doi.org/10.4102/sajce.v5i2.382
- Martin, J.R. & K. Maton (eds.). 2013. Cumulative Knowledge-Building in Secondary Schooling. *Linguistics and Education* 24, 1: 1 74. https://doi.org/10.1016/j.linged.2012.11.003
- Martin, J. & D. Rose. 2003. Working with Discourse: Meaning beyond the Clause. London: Equinox.
- Martin, J. & D. Rose, D. 2008. *Genre Relations: Mapping Culture*. London: Equinox.
- Martin, J. 2013. Embedded Literacy: Knowledge as Meaning. *Linguistics and Education* 24: 23 37. https://doi.org/10.1016/j.linged.2012.11.006
- Martin, J.R. & D. Rose. 2012. Genres and Texts: Living in the Real World. *Indonesian Journal of SFL* 1, 1: 1-21.
- Martin, J.R. & K. Maton. 2013. Cumulative Knowledge-building in Secondary Schooling: Guest Editors' Preface. *Linguistics and Education* 24, 1: 1 3. https://doi.org/10.1016/j.linged.2012.11.003
- Martin, J.R. 2013. Embedded Literacy: Knowledge as Meaning. *Linguistics and Education: An International Research Journal* 24, 1: 23 37. https://doi.org/10.1016/j.linged.2012.11.006
- Martin, J.R. & K. Maton. 2017. Systemic Functional Linguistics and Legitimation Code Theory on Education: Rethinking Field and Knowledge Structure. *Onomázein* March: 12 45. https://doi.org/10.7764/onomazein.sfl.02
- Martin, J. 2017. Revisiting Field: Specialized Knowledge in Secondary School Science and Humanities Discourse. *Onomázein* 35: 111 148. https://doi.org/10.7764/onomazein.sfl.05

- Maton, K. & R. Moore. 2010. Introduction: Coalitions of the Mind. In Maton, K. & Moore, R. (eds.): *Social Realism, Knowledge and the Sociology of Education: Coalitions of the Mind.* London: Continuum.
- Maton, K. 2013. Making Semantic Waves: A Key to Cumulative Knowledge-building, *Linguistics and Education* 24, 1: 8 22. https://doi.org/10.1016/j.linged.2012.11.005
- Maton, K. 2014. *Knowledge and Knowers: Towards a Realist Sociology of Education*. London: Routledge. https://doi.org/10.4324/9780203885734
- Maton, K. & Y.J Doran 2017a. Semantic Density: A Translation Device for Revealing Complexity of Knowledge Practices in Discourse, Part 1 Wording. *Onomázein* March: 46 76. https://doi.org/10.7764/onomazein.sfl.03
- Maton, K. & Y.J. Doran 2017b. Condensation: A Translation Device for Revealing Complexity of Knowledge Practices in Discourse, Part 2 Clausing and Sequencing. *Onomázein* March: 77 110. https://doi.org/10.7764/onomazein.sfl.04
- Macnaught, L., K. Maton, J.R. Martin & E. Matruglio 2013. Jointly Constructing Semantic Waves: Implications for Teacher Training. *Linguistics and Education* 24, 1: 50 63. https://doi.org/10.1016/j.linged.2012.11.008
- Moore, R. & J. Muller 2002. The Growth of Knowledge and the Discursive Gap British. *Journal of Sociology of Education* 23, 4. https://doi.org/10.1080/0142569022000038477
- Moore, R. 2012. Social Realism and the Problem of the Problem of Knowledge in the Sociology of Education. *British Journal of Sociology of Education* 34, 3: 333 353.
 - https://doi.org/10.1080/01425692.2012.714251
- Moore, R. 2013. *Basil Bernstein: The Thinker and the Field*. Routledge, London. https://doi.org/10.4324/9780203818251
- Rose, D. 2005. Democratising the Classroom: A Literacy Pedagogy for the New Generation. *Journal of Education* 37:127 164.
- Rose, D. 2004. Sequencing and Pacing of the Hidden Curriculum: How Indigenous Children are Left out of the Chain. In Muller, J., A. Morais & B. Davies (eds.): *Reading Bernstein, Researching Bernstein*. London: Routledge Falmer.
- Rose, D. 2015a. New Developments in Genre-based Literacy Pedagogy. In

- MacArthur, C., S. Graham & J. Fitzgerald (eds.): 2015 *Handbook of Writing Research*. 2nd Edition. New York: Guilford.
- Rose, D. 2015b. Genre, Knowledge and Pedagogy in the 'Sydney School'. In Artemeva, N. & A. Freedman (eds.): *Trends and Traditions in Genre Studies*. Alberta, Canada: Inkshed.
- Yi, L. 2011. Bernsteinian Perspectives on the Reading to Learn Program. *Annual Review of Functional Linguistics in China* 3: 109 123.

Billy Meyer School of Religion, Philosophy and Classics University of KwaZulu Natal Meyerw@ukzn.ac.za

Semantic Waves: Writer Performance Ranges on the National Benchmark Tests (NBT) Academic Literacy Test

Naomi Msusa

Abstract

Some research in student level of preparedness in Higher Education has signalled that student under-preparedness might be compounded by an overfocus on student-centred engagement, learning and teaching methods and the acquisition of academic skills, at the expense of focusing on the *knowledge* itself that is the actual subject of the learning. This paper is an analysis of the test-taker performance on a National Benchmark Test (NBT) Academic Literacy (AL) assessment, used by South African higher education institutions for admission and/or placement. Using Legitimation Code Theory (LCT) and illustrated by semantic waves in particular, the analysis focuses on the structure of the knowledge that underpins the NBT AL test, its indicators for success and their relation to the test-takers. The approach highlights the affordances of LCT as a tool to tease out specific areas of the test that reveal student academic under-preparedness, and how this tool can be used to obtain complementary information from test-taker performance that could be crucial for a foundation programme provider.

Keywords: Legitimation Code Theory, NBT Academic Literacy Test, semantic waves, under-preparedness, foundation provision

Introduction

A considerable amount of research has been done across the South African Higher Education landscape to explore student under-preparedness, its possible causes as well as the subsequent measures that can be put into place to mediate the status quo and improve student success rates. More current research is focused on gaining a deeper understanding of the actual student cohorts that higher education institutions select and enrol, to allow for an intervention strategy that is systemic in nature, based on a thorough knowledge of the student population that is being served, and one that is relevant to their needs and goals (Tinto 2012). One tool the South African Higher Education sector has used to access this deeper understanding of applicant cohorts is through diagnostic testing – over and above prescribed basic education exit assessments – aimed at obtaining information that is crucial in predicting success and progress of potential students.

The National Benchmark Tests are one such tool, aiming at assessing academic proficiency, that is, the student's ability to read, write and think in the language of instruction, and at the level required of students in Higher Education. In addition to the tests acting as a requirement for admission purposes, the tests may also be taken by students already admitted to university, and in this case, the diagnostic information from the tests is used to measure students' learning and thinking capacities in the context of a defined programme. Depending on the outcomes, appropriate placement is done and support provided.

Though set against this progressive backdrop, research has still signalled some elements in the academic development field that cause lecturers, foundation programme providers and researchers to unwittingly compound the situation and even create new challenges for under-prepared students. This can occur even after they have been assessed for proficiency, admitted to higher education and appropriately placed in their first year of study. This study is particularly interested in the notion that there is a propensity to 'locate the problem in the individual' and an attempt to change them without trying to understand the way the system works in relation to that individual (Boughey 2010). Furthermore, this research points to the over-focus on exploring student-centred engagement, learning and teaching methods and the acquisition of academic skills, at the expense of focusing on the knowledge itself that is the actual subject of the learning (Clarence 2014). This knowledge is the object that is meant to shape both the learning and the skills that need to be acquired, therefore the lack of a deeper theoretical understanding of how this knowledge is structured may hinder the efforts that relevant interventions, such as foundation programmes, use to address under-preparedness.

There is, therefore, a need to keep the actual knowledge as a crucial aspect of understanding student strengths and deficiencies, as well as an important contribution to the foundation curriculum. Using relatively new theories and social realist tools such as Legitimation Code Theory (LCT) enables a study of the underlying structure of the knowledge itself, offering an insight into what is deemed to be its 'legitimate' indicators for success, status and achievement. By focusing on the structures that lie beneath the surface appearances of knowledge, LCT aims at revealing the tacit principles embodied by these knowledge practices, and is capable of providing often hidden 'knowledge about knowledge' (Maton & Moore 2010). In addition, LCT theorists further propose that knowledge itself is an artefact that ought to take centre stage, allowing an exploration into the characteristics that enable it to be created and developed over time and the modes of its creation and development. This emphasis on structural knowledge enables an exploration of the said knowledge's effect on educational policies and practices (Maton & Moore 2010). In addition, it allows the areas of over-focus such as those outlined above to be brought into relation with the analysis of students themselves, enabling the comparison of different contexts and analysis of change over time without the clutter of empirical differences (Howard & Maton 2011).

This paper offers an analysis of the test-taker performance on a National Benchmark Test (NBT) Academic Literacy (AL) assessment using LCT and illustrated by semantic waves in particular. The scores of this test are reported empirically and categorised as Proficient (68% and above), Intermediate (between 67% and 39%) and Basic (below 38%). The Intermediate and Basic students have been proven to require additional intervention such as foundation courses to allow them to achieve their qualifications (Griesel 2006). An analysis of performance on the test using LCT will enable us to explore the knowledge structure that underpins the NBT AL, its indicators for success and how it relates to the test-takers. This information would be a crucial complement to the predictive and diagnostic information that a foundation programme provider gets, information that would assist in zoning in on specific areas of under-preparedness.

I will proceed by proposing a translator based on concepts of LCT with which the structural knowledge of the NBT AL can be explored. The translator will enable us to extract what the design of the test is proposing as the legitimate knowledge. This will be followed by the exploration of a *semantic*

wave which will act as an illustration of how the translator can be used. To effect this illustration, I will look at the performance patterns of an NBT AL test-taker cohort, mapping them against the legitimated test requirements. Since there can be several permutations to reading test-taker results using this type of analysis, I will focus on the test-takers' self-declared home language as the main variable for categories for analysis.

The report of the Council on Higher Education Task Team on Undergraduate Curriculum Structure (2013) concurred with the notion that the largest disparities in performance in higher education are associated with the pervasive effects of historical racial discrimination. They subsequently conducted a study to disaggregate the performance of a first-time entering cohort by population groups. Although overall performance was not good across all racial groups (32% success rate for Black African students for a 3-year degree; 29% for Coloured, 32% for Indian and 51% for White), it was noted that Black African student performance remained a significant cause of concern and symptom of under-preparedness. Building on this, I will categorise the test-takers according to home language, motivated further by the fact that the object of study is a language test. For purposes of this paper, home languages have been compressed into three: English (EN), Afrikaans (AF) and 'Black African Languages' (BAL) to represent the major population groups of the region.

The NBT AL

Being proficient in academic literacies requires students to be able to notice the particularities of academic contexts and ways in which these shape a particular kind of language use, and to be able to develop and use a nuanced approach to language that is aligned with a given context (Cliff 2015). The NBT AL construct, therefore, draws on the applied linguistics theories of Bachman (1990), Bachman and Palmer (1996), Lea (2004) and Yeld (2001) to assess student readiness in two main areas: organisational knowledge (to do with the formal structure of language for the production or comprehension of grammatically acceptable sentences), and pragmatic knowledge (the creation and interpretation of discourse by relating utterances or sentences to their meanings, language use settings as well as intentions of language users). The categories or skill areas that are assessed by the NBT AL are therefore adapted from these two main areas, as follows:

- *Communicative function*: assessing students' abilities to 'see' how parts of sentences/discourse define other parts; or are examples of ideas or are supports for arguments; or are persuasions.
- *Inferencing*: students' capacities to draw conclusions and apply insights based on what is stated or implied in texts.
- *Vocabulary*: students' abilities to derive/work out word meanings from their context.
- Relations: combination of Cohesion ability to 'see' anaphoric and cataphoric links in text, antecedents and what follows; and Discourse the capacity to 'see' the structure and organization of discourse and argument (transitions in argument; superordinate and subordinate ideas; introductions and conclusions; logical development).
- Essential/non-essential: capacity to 'see' main ideas and supporting detail; statements and examples; facts and opinions; propositions and their arguments; classification, categorization and labelling.
- *Grammar and syntax*: ability to 'see'/analyze the way in which sentence structure/word, phrase order affects meaning and emphasis in language.
- *Metaphor*: capacity to perceive language connotation, word play, ambiguity, idiomatic expressions.
- *Text genre*: ability to perceive 'audience' in text and purpose in writing; ability to understand text register (formality/informality) and tone (didactic/informative/persuasive/etc.).

