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POSTCOLONIAL PERSPECTIVES IN GAME STUDIES

Decolonising the Games Curriculum: Interventions in an Introductory Game Design Course

Hanli Geyser

Digital Arts, University of the Witwatersrand, Johannesburg, ZA

hanli.geyser@wits.ac.za

Games face a crisis of diversity in both their content and in the industry itself. The inequalities that underlie these issues are heightened in the Global South. Addressing these issues will require a systemic decolonisation of games education in which future generations of industry professionals become critically engaged in their creative practice. Decolonisation requires the investigation and reconstruction of the ways knowledge is created and produced. To enable this, the curricula employed in teaching games requires close investigation and intervention. The difficulties of enabling access to knowledge when teaching games are exacerbated when seen in light of the need for decolonisation. Situated in a South African context, this article investigates the first-year core course 'Key Concepts in Game Design' offered at the University of the Witwatersrand in Johannesburg. It outlines the challenges games education faces in South Africa and takes stock of the state of the course and of the perceptions of students enrolled in it. It demonstrates that the course curriculum requires increased Africanisation and the establishment of common play practices. Finally, it highlights the importance of focusing on the development of critical game literacies as part of the decolonising project.

Introduction

A lack of diversity in games is evident both in the content of existing games and the workforce that is creating them (Hall, 2015; Ramanan, 2017). This can be observed in the representation of gender, race, culture, economic position and geographic location in many commercial games (Dickerman, Christensen & Kerl-McClain, 2008; Everett & Watkins, 2008; Williams *et al.*, 2009; Burgess *et al.*, 2011; Shaw, 2012). This concern has enjoyed ever-increasing academic study and public debate, but the systemic depth of the issue remains. Games education may perpetuate this problem, moreover, by being deeply embedded with discourse from the Global North. Like games themselves, games education needs to be decolonised. The question, then, is how do we, as games educators, respond to these needs and impact and shape the narrative of the industry to come?

This article argues that a systemic decolonisation of our teaching practice can have a fundamental impact by increasing diversity within games. The field's pedagogic methodologies should be examined as much as its core disciplines of game studies and game design—the ways we teach should be interrogated alongside the content of our courses. The teaching methodologies for game design that are emerging should be critically addressed both from within the greater fields of game studies and game design; and from within curricular studies and pedagogy. This article examines pedagogic interventions undertaken to encourage the diversification and decolonisation of the curriculum in the first year introductory course of the Game Design program at the University of the Witwatersrand (Wits) in Johannesburg, South Africa. These interventions aim to encourage more socially aware game design practice and the creation of more diverse games. They also aim to create a safe space for disempowered groups to participate in the field.

The lack of diversity in games is an international problem, but in the Global South, where the field is very young and the socio-economic terrain uneven, the inequalities that underlie these issues are heightened. This study focuses on a South African context, but it can still shed light on approaches that could be internationally applicable to the inclusive teaching of game design. The situation of higher education

in South Africa is precarious, with continuing student protests focusing the nation's attention on the systemic inequalities in the education sector (Habib, 2015, 2016; Hodes, 2017; Langa, 2017). The protests are best known for highlighting issues of financial access, but they also encompass far-reaching issues of transformation and diversity (#FeesMustFall, 2015). The transformation of curricula, which the South African Department of Education has always emphasised, has now become imperative (South African Department of Education, 2003; Habib, 2015; Prinsloo, 2016).

Another factor complicating this matter in relation to game design is that the accessibility of technology fields in South Africa is skewed not only across an entrenched gender divide, but also across racial and economic divides. This has far-reaching implications for the games industry in South Africa, which is overwhelmingly dominated by white males (Hall, 2015). Games are seen as a luxury, with the vast potential they present obscured by the assumption that they belong to an elite upper class (Walton & Pallitt, 2012). This perception is compounded by the severe socio-economic difficulties of entering the fledgeling industry. In this article, I argue that one of the fundamental ways to address this issue is through the creation of inclusive game design education environments and curricula to prepare a more diverse and critically engaged new generation of industry professionals.