These categories are further measured by a defined set of NBT cognitive levels, adapted from Bloom's taxonomy (1956). The lowest cognitive level is *knowing*, represented by the code 1+ or 1-. The second level is *applying routine concepts in familiar contexts* (2+/2-); and the third is *applying complex concepts in a variety of contexts* (3+/3-). The most difficult level is *reasoning and reflecting* (4+/4-).

The NBT AL as Test Artefact

The data in Figure 1 below shows the performance of a cohort of test-takers (n=7988) taken from a national NBT writing session in 2015. These students wrote the same form of the NBT AL on the same day, at various venues around South Africa. Of the sample, n=3036 self-report English as Home Language,

n= 256 as Afrikaans and n=4696 as other South African languages, with Zulu, Xhosa, Sotho and Tswana as most common.

The choice of test form used in the study depended on what was made available to the researcher by the NBT Project. The AL test has four sections, and this study focuses only on the first section. The section is made up of seventeen multiple choice questions based on a piece of given text. The actual test/item content was not made available by the NBT Project for publication, therefore, where necessary, the closest possible alternative of item content is given in this study. The raw data is also not presented here, but available for scrutiny from the author.

Figure 1 below is a representation of the overall test-taker performance in Section 1 of this particular AL form, by language group.

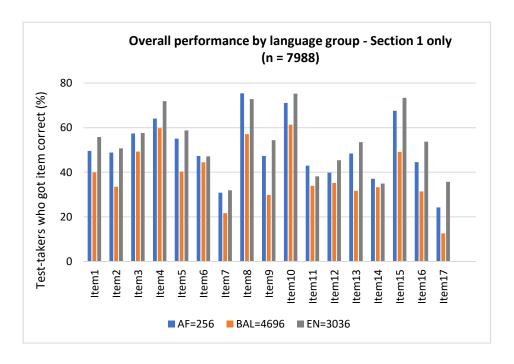


Figure 1: Overall test-taker performance on the NBT AL, Section 1, by language group

Legitimation Code Theory – The Semantic Range

Social realism offers a way of seeing and analysing both knowledge and knowing – together and distinctly (Clarence 2014). Clarence uses the metaphor of 'digging' beneath what one can see and experience to look at the events that give rise to these experiences, using the appropriate tools. The digging is necessary for the revelation of the deeper mechanisms that influence experiences, so that educators can begin to find, analyse and understand the elements that shape and influence the experiences of both students and lecturers.

LCT is principally based on studies arising from Bourdieu (1990) and Bernstein's (1996) theories of knowledge fields and the pedagogic device. Bourdieu's theory locates knowledge practices as strategies of actors who are positioned in fields of struggle over status and resources. Knowledge is presented as fields that are categorised into three main areas:

- (1) the field of production where 'new' knowledge is constructed and positioned;
- (2) the field of recontextualization where discourses from the field of production are selected, appropriated and repositioned to become 'educational' knowledge; and
- (3) the field of reproduction where pedagogic practice actually takes place (Maton & Muller 2006).

Maton (2005) enters this context with the suggestion that 'languages of legitimation' exist within each field, made up of the viewpoints and practices of the actors within. These languages, also known as codes, provide insight into the legitimate indicators for success, status and achievement, into what is acceptable and valued in the field and which therefore influences dispositions, beliefs and practices of its members. Codes are therefore regulative principles tacitly acquired which select and integrate relevant meanings of knowledge, their forms of realization and their evoking contexts (Bourdieu 1990). The analysis of these languages or codes, (and not pedagogic ideology), then becomes a suitable approach for the discovery of the tacit rules of the game for a particular knowledge structure. In our case, it becomes essential to ensure that the spotlight is not on the under-prepared student alone, but also on the knowledge they are required to acquire.

Maton (2010) further proposes that segmentalism exists in education, where knowledge is so strongly tied to its context that it is only valuable within that particular context. This results in the accumulation of new theories and approaches failing to integrate or even replace existing knowledge in intellectual and educational fields. Consequently, students are unable to cumulatively build on what they have previously learnt and so apply the knowledge to new contexts. This is true for example in the instance that basic education exit examinations are still not the best reflection of a students' ability to cope in higher education, and that most still struggle to transition basic education knowledge into the expected forms in higher education. Maton (2014), therefore, explores the role of knowledge practices in cumulative learning using the concept of semantic profiling. This concept allows us to explore the sets of principles underlying a particular knowledge through the coding of its fields as semantic structures. It also enables us to focus more on what is being learned and how it shapes processes of learning. The LCT dimension of Semantics includes both semantic gravity and semantic density, as explained in (Maton 2014: 129).

Semantic gravity (SG) is the degree to which meaning relates to its context in order to make sense, whether that is social or symbolic. Semantic gravity may be relatively stronger (+) or weaker (-). Where semantic gravity is stronger (SG+), meaning is more closely related to its context, where it is weaker (SG-), meaning is less dependent on its context. For instance, therefore, vertical discourse has weaker semantic gravity than horizontal discourse. In addition, the process of weakening semantic gravity means that in a specific context or case, the principles are abstracted from the concrete details, and strengthening semantic gravity means abstract ideas are made more concrete.

Semantic density (SD) is the degree to which meaning is condensed within symbols. Symbols may include terms, concepts, phrases, expressions, gestures, formal definitions, empirical descriptions, feelings, political sensibilities, taste, values, morals and affiliations). As in semantic gravity, semantic density may be relatively stronger (+) or weaker (-). Where it is stronger (SD+), symbols have more meaning, and where it is weaker (SD-), symbols condense less meaning. The process of strengthening semantic density may include condensing a lengthy description into a single term, and weakening semantic density may be when an abstract idea is presented with detailed definitions or empirical descriptions.

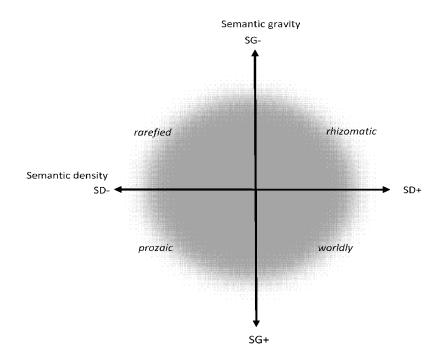


Figure 2. The semantic plane as illustrated by Maton (2016)

The process of strengthening or weakening these two degrees in different permutations generates *semantic codes* that can be visualized as axes on a *semantic plane*, as below:

Figure 2 also shows four principal modalities (Maton 2016) that characterise the semantic plane, adapted for this paper as follows:

- Rarefied codes (SG-, SD-), where items are based on relatively context-independent positions that condense fewer meanings;
- Rhizomatic codes (SG-, SD+), where the test items and their basis of achievement comprise relatively context-independent and complex meanings;
- Worldly codes (SG+, SD+), where items are of relatively context-

- dependent positions and condense manifold meanings, and
- Prosaic codes (SG+, SD-), where the items are relatively context-dependent with simpler meanings.

Lastly, our study makes use of semantic waves, which refer to the upward and downward shifts in semantic profiles that characterise classroom practice. These shifts allow, for example, the possibility of transforming knowledge from a simple context to a more complex, more detailed one over time. Semantic waves are a crucial element of cumulative knowledge-building, which is also a required condition for epistemological access and social inclusion into knowledge communities. Clarence (2013) points out that although there is still much research to be done in the field of LCT, we are beginning to understand, using LCT, how cumulative knowledge can be enabled and constrained through pedagogy through these profiles, and this is a crucial area for both research and practice.

A semantic wave may be characterised by a downward movement on one end, which is essentially the 'unpacking' of technical terms, concepts or definitions into more familiar common-sense language for students. This can also be described as movement from context-independent symbols whose meanings are relatively abstract. On the other end the inverse upward movement is necessary as a 'repacking' process, where engagement with the knowledge is now grappled with using terms and concepts as well as application of theories in own voice, in other words, grappling with context-dependent material that has quite specific meanings. As Maton (2013) discusses, the concept of semantic waves can be used in a variety of ways as a tool to trace changes in knowledge through time.

The External Language of Description

The external language of description as presented in Table 1 is essentially a translation device that I have used to transform one language into another, that is, the translation of several theories into a corresponding LCT code. In the first place, the translator draws from Bachman and Palmer (1996) to outline the general structure of an academic literacy test, the specifications of the knowledge being assessed as well as the skills required in order to achieve the assessment. Secondly, the corresponding NBT AL specifications are mapped onto Bachman and Palmer's structure, drawing on Yeld (2001). Although the

NBT specifications do not appear to be ranked in any form, this study ranks them according to the language knowledge structures as outlined and categorised by Bachman and Palmer (organisational and pragmatic knowledge categories). This categorisation is further useful when it comes to creating a semantic gravity and semantic density map, as it enables the plotting of varying degrees of context-dependence and meaning condensation for each item.

The resulting semantic range allows us to categorize the seventeen items into four levels of semantic codes. The items right at the top belong to the *rarefied* group of codes on the semantic plane – they have little or no context and are abstract, with relatively simple meanings (SG-,SD-). Such items include vocabulary and grammar categories, assessing abstract concepts and common words used with their common meaning (Maton 2011). The second category has items that fall into the *rhizomatic* code on the semantic range, that is, they also have little or no context, are abstract but have highly complex meanings (SG-, SD+). They include items from the categories of cohesion, relations and inferencing, assessing abstract concepts with specific brief terms or symbols. In terms of language knowledge, these two categories belong to the 'organizational knowledge' group, and assess the understanding of the formal structure of language for the production or comprehension of grammatically correct academic language.

The next two levels belong to the 'pragmatic knowledge' group and assess the ability to interpret and create discourse by relating utterances or sentences and texts to their meanings. Thus, the third level is made up of items that fall in the *worldly* code on the semantic range – items that have some context but meanings are still abstract and manifold (SG+,SD+). These include the NBT AL categories of essential/non-essential and text genre, characterised by real world examples with specific terms or symbols. The final group is made up of items that are defined by the *prosaic* code on the semantic scale – they are more context-dependent but with more simplified and specific meanings (SG+, SD-). These include the NBT AL categories of communicative function and metaphor, with real world examples and common words used with their common meaning.

Maton (2014) points out that that this weakening and strengthening of codes, or gradation, occurs along a continuum of strengths with an infinite capacity for gradation. The strength or level of condensation is not intrinsic to a particular word itself, but may relate to the semantic structure in which it is located.

| | : | | : | Semantics | ntics | Code on the |
|----------------|-------------------------------------|--------------------------|---|---------------------|---------------------|------------------|
| | Language Knowledge | | NBT Academic Literacy Test Categories | | | Semantic |
| | (Bachman and Palmer 1996) | <u> </u> | (Adapted from Bachman and Palmer 1996 and Yeld 2001) | Semantic Gravity | Semantic Density | Plane |
| | Grammatical | Produce/comprehend | 1. Vocabulary: | -SG- | SD- | SG-, SD- |
| | | formally accurate | Ability to derive/work out word meanings | Little or no | Meanings | Rarefied |
| | Vocabulary | utterances/sentences | | context, | more | Context- |
| | Morphology | | 2. Grammar: | mostly | unpacked, | independent |
| | Syntax | | unctuation features of basic | general | more | and simple |
| | | | language structures affect academic text meaning | knowing | concrete | meanings |
| | Textual | Produce/comprehend | 3. Relations: | -SG- | SD+ | SG-, SD+ |
| | | spoken/written texts | a. Cohesion | No or little | Meanings | Rhizomatic |
| | 20000 | that consist of two or | b. Discourse | context given | more | Context- |
| Organizational | | more utterances or | Ability to be able to 'see' anaphoric and cataphoric links in text, as well as | 1 | condensed, | independent but |
| Knowledge | Microfical digalifeatori | sentences | other mechanisms that connect parts of text to their antecedents or to what | | abstract | highly complex |
| • | | | follows. | | | meanings |
| | | | Capacity to 'see' the structure and organization of discourse and argument, by | | | |
| | | | paying attention - within and between paragraphs in text - to transitions in | | | |
| | | | argument; superordinate and subordinate ideas; introductions and conclusions; | | | |
| | | | logical development. | | | |
| | | | 4. Inferencing: | | | |
| | | | Capacity to draw conclusions and apply insights, either on the basis of what is | | | |
| | | | stated in texts or is implied by these texts. | | | |
| | Functional | Interpret relationships | 5. Essential/non-essential: | +9S | *OS | SG+, SD+ |
| | knowledge | between ufferances | Capacity to 'see' main ideas and supporting detail; statements and examples; | Context given, | Meanings | Worldly |
| | | contonocitode: oc. | facts and opinions; propositions and their arguments; being able to classify, | some prior | condensed, | Context- |
| | Ideational | Sellicincontexto, do | categorize and 'label'. | knowledge | abstract | dependent but |
| | Manipulative | well as the intention of | | required | | manifold |
| | Heuristic | anguage users. | 6. lext genre: | | | meanings, still |
| | Imaginative | | Ability to perceive 'audience' in text and purpose in writing, including an ability | | | abstract |
| Pragmatic | | | to understand text register (formality / informality) and tone (didactic / | | | |
| Knowledge | | | informative / persuasive / etc.). | | | |
| egpelwoun | Sociolinguistic | Create and interpret | 7. Communicative function: | \$G+ | SD- | Prosaic |
| | knowledge | anguage to a | Ability to 'see' how parts of sentences / discourse define other parts; or are | Context- | Meanings | More context |
| | | narticular language | examples of ideas or are supports for arguments; or attempt to persuade. | dependent, | unpacked, | dependent but |
| | (sensitivity to dialect, language | office in the second | | prior | more | with simplified, |
| | variety; register; naturalness | seming | 8. Metaphor | knowledge | concrete | more specific |
| | criteria); familianty with cultural | | Ability to understand and work with metaphor in language. This includes | | | meanings |
| | references and figures of speech | | capacity to perceive language connotation, word play, amorguity, idiomatic | | | |
| | | | expressions, and so on | | | |

The process might also involve relations to other meanings as part of compositional and taxonomic structures as well as explanatory processes. This means, for example, that whereas 'vocabulary' in the NBT AL specification may be described as the derivation of known and unknown vocabulary (with context or no context given) and the understanding of sentence structure (with context given), in the location of the semantic structure, 'vocabulary' is simply categorised as having little or no context, general knowing and abstract. This categorisation is based on the position that 'vocabulary' takes on the semantic continuum specific to the NBT AL and in relation to the other item categories, for example 'metaphor', which is categorised as having a greater degree of context-dependence and where meaning is more specific.

The translator is tabulated as on the previous page.

The first part of the analysis mapped the seventeen items from the AL test form onto the translator, thereby ranking them by NBT AL category, and against the appropriate semantic code on the semantic range. The translated information is tabulated as follows:

Table 2. External Language of Description – with NBT AL

| Language Knowledge | NBT AL Category | | N | ВТ | AL · | Se | ctic | n 1 | (17 | Iten | 1S) | | Semantic gravity and density | | | | | | | | |
|-----------------------|-------------------------|-------|---|----|------|----|------|-----|-----|------|-----|----|------------------------------|----|----|----|----|----|----|---------------|------------------------------------|
| | | Item# | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | Semantic Code | Description |
| | Vocabulary | | | | | | | | | | χ | | | | χ | | | | | SG-, SD- | Context-independent and simple |
| Organizational | Grammar | | | | X | | | | | | | | | | | | χ | | | | meanings |
| Knowledge | Relations | | | | | | | | | | | χ | χ | | | | | | | 3G-, 3D+ | Context-independent but highly |
| | Inferencing | | | | | Х | | | Х | | | | | χ | | | | | | | complex meanings |
| | Essential/non-essential | | | χ | | | χ | | | χ | | | | | | | | | | SG+, SD+ mea | Context-dependent but manifold |
| Pragmatic | Textgenre | | | | | | | | | | | | | | | | | χ | χ | | meanings, still abstract |
| Knowledge | Communicative Function | | χ | | | | | χ | | | | | | | | | | | | | More context-dependent but with |
| | Metaphor | | | | | | | | | | | | | | | X | | | | | simplified, more specific meanings |

When the items are linked together, a semantic wave is formed, showing the movement of the items from context-independent and abstract meanings, to context-dependent with meanings that are more unpacked. It is important to

note that there is no 'right' or 'wrong' semantic wave, in our case, it is merely an instrument used to read the structure of the test. A test-developer, though, might decide to design a test to follow a prescribed semantic wave.

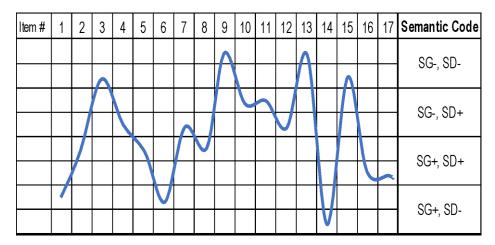


Figure 3. Semantic Profile of the NBT AL items

This resulting wave, therefore, is the visual that represents the 'legitimate' knowledge that the NBT AL is assessing. The wave summarises the three main theoretical concepts that I have used in the translator, and therefore becomes a simpler tool to use in reading the structure of the test at a glance. It shows that the test begins with a context-dependent item assessing a specific meaning, moves on to another context-dependent but abstract item, and then on to a general knowing question, and so on. At one end of the semantic plane would therefore be items 9 and 13 (*vocabulary*), where context does not really play a role and what is required is general knowing of a word or group of words. On the opposite end of the plane would be item 14 (*metaphor*), where meaning (or response to it) will be highly dependent on a specific given context.

The second part of the analysis looks at the performance of the test-takers on these items by language group; AF (Afrikaans), BAL (Black African Languages) and EN (English). Starting at the top of the translating tool, four items fall in the *rarefied code* semantic range: items 3, 9, 13 and 15. These items comprise of items from the organizational knowledge group – *grammar* and *vocabulary*. The Figure 4 below shows that overall, more than half of the

English and Afrikaans test-takers chose the correct option. Less than half of the Black African Language cohort chose the correct option in each case. The worst performed item in this section is item 9 (*In paragraph 4, what word could replace the word 'usurped' without changing the meaning of the sentence?*). Only 30% of non-English and 47% of the Afrikaans speakers appear to know (or successfully guess) the correct option.

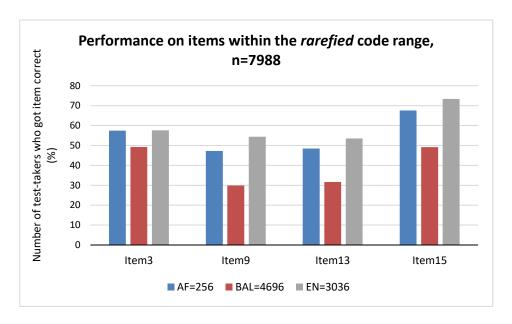


Figure 4: Performance on the items falling within the *rarefied code* range (SG-,SD-)

In the *rhizomatic code* range, the items also fall in the organizational knowledge category, are context-dependent but with highly complex meanings. As may be observed from Figure 5 below, item 7 (*inferencing*) is quite concerning, as it is the worst performed in all language groups, with 31% of Afrikaans, 22% of Black African Languages and 32% of the English test-takers test-takers choosing the correct option. The actual item stem reads: *The term 'gunboat diplomacy' represents the contradiction between aggressive enforcement of one's position and...*). The literacy skill required here is the

Naomi Msusa

ability to draw conclusions or give insight based on what is stated or implied by the text. It is clear that the item proved difficult for the majority. Items 4 and 12 are also assessing *inferencing*, and whereas the performance on item 4 is quite good across all language groups, item 12 proves to be difficult for all groups, with 40% of Afrikaans, 35% of the Black African Languages and 45% of the English test-takers test-takers choosing the correct option.

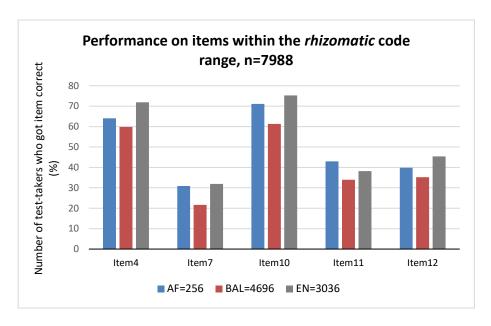


Figure 5. Performance on the items falling within the $\it rhizomatic code$ range (SG-,SD+)

The next level is comprised of items from the *worldly code* range of the semantic plane, (SG+, SD+), where legitimacy is related to context-dependent practices that condense manifold meanings (Figure 6). The items all fall under the pragmatic knowledge category, and items 2, 5 and 8 are assessing *essential/non-essential*. Performance on these items shows that majority of the Black African Languages cohort, followed by Afrikaans, struggled with these items. Item number 2 (*The main idea of paragraph 2 is...*) is to be noted, with

49% of Afrikaans, 34% of the Black African Languages and 51% of the English cohort choosing the correct option. Items 16 (*What is the overall purpose of this text?*) and 17 (*Where would one find this text in a newspaper?*) are assessing *text genre*, and it is also interesting to note that 73% and 36% of the English language group chose the correct option respectively, followed by the Afrikaans group at 75% and 24%; and the Black African Languages group with only 57% and 13% respectively.

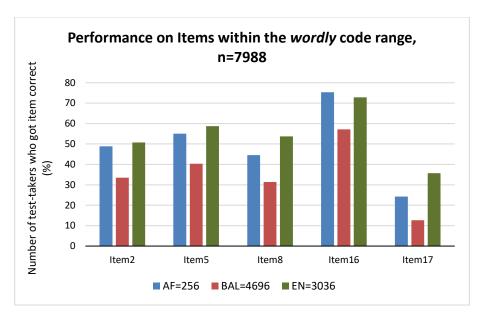


Figure 6. Performance on the items falling within the *worldly code* range (SG+,SD+)

The fourth and final category on the semantic plane belongs to the *prosaic codes* (SG+, SD–) group, where items 1 and 6 (*communicative function*) and 14 (*metaphor*) are more context-dependent but with simpler meanings. Figure 7 shows that performance on item 14 was problematic for all language groups with Afrikaans at 37%, Black African Languages at 33% and the English group at 36% of test-takers choosing the correct option.

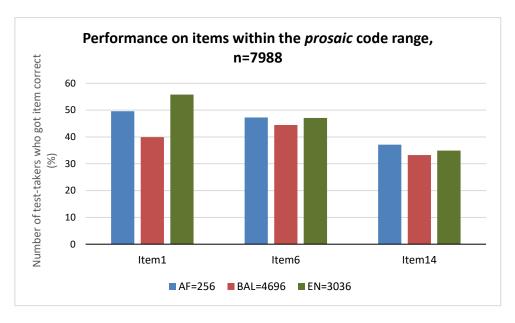


Figure 7. Performance on the items falling within the *prosaic code* range (SG+,SD-)

Having now seen the performance of individual items and where they fall structurally on the semantic plane, the next step would be to see what kind of story the item semantic wave in conjunction with the overall test-taker performance may be telling us.

When it comes to the English language group, over half of the writers are able to grasp the movement from a pragmatic knowledge item that is context dependent but simplified (SG+, SD-: communicative function), up towards one that is more complex (SG+,SD+: essential/non-essential). Still, over half are able to grapple with the next item all the way up the wave that falls under organisational knowledge, is context-independent with simple meanings (grammar), and back down the wave to the next item that is context-independent but has highly complex meanings (SG-SD+: inferencing), and so on. The major dips for this language group exist in two categories: items categorised as organisational knowledge (textual), context-independent but

with highly complex meanings (SG-SD+), and items categorised as pragmatic knowledge (sociolinguistic), more context dependent but with simplified, more specific meanings (SG+,SD-). If, therefore, a student from this cohort were to be placed on an extended programme, these particular areas of academic literacy would benefit from additional support.

The performance pattern of the Afrikaans group of writers is quite similar to the English one. The Black African Languages cohort, however, starts off with poor performance at the beginning of the wave and generally stays that way. The peaks where more than half of the test-takers choose the correct options come in only at the organisational knowledge category (textual), context-independent but with highly complex meanings (SG-SD+), and at the pragmatic knowledge category (functional), context-dependent but with manifold meanings (SG+,SD+). Based on this analysis alone, it would be concluded, therefore, that students from this cohort will need additional assistance in most, if not all areas of academic literacy.