Decolonisation requires a self-aware reflection on our participation in the field and as a researcher I occupy a space fraught with complexities and ambiguities. When investigating the process of the decolonisation of a games curriculum, attention should be given to the intersecting systems of the institutions of higher education, the socio-economic implications, and epistemological access to the field. As curriculum designer, lecturer and administrator I am immersed in the systems of the institution. As a middle-class white woman in South Africa, I am socio-economically privileged. As a lifelong gamer I am embedded in the practices of play. And as an academic, I think in the discourse of the field of study. The project here is to investigate the means of decolonisation through reflection from both inside and outside of these systems, which demands an active acknowledgement of the multivalent, intersecting issues of my own positionality as author.

The South African milieu necessitates an approach to teaching game design that lowers intimidation levels experienced through the demands of a high technology environment. In my introductory course 'Key Concepts in Game Design', which is the focus of this study, I therefore introduce students to game analysis, design and development through analogue games as a strategy to bridge the technological divide and to establish game design as a discipline without the distractions of the digital. The usefulness of analogue games in the teaching of game design principles is well documented (Salen & Zimmerman, 2003; Brathwaite & Schreiber, 2008; Davidson & Costikyan, 2011). This approach is augmented through a focus on the abstraction of design principles and frequent comparisons to the systems of abstract analogue games, a genre firmly entrenched in much of South African culture (Binsbergen, 1997; Burnett & Hollander, 2004; Bogopa, 2012).

In this article, I investigate the course in order to determine the effectiveness of the initial approach. I also interrogate the interventions I designed to transform and diversify the curriculum. This takes the shape of a close investigation of the milieu, as well as an analysis of a series of surveys and curriculum transformation workshops held in the class. The article describes the interventions taken in both curriculum design and teaching methodology that stemmed from these discussions and critically reflects on their impact on the curriculum and reception by the students.

Decolonising the Curriculum in South Africa

The project of decolonisation extends far beyond mere calls for diversity. It is often approached on a reactive level in activities such as the analysis of representations of race, region and religion amongst others; the inclusion of work from disadvantaged groups into established canons; and the investigation of how diversity operates. While these activities are crucial to the project, the work of decolonisation extends much further, into the fabric of creative practice and knowledge production itself (Le Grange, 2016; Ramrathan, 2016; Hall & Tandon, 2017). Decolonisation is, at its core, the process of critically engaging with and actively redressing epistemicide, the systemic devaluation and eventual destruction of knowledge systems (Hall & Tandon, 2017). Nigel Gibson refers to decolonisation as 'philosophic action grounded in material necessity, socially imagining and indeed trying to put into practice new

liberatory spaces as spaces of thought and action (alive with the contradictions)' (Gibson, 2016: 10).

Decolonisation requires the systematic investigation of the consumption and production of knowledge in order to achieve a recreation of the structures of knowledge themselves. Creative practice, including the making of games, is inherently a form of knowledge production, a position that is emphasised in decolonial theory. This is asserted by Budd Hall and Rajesh Tandon in their analysis of decolonisation as a 'Knowledge Democracy', which 'affirms that knowledge is both created and represented in multiple forms, including text, image, numbers, story, music, drama, poetry, ceremony and meditation' (Hall & Tandon, 2017: 13).

We need to acknowledge not only that systems of knowledge production act in repressive ways towards the subaltern populations of the Global South, but also that these modes are cyclical and become self-reinforcing in the work that is produced from within them. In game design, the privileging of knowledge from the North, combined with the need to appeal to a global market, drives the reproduction of 'international' themes in which creators produce work that mimics Northern styles, subjects and content. This can be seen in South African games like the popular *Broforce* by FreeLives (2013) and *Desktop Dungeons* by QCF Design (2011). The voice of those on the margins is self-censored; expressed only as echoing the language of the centre. A diversification of the South African gaming industry is thus desperately needed (Hall, 2015). However, that alone can only go so far if it keeps reproducing the same kinds of knowledge/games. Challenging this cyclical production is the work of feminism and decolonisation, which demands not only that the existing structures be interrogated, but that new knowledge be created.