Conclusion

The study attempted an analysis of test-taker performance on an NBT AL paper with the aim of teasing out additional information that can be of use to a foundation programme provider. The paper focused on overall performance on only one section of a specific test form, therefore it is important to remember that there are three other sections that might change the overall picture if included in a more detailed study. Although the trends give an insight into the inadequacies of the test-takers, these patterns might become more evident if the whole test is mapped out in this way. The paper also did not include other aspects of interest that might also be a subject for further research, for instance, the inclusion of performance boundaries (Basic, Intermediate and Proficient), with the Basic and Intermediate groups being the principal beneficiaries of extended programmes.

The paper looked at how LCT can be used to analyse both test and student data by creating a translator that enabled the categorisation of both. The item data was partially categorised by existing NBT AL specifications. I added to this categorisation by extending it with a map adapted from a corresponding semantic range, creating codes that gave us an insight into the underlying structure of the items. I was able to see from the coding that the two main categories that academic literacies are bound in, (organizational and pragmatic

knowledge), are characterised by specific and corresponding codes on the semantic range. Therefore, a pragmatic knowledge item falling under the *metaphor* NBT AL category would require the test-taker to have some knowledge of cultural conventions and references, for example. In semantic terms, the profile I have created confirms that such an item would indeed be context-dependent (e.g. a cultural reference) and the symbol would be specific in nature (e.g. a proverb). Finally, I looked at test-taker performance mapped against this translator to determine the extent to which three different language cohorts are able to grapple with material that is pegged at each level.

Even though an empirical analysis of the NBT AL is well capable of identifying weak performance on the items, the LCT analysis may be used as a visual aid that first summarises the different structural categories of the knowledge that makes up the test, and secondly, allows the mapping of individual or group test-taker performances with the aim of teasing out problem areas. Such an aid would be relevant in the exploration of innovative and creative research that seeks to complement meaningful provision of foundation programme support.

References

- Bachman, L.F. & L. Angeles 2002. Some Reflections on Task-based Language Performance Assessment. SAGE. *Language Testing* 19: 453 463. Available at: https://doi.org/10.1191/0265532202lt240oa
- Bachman, L.F., & A. Palmer 1996. Language Testing in Practice: Designing and Developing Useful Language Tests. OUP: Oxford.
- Badenhorst, E. 2008. An Exploration of Mediation in an Intervention Programme for Educationally Disadvantaged Medical Students. Unpublished Master's Thesis, University of Cape Town.
- Bernstein, B. 1996. *Pedagogy, Symbolic Control and Identity*. London: Taylor & Francis.
- Bloom, B.S. (ed.) 1956. *Taxonomy of Educational Objectives. Volume 1.* New York: David McKay Company.
- Boughey, C. 2000. Multiple Metaphors in an Understanding of Academic Literacy. *Teachers and Teaching* 6, 3: 279 290. Available at: http://eprints.ru.ac.za/1123/1/boughey_multiple_metaphors_in_an_understanding.pdf

https://doi.org/10.1080/713698740

- Bourdieu, P. 1990. The Logic of Practice. Cambridge: Polity.
- Carelse, C. 2011. Teaching and Learning Strategies Aimed at Facilitating Epistemological Access to the Bachelor of Social Work Degree. In Bozalek, V., J. Garraway & S. McKenna (eds.): Case Studies of Epistemological Access in Foundation/Extended Curriculum Programme Studies in South Africa. HELTASA.

http://heltasa.org.za/foundation/

- Clarence, S. 2013. Enabling Cumulative Knowledge-building through Teaching: A Legitimation Code Theory Analysis of Pedagogic Practice in Law and Political Science. Unpublished PHD Thesis, Rhodes University.
- Clarence, S. 2014. Surfing the Waves of Learning? Exploring the Possibility of Enabling Greater Cumulative Knowledge Building through Pedagogy Using Semantics. Paper delivered at HECU7, Lancaster, July 2014.
- Cliff, A. 2014. Entry-level Students' Reading Abilities and What these Abilities Might Mean for Academic Readiness. *Language Matters* 45, 3: 313-324. https://doi.org/10.1080/10228195.2014.958519
- Cliff, A., & E. Montero 2009. The Balance between Excellence and Equity in Admissions Tests: Contributions of Experiences in South Africa and Costa Rica. *Ibero-American Journal of Educational Evaluation* 3: 8 28.
- Cliff, A., K. Ramaboa & C. Pearce 2007. The Assessment of Entry-level Students' Academic Literacy: Does it Matter? *Ensovoort* Special Edition 11, 2.
- Cliff, A. 2015. The National Benchmark Test in Academic Literacy: How Might it be Used to Support Teaching in Higher Education? *Language Matters* 46. https://doi.org/10.1080/10228195.2015.1027505
- Griesel, H. (ed.). 2006. Access and Entry Level Benchmarks: The National Benchmark Tests Project. Pretoria: Higher Education South Africa.
- Herbert, M., C. Conana, T. Volkwyn & D. Marshall 2011. Multiple Modes of Epistemological Access in Physics. In Bozalek, V., J. Garraway & S. McKenna, S (eds.): Case Studies of Epistemological Access in Foundation/ Extended Curriculum Programme Studies in South Africa. HELTASA. http://heltasa.org.za/foundation/
- Hutchings, C., & J. Garraway (eds.). 2010. Beyond the University Gates: Provision of Extended Curriculum Programmes in South Africa. Rhodes University Foundation seminar hosted by Chrissie Boughey. 2009. http://heltasa.org.za/foundation/

- Jacobs, C. 2013. Academic Literacies and the Question of Knowledge. *Journal for Language Teaching* 47, 2: 127 139. https://doi.org/10.4314/jlt.v47i2.7
- Jacobs, M. 2010. A Framework for the Placement of University Students in Science Programmes. *Higher Education* 355.
- Macnaught, L., K. Maton, J. Martin & E. Matruglio 2013. Jointly Constructing Semantic Waves: Implications for Teacher Training. *Linguistics and Education* 24, 1: 50 63. http://doi.org/10.1016/j.linged.2012.11.008
- Maton, K. 2000. *Beyond Bourdieu and Bernstein*: Legitimation Code Theory. University of Sydney. http://www.ucd.ie/t4cms/teaching_lct_intro.pdf (Accessed November 2018.)
- Maton, K. 2005. Fracturing autonomy: Bourdieu and Contemporary Changes to the Higher Education Community. *Proceedings of the Australian Sociological Association Annual Conference*, University of Tasmania. December, 2005.
- Maton, K. 2010. Reclaiming Knowers: Advancing Bernstein's Sociology of Knowledge. University of Sydney Press.

 Available at:
 - http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.470.7136&rep =rep1&type=pdf (Accessed November 2018.)
- Maton, K. 2010. Segmentalism: The Problem of Building Knowledge and Creating Knowers. In Fandji, D. & P. Vitale (eds): *Knowledge, Pedagogy & Society: International Perspectives on Basil Bernstein's Sociology of Education*. Abingdon. Routledge.
- Maton, K. 2013. Making Semantic Waves: A Key to Cumulative Knowledge-building. *Linguistics and Education* 24, 1: 8 22. Available at: http://doi.org/10.1016/j.linged.2012.11.005
- Maton, K. 2014. Building Powerful Knowledge: The Significance of Semantic Waves. In Rata, E. & B. Barrett (eds.): *Knowledge and the Future of the Curriculum: International Studies in Social Realism.* London: Palgrave MacMillan. https://doi.org/10.1057/9781137429261_12
- Matruglio, E., K. Maton & J. Martin 2013. Time Travel: The Role of Temporality in Enabling Semantic Waves in Secondary School Teaching. *Linguistics and Education* 24, 1:38 - 49. http://doi.org/10.1016/j.linged.2012.11.007
- Scott, I., N. Ndebele, N. Badsha, B. Figaji, W. Gevers & B. Pityana. 2013. A Proposal for Undergraduate Curriculum Reform in South Africa: The

- Case for a Flexible Curriculum Structure. Pretoria: Council on Higher Education.
- Moore, R. 2004. Education and Society, Issues and explanations in the Sociology of Knowledge. Cambridge: Polity Press.
- Singh, B.V. 2013. What does Gravity, Density and Waves have to do with *Pharmacy Education?* Unpublished PhD Thesis. University of Kwa-Zulu Natal.
- Van Wyk, A.L. & W. Greyling 2012. Developing Reading in a First-year Academic Literacy Course. *Stellenbosch Papers in Linguistics* 38,0: 205 219. https://doi.org/10.5774/38-0-30
- Weideman, A. 2003. Assessing and Developing Academic Literacy. *Per Linguam* 19, 1 & 2: 55 65. https://doi.org/10.5785/19-1-89
- Yeld, N. 2001. Assessment, Equity and Language of Learning: Key Issues for Higher Education Selection in South Africa. Unpublished PhD thesis, University of Cape Town.

Naomi Msusa
Consultant, Test Administration
Centre for Educational Testing for Access and Placement,
Centre for Higher Education
University of Cape Town
naomi.msusa@uct.ac.za

Translanguaging as Foundational Pedagogy: Disrupting Hegemonies for Academic Access in Multilingual Spaces

Sindiso Zhou Nhlanhla Landa

Abstract

The grand objective of foundational pedagogy is underpinned by an endeavour to create access to higher education for marginalised learners. Without a deliberate plan of action to bridge the knowledge and skills gap, it would be challenging for learners to proceed to, and progress in, higher education institutions. In the multilingual South African space, language is essential in access to education given the legacies of colonialism and apartheid. However, language is currently a tool of exclusion in SA University classrooms. It is against this background that this paper disrupts the prevailing hegemony of English, using translanguaging: a subversive theory that acknowledges linguistic and cultural diversity. This paper shifts prevailing monolingual cultures, and explores practical ways of designing instruction that accommodates multilingual repertoires. We reflect on the rich linguistic canvas, initiate necessary conversations and ask relevant questions in an attempt to transform the educational experience for learners in marginalised contexts. This paper challenges attitudes of delegitimizing multilingual practices and branding them as corrupted and unacceptable. We acknowledge that sites of education are sites of legitimate struggle for decolonisation and transformation. Therefore, through translanguaging, learners' plural identities and humanity are embraced. Most importantly, foundation learners are free to use their complete linguistic repertoire to access knowledge without prejudice.

Keywords: translanguaging, disrupting hegemony, indigenous language, epistemic access

Introduction and Background

As South Africa emerged from the pre-independence era, which was characterised by many inequalities and social injustices, several changes took place. These changes could not exclude changes in the linguistic environment, which had been characterised by a subtractive language policy that excluded the indigenous languages spoken by the majority of South Africans, and which had been at the centre of the struggle against apartheid by the black majority. The conspicuous domination of English and Afrikaans in pre-independent South Africa could not go unchecked by the post-Apartheid regime (Osborn 2007; Language Policy for Higher Education 2002; Council of Higher Education Policy Framework 2001; Language in Education Policy 1997). The enactment of these policies, which sought to realise the provisions of the South African Constitution, is evidence of efforts to correct the language imbalances of the apartheid era in South Africa. However, in the case of the education system, the legacies of the apartheid era still abound. This has caused the current debate on decoloniality and decolonisation of the education system. Again, the question of language, specifically the question of the language of instruction that should be used, which is very central to any debate on decoloniality, emerges.

This paper grapples with issues of how language pedagogy can be reconfigured to improve epistemological access for students at the foundational level. The expected outcome is to transform formal access into epistemic access. Epistemic access describes actual access to the knowledge that an institution distributes to learners. We argue that while the problem of epistemic access has multiple causes and manifestations (Morrow 2007; Paxton 2007), the language barrier is a huge and most central determinant (McKay 2014; Theron & Nel 2005). We offer translanguaging as a possible solution to the challenge of language of instruction, and by extension the challenge of epistemic access for foundational pedagogies.

As a theory, translanguaging takes a lot from the concept of bilingual education and instruction. In bilingual instruction, learners and teachers are able to interact, negotiate meaning and transfer cognitive and linguistic skills in an environment conducive for free and active participation in more than one language (Cummins 2007a; Krashen & Brown 2007; Benson 2005; Cummins 2000). These feed into effective teacher-learner-content interaction described in the Dialogic and Cognitive Pedagogy Model of Learning and Social

Interaction (Zhou & Landa 2018). Translanguaging may be viewed as a tool of meaning-making through use of languages within the reach of learners as they attempt to access discipline-specific knowledge. By description, translanguaging is more about communication than language proficiency. Translanguaging highlights the difference between a named standardized language, and the ability to use multiple languages for various tasks including academic tasks and purposes. The true measure of what a bilingual child can do comes out as they use all the languages within their mental lexicon, thus translanguaging. Unless we critically question and challenge the subtractive linguistic practices in our institutions, the potential of language minoritized students is wasted. Translanguaging emphasises dialogic learner-centered instruction that always puts the learner first.

Current university culture tends to promote monolingual pedagogies in which English dominates during instruction (with the exception of Afrikaans dominant universities and in(directly) uses monolingualism to exclude and marginalize learners. We approach our theorisation of translanguaging as a foundational pedagogy with the underlying belief that for translanguaging to be practised in the multilingual classroom; there should be systematic strategies on how to operationalize it. Translanguaging disrupts social conventions of subtractive educational contexts and dominant monolingual perspectives. Given that multilingual skills represent a prized competency in the employability skills-set in the global economy, learners from rural schools also need to access opportunities to be active in the global economy. The paper outlines strategies for creating translanguaging spaces in a multilingual environment through the development of three strands of a translanguaging pedagogy involving the teacher's stance, instructional and assessment design, and shifts in pedagogic practice.

In many post-colonial African nation states, languages of instruction have impeded epistemic access and pedagogical success as they have constructed alien learning environments for, especially, first year black students (Qunta 2008). Languages of instruction have also generally thwarted language development (Magwa 2015; Bamgbose 2000). However, literature indicates that the success of academic endeavours is irretrievably linked to medium of instruction (Magwa 2015; Tamtam *et al.* 2013; Lafon 2008; Lolwana 2005; Biseth 2005), and language of assessment. This has led to failed contact between learners in foundational programmes and knowledge. Therefore, 'an English-only or even an English-mainly policy' has significant disadvantages

for any national processes (Alexander 2004). Learners in foundational education are at a disadvantage due to weaknesses in academic performance in general and under-preparedness for tertiary education due to poor secondary school learning conditions, ill-resourced rural secondary schools and inadequately trained rural and urban school teachers (Maforah & Schulze 2012; Bloch 2009; Christie 2008). The continued poor performance of these students, which marks the difference between mere physical access to higher learning institutions and epistemic access, renders efforts of initiatives such as the free education movement fruitless. Du Ploy and Zilindile (2014), and Alexander (2008), discuss the differences between the forms of access to education. Further, Cross (2007) differentiates between access to campus and access to knowledge. Foundation students are caught up in this access paradox whereby they enjoy the privilege to access universities, yet in reality, the language in which higher education knowledge is packaged in renders the knowledge inaccessible.

Practice in the past has been to insist on monolingualism and separation of languages in the learning environment to promote and enhance foreign language acquisition and learning (Portoles & Marti 2017) as well as second language acquisition. This reductionist approach most likely stemmed from the view that for effective acquisition and learning of a language, there is need for immersion in that language (Savage & Hughes 2014; Schwartz 2009) and the input must be comprehensible (Krashen 2003), making the use of any other language in that space punishable in most school practices. At best, practice has also been bilingualism, which, following Heller (1999), at first was fashioned under 'parallel monolingual' models.

Literature Review

Revolutionising classroom practice has been widely investigated; however, the focus has largely been on outcomes after assessment. Little has been reported concerning actual classroom practice.

This article focuses on the processes that are undertaken in the language classroom - specifically, the foundation English for Specific Purposes class and the strategies involved in empowering learners and actual outcomes of that practice.

Extended Curriculum Programme in South Africa and Implications for Pedagogy

The Extended Curriculum Programme (ECP), a child of the Draft National Plan for Education (RSA Department of Education 2001), was born out of the need 'to redress inequalities of the past and to ensure equitable access and success' of higher education (Julius 2017:5). Ensuring access without putting in place measures to ensure success was proving fruitless as enrolment improved but did not translate to increased graduates. The ECP was, therefore, implemented to ensure that first year students were able to build a strong academic foundation to allow them to transcend access to get to success in their studies. The programme was implemented in such a way that it is adjustable to suit the needs of each university (Council for Higher Education 2013). The South African ECP has similarities with programmes from other countries which seek to attain the same results in higher and tertiary education; these include Ireland and Scotland (Dhunpath & Vithal 2014).

As Lange (2017) indicates, epistemological access was central to the introduction and implementation of the foundation programmes. These sought to provide 'extra scaffolding, especially in the areas of language and academic literacy' (Lange 2017: 41). The goal was to assist learners who had been inadequately trained in secondary education (Harris 2014). However, as Harris established, there are weak to no mechanisms put in place to ensure and measure the effectiveness of the ECP programme in some universities in South Africa.

Epistemic Access

South Africa is a typical example of what Omoniyi (1999) has described as multiethnicity-riddled sub-Saharan Africa. The South African University classroom is characterised by a multiplicity of indigenous African languages. In one class at the University of Fort Hare, for example, one can find in the same class students who speak isiXhosa, isiZulu, Sepedi, Yoruba, Shona, Southern isiNdebele and seSotho among a host of other African languages. In such an environment, the language question becomes key to epistemic access. Often, the language in education policy of the institution recognises one or two of these indigenous African languages. Therefore, there is more to the language of instruction question than allocating languages to institutions according to regional ethnic strata.

Besides language issues, the South African education system is still characterised by inequalities and many unresolved challenges to epistemic access (Maforah & Schulze 2012; Nel and Müller 2010; Hammett 2008). Learners from historically black schools continue to perform badly is some subject specifics and the situation does not promise to improve soon as long as schools in townships and rural areas do not receive special attention to uplift them to the level of schools that enjoy the urban advantage in towns and cities (Liccardo, Botsis & Dominguez-Whitehead 2015). School location, therefore, has a bearing on the quality of epistemic access learners have. These differences in secondary education are carried to tertiary education as these different levels of access linger into the university, hence the ECP.

Cognitive and social advantages abound for epistemic access where multilingual learners use more than one language (Makalela 2015); thus, translanguaging in which learners harness all the linguistic resources within their reach for purposes of learning new concepts. Makalela insists that when boundaries between languages are transcended in a multilingual classroom, epistemic access is enhanced. Monolingualism in the classroom, or even parallel monolingualisms, puts a lot of pressure on multilingual learners (Garcia & Wei 2014), and on monolingual learners whose language is not necessarily the one being used for instruction.

Makalela (2015) experimented with translanguaging in the teaching of Sepedi in a South African University to students who had not been previously exposed to the language, and to the teaching of English as a First Additional Language to primary school learners whose home language was Sepedi. The study concluded that epistemic access was greatly increased when translanguaging strategies were implemented. Further, translanguaging enhanced positive language-learning experiences for the learners, for whom alternation of languages in the classroom was received enthusiastically (Makalela 2015). The findings from Makalela's (2015:28) study that 'English reading proficiency skills can be enhanced through the use of the learner's language in the same lesson' are monumental and disruptive, showing the currency of translanguaging in enhancing epistemic access. Following Hurst, Madiba and Morreira's (2017) study on 'Surfacing and Valuing Students Linguistic Resources in an English-Dominant University'; the use of translanguaging in the social sciences significantly helps to allow deeper access to the concepts being learned. This is an indication that translanguaging is not limited to language teaching, but that using multiple languages is also

useful in teaching concepts in different disciplines. We share Makalela's (2015:16) conviction that when learners have, at their disposal, more than one language to access content, understanding is better and deeper. However, in this paper we go beyond time-bound translanguaging whose only operationalisation is limited to the classroom.

Translanguaging Theory: Framing Multilingual Interaction in the Foundation Classroom

This section offers a brief description of translanguaging in the classroom from a scholarly viewpoint. A preview of translanguaging's original structure is essential in setting a necessary background on the practical ESP Translanguaging Framework that we experimented with at the University of Fort Hare with Foundation students in the Faculty of Social Sciences. Translanguaging refers to a process of 'communicating across and between different varieties of language/s' (Heugh 2015:2). This, Heugh adds, includes translation, interpretation and code-switching. It also covers what has been described as polylanguaging, codemeshing and metrolanguaging (Bloemmart 2010; Canagarajah 2011). In the education context, translanguaging achieves educational legitimacy in which education literally has meaning. It carries the promise of facilitating the transcending of the linguistic divide characterising the South African classroom context. It encourages 'multilingualism and multilingual pedagogies in the classroom' (Heugh 2015:2).

Translanguaging in class allows learners and teachers to pool linguistic and cognitive resources from all the languages available in a particular class's linguistic environment. In the first place, decolonisation of epistemic access does not imply a replacement of one system with another, but benefiting from a multiplicity of systems; systems of language teaching and learning; of education; of knowing; of doing things; and, indeed, of being. Translanguaging strategies bend to the needs of the learners at specific times, earning it the descriptor all-terrain (Garcia 2009); disrupting boundaries between languages in the effort to meet the communicative needs of the users (Garcia 2011; Makalela 2013).

As an approach to practice, translanguaging has the effect of multiplying the instructional voice as it allows learners to mediate and translate (teacher explanations and learning material) form one language into the other for the benefit of both the other learners and the teachers. It brings into play

the concept of peer instruction, as opposed to the traditional practice of supplemental instruction where instruction is still limited to one (or two) supplemental instructor who, in many instances, also uses a dominant language like English or, if not, uses his/her home language and sticks to it or (code) switches between it and English. Either way, access is still not at its maximal. Differences between code-switching and translanguaging are discussed at length by Hornberger and Link (2012).

The challenge with multilingual set-ups, such as the University of Fort Hare, and indeed other South African universities and schools, is that improving epistemic access through language of instruction cannot be a simple issue of replacing English (or any other foreign or dominant language) with an indigenous language. Often, in the same mass-learning space characterising foundation classes at many universities in South Africa there are multiple languages, and, therefore, many learners whose indigenous (home) language is a language other than the dominant (and majority) indigenous language of the class. Further, in the same classes some learners' home language is English (or Afrikaans), making outright displacement and replacement of English (or Afrikaans where applicable) a disadvantage to some learners and some teachers.

The use of a language the learner is not comfortably competent in would impede their effective participation in whatever activity they are supposed to be part of. If the activity is academic, then the effect is major. As Garraway (2017) reports, confidence, both in the language of communication and in what one is saying is central to epistemological access. If learners lack confidence in their language competency, there is usually no voluntary participation in class activities that require them to speak or discuss. They also often find themselves at the mercy of other learners (Bozalek & Boughey 2012), who often mock those who do not speak the language of instruction well. In classes other than language classes, the teacher's competence in the language of learning and teaching also becomes a critical issue (Pendleburry 2008; Ab Rahman *et al.* 2005).

Translanguaging in class, therefore, would allow learners to use whatever languages they are comfortable with and confident in. The next major question would be; what, then, should be the language of assessment in such a multilingual translanguaging class? Therefore, translanguaging answers the question that has been central in the debates about language in education policies; whose indigenous language should be promoted to the status of

language of instruction? The answer that comes with translanguaging is; everyone's languages can be used to facilitate epistemic access.

Motivation Driven by Agonising Experience

The motivation to embark on a translanguaging experiment was necessitated by an agonising experience of teaching English for Specific Purposes to a Foundation class of 210 students in 2017 at the University of Fort Hare. After teaching ESP to the Foundation class for two weeks, it became evident that exclusive use of English during class was not working. Contact time was being wasted as there was no feedback. In this case, no feedback was the perfect feedback to indicate that not much learning was taking place. Students could not answer questions asked during class discussion due to their lack of confidence in speaking English. It became apparent that if any learning was going to take place, students had to participate in their own learning. They had to talk to each other, talk to the lecturer and talk to themselves with confidence. Dialogue is central to learning (Zhou & Landa 2018). However, if it has been stated that this is an English class and the only way to succeed in English is to immerse oneself in all things English to the exclusion of any other language, then students who are not proficient in English automatically shut down for fear of being ridiculed. Evidently, an alternative way of thinking about learning was required. As a matter of survival and continuity, an alternative, practical, functional methodology had to be employed. To forge ahead, we had to disturb the hegemonic discourse that one can only learn English in English, and that English is the superstrate and dominant language of academic spaces.

With the challenge of delivering content successfully being our major preoccupation, the reality of multilingual classrooms was apparent. Like any space where individuals from various ethnicities, religions, genders and races converge, the classroom is a political space. As a political space, there is power at play. The very nature then, of a classroom as a space of serious contestation presents it as a space where significant change can be achieved. It is the potential of the classroom to be used as a space for positive change that prompted this notion of conceptualising subversion as emanating from the language of the learners during learning. If language has previously been used as a tool to separate, exclude and oppress, it can also be used for positive effect in the classroom. Given that knowledge has been packaged in Anglonormative terms, it should be expected that foundation students coming from a

predominantly African background with home languages other than English should face challenges.

The Dual Challenge of Access

The dual task faced by foundation students is that of accessing English as a language of communication before they can understand the content that it is delivering. Language acquisition and learning are a package deal. Language is acquired and learnt alongside its culture. There are complex processes involved in language acquisition and learning, and as stated earlier in this paper, there are structural weaknesses in primary and secondary education hence learners come to university ill prepared. Once a language learner misses a stage and errors fossilize, it becomes difficult to revert to childhood level proficiency. Even after independence from the shackles of colonialism, English as a language continues to transport innuendoes of oppression and transmit hegemonies in its wake, especially if it is made to occupy epistemic spaces that the majority cannot access even though they are physically on a campus. This paper, therefore, uses the same tool of language to break the barrier that is blocking access to knowledge for foundation students.

Experimental Translanguaging: The Case of Foundation English for Specific Purposes (ESP)

Given the urgency of ensuring access to knowledge and skills of learners from marginalised backgrounds, it has become important to challenge canonical perspectives and concepts of higher education; to contest colonial definitions of knowledge and to disrupt entrenched practices of scripted curricula, hence our experiment with translanguaging in the Foundation English for Specific Purposes class. While searching for opportunities and practical ways of bringing translanguaging to life in an academic setting three strands of a translanguaging pedagogy involving the instructor's stance, instructional design, and shifts in pedagogic practice were explored. Stance focused on the instructor's beliefs with regards to language diversity. Instructional design focused on the design of the material being taught. Its flexibility and possibility for innovative delivery was a major factor in this instance. Lastly, shifts on delivery style where the readiness of the instructor to shift teaching styles in

order to accommodate the translanguaging moments during a learning session is tested. These three strands underpinned activities undertaken during the experimental sessions.

Before embarking on the Translanguaging Experiment (TEX), students were briefed on language development. The brief was meant to explain how translanguaging works without misleading students into thinking that they were off the hook and they could write classwork in isiXhosa or seSotho. Content understanding is linked to learning ways of using the dominant language. However, given that any acquisition or learning of a new language depends on what is already known to the speaker, then making use of available resources makes productive sense and ensures both language and content development. On the contrary, the exclusive use of English in the classroom accompanied by an outright negation of indigenous languages has damaging consequences for foundation students who are vulnerable where English proficiency is concerned.

One of the skills that students have to acquire in ESP is that of writing essays in an academic setting. After exposition, students were assigned a group task on planning for an essay on *Gender inequality in the workplace in South Africa*. In groups of four, students drafted a comprehensive stage by stage plan (Introduction, thesis statement, proposition and so on following the conventions of academic writing). As opposed to pre-experimental activities in which it was attempted that English was the language of class business- there was vibrant and productive discussion that demonstrated surprisingly robust arguments from the foundation students. Innovation, versatility, linguistic multitasking, interpersonal relationships, connections and comradeship were developed while learning. Students owned their *voices* and expressed themselves as they participated in their own learning.

We broadened the concept of translanguaging by conceptualising a pedagogic paradigm that we labelled as the Learner Translanguaging Tools (LTT). Since the focus was on giving the learner voice, the learner is the central participant in the paradigm. The basis of the LTT paradigm is that participation of foundation students evolves as a result of the interaction of the following variables:

a) Learner variables

The background knowledge of students, their attitudes to learning, linguistic knowledge, enthusiasm and beliefs influence their

participation in learning tasks. On the *Gender Inequality* task, the mere fact that some of the students identified with the topic somehow, as they were victims directly or indirectly, was enough to stimulate their interest in the subject.

b) Learning material variables

The understanding of the demands of task assigned, complexity of task assigned, cognitive demand, additional resources such as research articles, freedom to use the internet and social media to source information all facilitate readiness, confidence and determination to use all available linguistic resources to get the best possible outcome.

c) Learning context variables

The physical and social settings are both important in translanguaging. In the ESP TEX, the students were made to feel safe in the auditorium by allowing them to choose their group members before class. They chose group members based on similarity of home language, dialect and so on. This means that on the day of the task, they would be sitting in a comfortable, safe space where they could express themselves without fear of humiliation.

Consideration of all the variables of the LTT coupled with the stance, learning material and shifts' strands provided learner-friendly learning spaces in which students accessed knowledge on their own terms at their own pace. Indigenous words were used, translated to English and vice versa. Positive learning outcomes were recorded as tasks were completed and understanding was confirmed through positive feedback. While the shifts aspect in the original theory could pause challenges of disrupting linear class time, the Learning Context Variable in the LTT paradigm offers an opportunity to plan translanguaging learning sessions and to create translanguagable contexts. Not every learning session, topic and field will yield to translanguaging. However, stance, creativity and innovation are key in seeking translanguaging spaces and creating content that suits snugly the context of the learner. The irony of translanguaging is that there may be resistance to using multiple linguistic repertoires to clarify content in class but when students achieve pass marks, methodology used is not an issue. The activities outlined above are in line with Madiba's (2014) strategy of bringing the academic lexicon into indigenous

languages. Consequently, using multilingual glossaries in learning spaces not only develops indigenous languages, but it also facilitates learning.

Challenges in Operationalizing Translanguaging

In order to address the inevitable disconnect that occurs between home language and language of instruction, we designed classroom activities that utilise both languages as a way of operationalising translanguaging in the ESP classroom.

When structured systematically and contextually, translanguaging can facilitate epistemological access by overturning the dominant paradigm of English as the standard. In addition, solid identities are created when home languages are elevated as tools of opening knowledge spaces (Childs 2016; Heugh 2015; Garcia & Wei 2015). It is important to note that both covert and overt curriculum practices can disempower or empower students. Therefore, the group discussions on writing practice sought the active involvement of learners in the learning process. The learners had the responsibility of not only understanding the concepts discussed but also making other group members do so. This responsibility allowed learners to feel more confident about their contribution.

Further, the discussions allowed interaction with learning material and with fellow learners at a group level. During the feedback sessions in a whole-class activity, learners were more confident in their participation as they felt they were representing their group. Translanguaging strengthened learners' confidence as they switched from one language to another and from one learning approach to another and their contributions were translated and interpreted to the dominant medium of instruction by other learners and by the instructor. This multiplied the voice of instruction in the class as learners also had the responsibility of explaining content in the class. Those learners who were competent in English but not necessarily knowledgeable in the content being discussed in class also benefited immensely from the contributions they were often called upon to translate into English.

The discussions also encouraged brainstorming and note-making in both the students' L1s and English, which was anticipated as a means to improve access to content and learner interest in the content. The strength of brainstorming lies in its provision of an unrestricted exploration of ideas for creativity and innovation by individuals and groups. We also encouraged

student-made multilingual vocabulary note books. These, when implemented alongside other academic processes like research and extensive reading, have a positive effect on learning (Centenario 2013).

Despite its emancipatory nature and positively disruptive to hegemonies conceptual frame, translanguaging has inherent tensions when operationalised. Specific strategies should be taken into cognizance and adhered to in instructional design and delivery, especially where large numbers are concerned. Class management, fragmentation of topics and proximity to student task execution are some of the demands that we had to grapple with. As observed in the practical sessions, appreciation of the home language can positively lead to understanding of the English language, a fundamental issue in multilingualism as discussed by Cummins (1979).

Conclusion

This paper set out to explore translanguaging theory as a foundational pedagogy that has the potential of disrupting language and knowledge hegemonies for epistemic access in multilingual spaces such as are found in South Africa. As indicated by the ESP Translanguaging Experiment, translanguaging presented students with a novel experience of savouring the learning experience: freedom to engage with peers, content and instructor. The rigid classroom atmosphere, known in monolingual scripted curricula, resulting in tense students, was completely erased by the comfortable, humane and communal atmosphere of dialogic, cooperative and communicative language learning aided by translanguaging. Foundation students enjoyed the autonomy and flexibility to use their languages in productive ways while accessing new knowledge. Critical thinking and versatility are some of the key skills that were nurtured through translanguaging in the ESP TEX.

As observed in the experimental activities, acknowledging the students' full linguistic repertoire as a resource allows them to externally leverage their language repertoire in its entirety. No features are suppressed out of fear of ridicule by peers. The two or three languages known are consciously activated and allowed to systematically interface and work together to make sense of new knowledges. Multilingual students think and perform better when they feel that their home languages are not being judged as inferior in the classroom. In practice, translanguaging gives voice to students. For foundation students who tend to be patronised by the mainstream

students implying that they are slow or not competent enough, translanguaging is the crutch they need to lean on as they navigate the university terrain attempting to access knowledge in various disciplines for their own academic success. We acknowledge that sites of education are sites of controversy as well as legitimate struggle for decolonisation and transformation. However, it is through subversion that the voices of the marginalised can be heard. Therefore, through translanguaging, learners' plural identities and humanity are embraced and positive learning outcomes are achieved. Most importantly, foundation learners are free to use their complete linguistic repertoire to access knowledge without prejudice.

References

- Ab Rahman, H., A. Nordin, M. Isa, F. Puteh, F. Muhammad, N. Abd Majid, A.A. Khalid, S.F. Bahari, H.S Tumin & Z. Zakariya 2005. Teachers' Competency in the Teaching of Mathematics in English in Malaysian Secondary Schools. *The Mathematics Education into the 21st Century Project: Reform, Revolution and Paradigm Shifts in Mathematics Education*. Malaysia: Universiti Teknologi Malaysia.
- Alexander, N. 2004. The Politics of Language Planning in Post-apartheid South Africa. *Language Problems & Language Planning* 28, 2: 113 130. Amsterdam: John Benjamins Publishing Company. Available at: https://www0.sun.ac.za/taalsentrum/assets/files/Alexander%20Lang%20Planning%20in%20Post-Apartheid%20SA.pdf. (Accessed on 15 October 2018.) https://doi.org/10.1075/lplp.28.2.02ale
- Alexander, R. 2008. Education for All, the Quality Imperative and the Problem of Pedagogy. *CREATE Research Monograph* 20:1 60. Available at: http://www.create-rpc.org/pdf documents/PTA20.pdf. (Accessed on 20 February 2019.)
- Ball, A. 2005. US and South African Teachers' Developing Perspectives on Language and Literacy: Changing Domestic and International Roles of Linguistic Gate-keepers. In Makoni, S., G. Smitherman, A. Ball and A.K Spears (eds.): *Black Linguistics*. London: Routledge Publications.
- Bamgbose, A. 2000. *Language and Exclusion: The Consequences of Language Policies in Africa*. London: Transaction Publishers.
- Benson, C. 2005. *Girls, Education Equity and Mother Tongue-based Teaching*. UNESCO: Bangkok.

- Biseth, N. 2005. Language in Education Influenced by Global Trends South African Experiences. Paper presented at the TETREED Conference at Beistolen 5 7 December 2005.
- Bloch, G. 2009. The Toxic Mix: What's Wrong with South Africa's Schools and How to Fix it. Cape Town: Tafelberg.
- Blommaert, J. 2010. *The Sociolinguistics of Globalisation*. Cambridge: Cambridge University Press.
- Bozalek, V. & C. Boughey 2012. (Mis)framing Higher Education in South Africa. *Social Policy and Administration* 46, 6: 688 703. Available at: https://doi.org/10.1111/j.1467-9515.2012.00863.x. (Accessed on 12 November 2018.)
- Canagarajah, S. 2011. Codemeshing in Academic Writing: Identifying Teachable Strategies of Translanguaging. *Modern Language Journal* 95:401 417. https://doi.org/10.1111/j.1540-4781.2011.01207.x
- Centenario, L.L. 2013. *Vocabulary Notebooks: A Tool to Enhance Memory or a Memories Notebook?* Masters Thesis, Universidad Pública de Navarra.
- Childs, M. 2016. Reflecting on Translanguaging in Multilingual Classrooms: Harnessing the Power of Poetry and Photography. *Educational Research for Social Change* 5, 1: 22 40. Available at:

 http://grap.prepry.co.graphy.co.
 - http://ersc.nmmu.ac.za/articles/ERSC_Vol_5_No_1_Childs_pp_22_to_4_0_April_2016.pdf. (Accessed 20 January 2018.) https://doi.org/10.17159/2221-4070/2016/v5i1a2
- Christie, P. 2008. *Opening the Doors of Learning. Changing Schools in South Africa*. Johannesburg: Heinemann.
- Council for Higher Education 2001. *Language Policy Framework for South African Higher Education*. Pretoria: Government Printers.
- Council for Higher Education 2013. A Proposal for Undergraduate Curriculum Reform in South Africa. The Case for a Flexible Curriculum Structure. Pretoria: Government Printers.
- Cross, M. 2007. Access to Campus or Access to Knowledge? The Challenge of Higher Education Transformation in South Africa. Paper presented at the IIEP, Paris 24 May 2007.
- Cummins, J. 2007. Biliteracy, Empowerment, and Transformative Pedagogy. [J. Cummins ESL and Second Language Learning Web]. Available at: http://www.iteachilearn.com/cummins/biliteratempowerment.html. (Accessed on 10 December 2008.) https://doi.org/10.21832/9781853596773

- Cummins, J. 2000. *Language, Power and Pedagogy: Bilingual Children in the Crossfire*. Toronto: Multilingual Matters Ltd.
- Dhunpath, R. & R. Vithal 2014. Alternative Access to Higher Education. Underprepared Students or Underprepared Institutions? Cape Town: Pearson Education South Africa (PTY) Ltd.
- du Plooy, L. & M. Zilindile 2014. Problematising the Concept of Epistemological Access with Regard to Foundation Phase Education towards Quality Schooling. *South African Journal of Childhood Education* 4, 1: 187 201. https://doi.org/10.4102/sajce.v4i1.51
- Garcia, O. 2009. *Bilingual Education in the 21st Century: A Global Perspective*. Malden, MA: Wiley/Blackwell.
- Garcia, O. 2011. From Language Garden to Sustainable Languaging: Bilingual Education in a Global World. *Perspectives* 34, 1: 5 9.
- Garcia, O. & L Wei 2014. *Translanguaging: Language, Bilingualism and Education*. London: Palgrave Pivot. https://doi.org/10.1057/9781137385765 4
- Garraway, J. W. 2017. Participatory Parity and Epistemological Access in the Extended Curriculum Programmes. *Education as Change* 21 2: 109 125. Available at: http://www.scielo.org.za/pdf/eac/v21n2/07.pdf (Accessed 17 October 2018.) https://doi.org/10.17159/1947-9417/2017/2008
- Hammett, D. 2008. Disrespecting Teacher: The Decline in Social Standing of Teachers in Cape Town, South Africa. *International Journal of Educational Development* 28, 3: 340 347. https://doi.org/10.1016/j.ijedudev.2007.05.007
- Harris, F. 2014. An Assessment of the Extended Curriculum Programme at a University of Technology Using Quality Management Principles. Masters Thesis. Faculty of Engineering, Cape Peninsula University of Technology.
- Heller, M. 1999. Linguistic Minorities and Modernity: A Sociolinguistic Ethnography. London: Longman.
- Heugh, K. 2015. Epistemologies in Multilingual Education: Translanguaging and Genre Companions in Conversation with Policy and Practice. *Language and Education* 29, 3: 280 285. Available at: https://doi.org/10.1080/09500782.2014.994529 (Accessed 12 August 2018.)
- Hornberger, N. & H. Link. 2012. Translanguaging and Transnational Literacies in Multilingual Classrooms: A Biliteracy Lens. *International*

- *Journal of Bilingual Education and Bilingualism* 15: 261 278. https://doi.org/10.1080/13670050.2012.658016
- Hurst E., M. Madiba & S. Morreira 2017. Surfacing and Valuing Students' Linguistic Resources in an English-Dominant University. In Palfreyman, D.M. & C. van der Walt (eds.): *Academic Biliteracies: Multilingual Repertoires in Higher Education*. Bristol: Multilingual Matters. https://doi.org/10.21832/9781783097425-007
- Julius, C. 2017. Nursing Students' Perceptions of an Extended Undergraduate Curriculum Programme within a Higher Education Institution in the Western Cape Province. Masters Thesis. Faculty of Medicine and Health Sciences, Stellenbosch University, South Africa.
- Krashen, S. & C.L. Brown 2007. What is Academic Language Proficiency? *Language & Communication Review* 6, 1: 1 - 4. Available at:_ https://files.eric.ed.gov/fulltext/ED505950.pdf (Accessed 16 October 2018.)
- Krashen, S. 2003. *Explorations in Language Acquisition and Use: The Taipei Lectures*. Portsmouth, NH: Heinemann.
- Lafon, M. 2008. African Languages for All, a Powerful Strategy for Spearheading Transformation and Improvement of the South African Education System. IFAS Working Paper.
- Lange, L. 2017. 20 Years of Higher Education Curriculum Policy in South Africa. *Journal of Education* 68: 31 58. Available at:

 http://www.scielo.org.za/pdf/jed/n68/04.pdf. (Accessed 20 January 2019.)
- Language in Education Policy 1997. Available at:

https://www.education.gov.za/Portals/0/

<u>Documents/Policies/GET/LanguageEducationPolicy1997.pdf?ver=2007-</u>08-22-083918-000. (Accessed on 27 August 2017.)

Language Policy for Higher Education 2002.

http://www.dhet.gov.za/Management-Support/Language-Policy-for-Higher-Education.pdf (Accessed 20 August 2017.)

Liccardo, S., H. Botsis & Y. Dominguez-Whitehead. 2015. Background Knowledge and Epistemological Access: Challenges Facing Black Women in a Set Scholarship Programme. *South African Journal of Higher Education* 29, 11: 373 - 389. Available at:

https://pdfs.semanticscholar.org/5879/6ac64670b794d48e80e64fbdb8c2bdd79deb.pdf. (Accessed on 20 January 2019.)

- Lolwana, P. 2005. Where to with Matric? *Matric: What is to Be Done?*Umalusi Seminar Series 64-74. Available at:
 https://www.umalusi.org.za/docs/assurance/2005/matric.pdf.

 (Accessed March 2019.)
- Madiba, M. 2014. Promoting Concept Literacy through Multilingual Glossaries: A Translanguaging Approach. *Linguistics and Education* 24, 4: 385 395. Available at: http://dx.doi.org/10.1016/j.linged.2013.09.002. (Accessed 25 January 2019.)
- Maforah, T.P. & S. Schulze 2012. The Job Satisfaction of Principals of Previously Disadvantaged Schools: New Light on an Old Issue. *South African Journal of Education* 32, 3: 227 239. Available at:

 http://www.scielo.org.za/scielo.php?script=sci_abstract&pid=S0256-01002012000300001&lng=en&nrm=iso. (Accessed on 3 February 2019.)
- Magwa, W. 2015. Attitudes towards the Use of Indigenous African Languages as Languages of Instruction in Education: A Case of Zimbabwe. *Journal of Education Policy and Entrepreneurial Research* (JEPER) 2, 1:1 16. Available at:_
 - https://pdfs.semanticscholar.org/f155/b29f5f86c104bc2ce6c5b47b36deb 88440f6.pdf. (Accessed on 23 September 2018.)
- Makalela, L. 2013. Translanguaging in kasi-taal: Rethinking Old Language Boundaries for New Language Planning. *Stellenbosch Papers in Linguistics Plus* 42: 111-125. Available at:

 http://siteseers.ict.new.edu/viewdee/deursleed2dei=10.1.1.004.2071.8reen
 - http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.904.3971&rep =rep1&type=pdf. (Accessed 12 January 2019.) https://doi.org/10.5842/42-0-164
- Makalela, L. 2015. Translanguaging as a Vehicle for Epistemic Access: Cases for Reading Comprehension and Multilingual Interactions. *Per Linguam: A Journal for Language Learning* 31, 1: 15 29. Available at:

 http://perlinguam.journals.ac.za/pub/article/view/628. (Accessed on 12 January 2019.)

 https://doi.org/10.5785/31-1-628
- McKay, B. D. 2014. Learning Support to Grade 4 Learners who Experience Barriers to English as Language of Learning and Teaching. Thesis: University of South Africa, Pretoria.
- Morrow, W. 2007. *Bounds of Democracy: Learning to Teach in South Africa*. Cape Town: HSRC Press.
- Nel, N. & H. Müller 2010. The Impact of Teachers' Limited English Proficien-

- cy on English Second Language Learners in South African Schools. *South African Journal of Education* 30, 4: 635 650. Available at: https://www.scielo.org.za/scielo.php?script=sci_arttext&pid=S0256-01002010000400009. (Accessed on 2 January 2019.) https://doi.org/10.15700/saje.v30n4a393
- Omoniyi, T. 1999. Bilingualism, Biliteracy, Classrooms and Identity Politics in Sub-Saharan Africa. *Opinion Papers* (120). U.S. Department of Education, Educational Resources Information Center (ERIC).
- Paxton, M. 2007. Students' Interim Literacies as a Dynamic Resource for Teaching and Transformation. *South African Journal of Applied Language Studies (SAJALS)* 5, 1: 1 12. Available at:

 https://www.tondfonline.com/doi/pdf/10/2080/160736107004864452page
 - https://www.tandfonline.com/doi/pdf/10.2989/16073610709486445?nee dAccess=true. (Accessed 12 January 2019.) https://doi.org/10.2989/16073610709486445
- Pendlebury, S. 2009. Meaningful Access to Basic Education: The South African Child Gauge 2008/2009 Report. South Africa: Children's Institute.
- Portolés, L. & O. Martí 2017. Translanguaging as a Teaching Resource in Early Language Learning of English as an Additional Language (EAL). *Bellaterra Journal of Teaching & Learning Language & Literature* 10, 1: 61-77. Available at:
 - http://gruplaela.uji.es/sites/default/files/portoles%26marti_2017.pdf. (Accessed on 12 June 2019.) https://doi.org/10.5565/rev/jtl3.698
- RSA Department of Education 2001. Draft National Plan for Higher Education in South Africa. *Ministry of Education* (February). Available at: http://www.dhet.gov.za/HEDPolicies/National%2 (Accessed on 03 March 2014.)
- Savage, B. L. & H. Z. Hughes 2014. How does Short-term Foreign Language Immersion Stimulate Language Learning? *Frontiers: The Interdisciplinary Journal of Study Abroad* 24: 103 120. Available at: https://files.eric.ed.gov/fulltext/EJ1062133.pdf (Accessed on 29 January 2019.)
- Schwartz, N.A. 2009. *Air Force Culture, Region, and Language Flight Plan.* Washington, DC: United States Air Force.
- Tamtam, A., F. Gallagher, S. Naher & A. Olabi 2013. The Impact of Language of Instruction on Quality of Science and Engineering Education in Libya: Qualitative Study of Faculty Members. *European*

Scientific Journal 9, 31: 19 - 36. Available at: http://eujournal.org/index.php/esj/article/view/2045. (Accessed on 20 August 2017.)

Theron, L. & M. Nel 2005. The Needs and Perceptions of South African Grade 4 Educators, Teaching English Second-language (ESL) Learners. *Africa Education Review* 2, 2: 221 - 241.

https://doi.org/10.1080/18146620508566302

Zhou, S. & N. Landa 2018. Dialogic Communication: Reviving Mathematics and Science Pedagogy for the 21st Century. *The Social Sciences: Medwell Journal* 13, 6: 1133 - 1141. Available at:

http://docsdrive.com/pdfs/medwelljournals/sscience/2018/1133-1141.pdf. (Accessed 13 January 2019.)

Sindiso Zhou English and Comparative Studies University of Fort Hare szhou@ufh.ac.za

> Nhlanhla Landa English Department University of Fort Hare nlanda@ufh.ac.za

Contributors

Dr. Moeain Arend's research interest is literacy in various social contexts, specifically looking at the effects that texts carry when they travel across contexts. Arend is a lecturer, Language Development Group, ADP, CHED, University of Cape Town. Contact details: moeain.arend@uct.ac.za

Professor Vivienne Bozalek is the Director of Teaching and Learning at the University of the Western Cape (UWC), South Africa. Prior to this she was Chairperson of the Department of Social Work, University of Western Cape. She holds a PhD from Utrecht University. Her areas of research, publications and expertise include the use of social justice and the political ethics of care perspectives, innovative pedagogical approaches in Higher Education, feminist and participatory research methodologies, posthumanism, feminist new materialist and critical family studies. Contact details: vbozalek@gmail.com

Delphi Carstens is an ECP lecturer with an interest in applying new materialist and Deleuzian cartographical methods to pedagogy. He holds a PhD in apocalypse (Anthropocene/Capitalocene) culture, Deleuze-Guattarian schizoanalytic theory and uncanny science fictions from Stellenbosch University and has published widely; most recently in Parallax vol 24(3). Contact details: carstensdelphi@gmail.com

Honjiswa Conana is the Teaching and Learning Specialist in the Faculty of Natural Sciences, University of the Western Cape. Her role is to support teaching and learning initiatives in the Faculty. Her research interests lie in Physics education and academic literacies. Contact details:

cconana@uwc.ac.za

Karen Ellery has higher degrees in both science and education. She joined the Extended Studies Unit of Rhodes University at the beginning of 2010, having

Contributors

previously worked in student academic development at the University of Witwatersrand and the University of KwaZulu-Natal for over 12 years. She teaches in the Integrated Science Concepts and Methods (ISCM) course and coordinates the Science Extended Studies Programme (SESP). Her research focuses broadly on student learning in the higher education context, and more particularly on epistemological access in the sciences. Contact details: k.ellery@ru.ac.za

James Garraway is currently an adjunct professor in PERI. His current research is into Change Laboratories as a boundary mechanism between university and work/society. Previously he was the CPUT institutional extended curriculum coordinator. Contact details: garrawayj@cput.ac.za

Dr. Aditi Hunma's research interests include the role of performative learning spaces in promoting academic literacies. Hunma is based in the Language Development Group within the Centre for Higher Education Development at the University of Cape Town, and teaches on the academic and research literacy courses. Contact details: aditi.hunma@uct.ac.za

Dr. Catherine Hutchings current research interests include a focus on the creation of accessible learning spaces in the teaching of academic literacies at undergraduate levels, and research writing at postgraduate levels, and in doing so, the allowances that different genres can offer in these spaces. Hutchings is a lecturer, Language Development Group, ADP, CHED, University of Cape Town. Contact details: catherine.hutchings@uct.ac.za

Corinne Knowles is a lecturer in the humanities Extended Studies (ES) Programme at Rhodes University. Formerly chair of the Women's Academic Solidarity Association at Rhodes, and active member of various progressive staff collectives over the years, she is a gender and social justice activist. Ms Knowles co-ordinates the TAI mentoring programme for ES humanities students and maintains mentoring relationships with many past and present students. She teaches courses on African feminism, Butler's performance theory, and provides academic support for Politics and Sociology first year students. She is currently reading towards a PhD degree which considers the relevance of the university from students' perspectives. Before entering academia 10 years ago, Ms Knowles was a high school teacher, an NGO

practitioner and fundraiser. She continues to be involved in NGOs in Makhanda. Ms Knowles has published a book of poetry and has written an award-winning play. Contact details: c.knowles@ru.ac.za

Dr. Nhlanhla Landa is in the Department of English at the University of Fort Hare. His research interests include multilingualism, language and politics, gender justice, as well as onomastics. Dr Landa teaches courses in Applied Linguistics. Landa also trains on research and writing for publication. Contact details: nlanda@ufh.ac.za

Associate Professor Kathy Luckett is the Director of the Humanities Education Development Unit, University of Cape Town. She teaches on the School of Education's Masters in Higher Education Studies. Her research interests are: sociology of knowledge and curriculum studies with a focus on the Humanities, Africana, decolonial and postcolonial studies, discourse analysis using systemic functional linguistics, research methods with a focus on applying social/critical realism to educational evaluation. Contact details:

Kathy.luckett@uct.ac.za

Delia Marshall is a Professor in the Physics and Astronomy Department at the University of the Western Cape. She researches Physics education, higher education and academic development. She teaches undergraduate physics courses, both in mainstream and extended programmes. Contact details: dmarshall@uwc.ac.za

Billy Meyer was educated at Rhodes and the University of Natal with a Phd in Biblical Studies. He has taught on the Pietermaritzburg Campus in both New Testament and English for Academic Purposes. He is currently reading for a Masters at UCT researching integrated literacy pedagogy in his own practice. Contact details: Meyerw@ukzn.ac.za

Shannon Morreira is an academic in the Humanities Education Development Unit at UCT, where she teaches an introductory course in the social sciences for students on the Humanities Extended Degree. She has a PhD in Social Anthropology, with research interests and publications in the areas of the anthropology of knowledge; higher education; and teaching and learning. Contact details: Shannon.morreira@uct.ac.za

Contributors

Naomi Msusa is a Test Administrator with the Centre for Educational Testing for Access and Placement (CETAP) of the University of Cape Town (UCT), South Africa. She holds a PhD from UCT. Her research includes assessment for admission and placement in Higher Education, and the contribution of these assessment practices to teaching and learning in the foundation phase. Contact details: naomi.msusa@uct.ac.za

Dr. Gideon Nomdo's research interests are in the area of black student identity and issues related to student access, equity and transformation in higher education. Nomdo is a lecturer, Language Development Group, ADP, CHED, University of Cape Town. Contact details: gideon.nomdo@uct.ac.za

Nike Romano is a visual artist and a lecturer in History of Art and Design at the Cape Peninsula University of Technology. Her PhD research focuses on Reconfiguring a history of art and design curriculum through affective critical arts-based pedagogical encounters. Contact details: romanon@cput.ac.za

Dr. Sean Samson's research interests include the representation of marginalised communities in post-apartheid media and, more recently, the relationship between writing, knowledge making and social justice. Samson is a lecturer, Language Development Group, ADP, CHED, University of Cape Town. Contact details: sp.samson@uct.ac.za

Deon Solomons is a lecturer in the Department of Mathematics and Applied Mathematics in the Faculty of Natural Sciences at the University of the Western Cape. He teaches second year mathematics and honours modules. His research focus is in Differential Geometry and Gravitation. He is passionate about teaching and learning at undergraduate level, and is involved in research on student performance in mathematics at second year level, especially in their transition from first to second and from second to third year modules. Contact details: deosolomons@uwc.ac.za

Sindiso Zhou's research interests are in the fields of language contact, language pedagogy, multilingualism, translanguaging, academic research and writing, as well as discourses on gender justice. In addition to training on research and mentorship, she is currently engaged in research into sociolinguistic influences on urban lives. Contact details: szhou@ufh.ac.za

Alternation

Guidelines for Contributors

Manuscripts must be submitted in English (UK). If quotations from other languages appear in the manuscript, place the original in a footnote and a dynamic-equivalent translation in the body of the text or both in the text.

Contributors must submit one computer-generated copy of the manuscript to the editor(s). The computer-generated copy must be in Word for Windows, and must have an Abstract and Keywords. It must also be submitted in the Alternation style.

Manuscripts should range between 5000-10000 and book reviews between 800-1200 words. However, longer articles may be considered for publication.

Attach a cover page containing the following information: The corresponding author's full name, address, e-mail address, position, department, university/ institution, and telephone/ fax numbers. A brief summary of the biodate of all authors must be attached too.

Maps, diagrams and posters must be presented in print-ready form. Clear black and white or colour digitised photos (postcard size) or diagrams in pdf or jpeg may also be submitted.

Use footnotes sparingly. In order to enhance the value of the interaction between notes and text, we use footnotes and not endnotes.

Authors may use their own numbering systems in the manuscript.

Except for bibliographical references, abbreviations must include full stops. The abbreviations (e.a.) = 'emphasis added'; (e.i.o.) = 'emphasis in original'; (i.a.) or [...] = 'insertion added' may be used.

The full bibliographical details of sources are provided only once at the end of the manuscript under **References**. References in the body of the manuscript should follow the following convention: Mkhize (2017:14) argues or, at the end of a reference/quotation: (Ngwenya 2017:20f).

The surname and initials of authors as these appears in the source must be used in the **References** section. Review articles and book reviews must include a title as well as the following information concerning the book reviewed: title, author, place of publication, publisher, date of publication, number of pages and the ISBN number. In the text as well as the **References**, all book, journal, newspaper and magazine titles must be in italics.

The format for the References section is as follows:

Journal article by one author

Fulela, B. 2008. Checking the Post: Derrida and the Apartheid Debate. *Alternation* 15,2: 11 – 37. Available at: http://alternation.ukzn.ac.za/Files/docs/15.2/02%20Fulela.pdf. (Accessed on 08 May 2017.)

Journal article by two authors

Mkhize, N. & N. Ndimande-Hlongwa 2014. African Languages, Indigenous Knowledge Systems (IKS), and the Transformation of the Humanities and Social Sciences in Higher Education. *Alternation* 21,2: 10 – 37. Available at: http://alternation.ukzn.ac.za/Files/docs/21.2/02%20Mkh.pdf. (Accessed on 08 May 2017.)

Book by one author

Moran, S. 2009. Representing Bushmen: South Africa and the Origin of Language. Rochester: University of Rochester Press. (Rochester Studies in African History and the Diaspora, Book 38.)

Book by one editor

Smit, J.A. (ed.) 1999. Body, Identity, Sub-cultures and Repression in Texts from Africa. Durban: CSSALL.

Book by two editors

Dhunpath, R. & R. Vithal (eds.) 2012. Alternative Access to Higher Education: Underprepared Students or Underprepared Institutions? Cape Town: Pearson Publishers.

Chapter in an edited book

Smit, J.A. & J. van Wyk 2001. Literary Studies in Post-apartheid South Africa. In Zegeye, A. & R. Kriger (eds.): *Culture in the New South Africa after Apartheid*. Volume 2. Cape Town: Kwela Books & History on Line.

Translated book

Foucault, M. 1977. Discipline and Punish. Sheridan, A. (trans.). New York: Pantheon.

Online resource

Jansen, J. & P. Vale (Co-chairs.) 2011. Consensus Study on the State of the Humanities in South Africa: Status, Prospects and Strategies. Pretoria: Academy of Science of South Africa (ASSAf). Available at: https://www.assaf.org.za/files/2011/09/2011-Humanity-final-proof-11-August-2011.pdf. (Accessed on 08 May 2017.)

Alternation Volume 26, Number 2, 2019 Print ISSN 1023-1757; Electronic ISSN 2519-5476

Interdisciplinary Journal for the Study of the Arts and Humanities in Southern Africa

ARTICLES

| James Garraway and Vivienne Bozalek Editorial: Reconfiguring Foundational | |
|--|-----|
| Pedagogies through Theoretical Frameworks | 1 |
| James Garraway and Vivienne Bozalek Theoretical Frameworks and the | |
| Extended Curriculum Programme | 8 |
| Kathy Luckett A Critical Self-reflection on Theorising Education Development as | |
| 'Epistemological Access' to 'Powerful Knowledge' | 36 |
| Nike Romano Just(ice) Do It! Re-membering the Past through co-Affective | |
| Aesthetic Encounters with Art/ History | 62 |
| Aditi Hunma, Moeain Arend, Gideon Nomdo, Catherine Hutchings, and | |
| Sean Samson Revisiting Writer Identities in Discomforting Spaces: | |
| The Envisioned Self in Writing | 89 |
| Corinne Knowles Access or Set Up? A Critical Race Feminist, Black | |
| Consciousness, and African Feminist perspective on Foundation Studies in | |
| South Africa | |
| Delphi Carstens New Materialist Perspectives for Pedagogies in Times of Movement | t, |
| Crisis and Change | 138 |
| Shannon Morreira Disruption by Curriculum Design: Using Steve Biko's | |
| I Write What I Like as a Tool for Participatory Parity in post-Apartheid | |
| Higher Education | 161 |
| Honjiswa Conana, Delia Marshall and Deon Solomons Supporting Student | |
| Learning in Foundation Programmes and Beyond: Using Legitimation Code | |
| Theory as a Theoretical Lens to Think about Transition | 183 |
| Karen Ellery Congruence in Knowledge and Knower Codes: The Challenge of | |
| Enabling Learner Autonomy in a Science Foundation Course | 213 |
| Billy Meyer What is a Gospel? Reflections on Developing an Integrated Literacy | |
| Lesson Cycle in a First Year Tertiary Module Using Legitimation Code Theory | 240 |
| Naomi Msusa Semantic Waves: Writer Performance Ranges on the | |
| National Benchmark Tests (NBT) Academic Literacy Test | 267 |
| Sindiso Zhou and Nhlanhla Landa Translanguaging as Foundational | |
| Pedagogy: Disrupting Hegemonies for Academic Access in Multilingual Spaces | 290 |
| Contributors | 311 |

PRINT CONNECTION Tel (031) 202-7766; 202-7766