The work of rebuilding ways of thinking, knowledge formation, and creative production often ironically falls to institutes of higher education, since one of the prime sites for colonialisation is in the format and assumptions of educational processes themselves. As Hall and Tandon explain:

> Those within the walls became knowers; those outside the walls became non-knowers. Knowledge was removed from the land and from the relationships of those sharing the land. The enclosing of the academy dispossessed the

> vast majority of knowledge keepers, forever relegating their knowledge to witchcraft, tradition, superstition, folkways or, at best, some form of common sense. We can see this separation of 'university knowledge' from other forms of knowledge in all of our communities to this day. (Hall & Tandon, 2017: 8)

The hierarchical relationships of knowledge that the academy reproduces reinforce the privileging of Western pedagogic modes, from styles of teacher/learner interaction to the competitive assessment methodologies used.

The transformation and decolonisation of education is an area that has received much attention in South Africa since the advent of democracy in 1994, with several legislative interventions taking place over the past two decades. Decolonising education is neither optional nor simply 'nice to do' within a South African context. It is an urgent need that must be addressed to ensure the stability and sustainability of the young democracy. Suellen Shay, Karin Wolff and Jenny Clarence-Fincham (2016) argue powerfully that the slow transformation in academia perpetuates social injustice and reinforces the historical disadvantage of vast swathes of the population. These concerns were echoed by South Africa's Minister of Higher Education and Training, Blade Nzimande, at the Higher Education Summit held in October 2015 when he called on universities to pay urgent attention to transformation and decolonisation (Nzimande, 2015).

The work of decolonisation is not yet permeating through the structures of higher education, but growing student protests have given the project added urgency. The student movements are known by a multitude of hashtag slogans. '#RhodesMustFall' originally referred to the statue of Cecil John Rhodes at the University of Cape Town, a symbol for the alienation that black students felt by being surrounded by artefacts of its colonial past within the institution. Most prominent in the media, however, was the umbrella slogan '#FeesMustFall' (FMF), the call to stop the annual university fees increases being implemented countrywide. In 2015 FMF, which originated at Wits, took shape as the rallying point nationally. The FMF call for 'free, quality, decolonised education', has been central to increasing the urgency of the decolonial project, highlighting the symbols and systems of the colonial educational machine, from the statue of Rhodes to unaffordable economic models.

Demands from across the movements centred on the economic models of higher education and the exclusionary ways in which they operate, but also included a reassessment of the language models, realignment of curricula to centre on Africa and the subaltern, linking research and teaching to social justice, and increasing academic support (Luckett, 2016). Despite the differences of the movements as they took shape across the country, Pontsho Pilane points out that:

> … all recent student-led movements are dedicated to transforming academia into a more inclusive space … EFF [Economic Freedom Front] Wits leader Vuyani Pambo … said, "We don't want to treat the symptoms, we want to decolonise the university – that is at the heart of the cause". (quoted in Le Grange, 2016: 2)

These imperatives are not new. As early as 1997 Malegapuru Makgoba wrote:

> Wits must realise that the cultural ethos which apparently served the institution so well in the past must change to accommodate other cultural values. The curricula have to change fundamentally as the University comes to terms with the reality that it is educating all South Africans in Africa. Africans, in particular, do not come to university to escape or erase their Africanness, but to confirm and articulate their roots. (quoted in Ramoupi & Ntongwe, 2016: 8)

Two decades later, the student protests have made it extremely clear that this decolonisation has not been done, or is being done too slowly. It is, however, dangerous to idealise FMF, for as much as it drew renewed attention to the imperatives of decolonised education, the increasing violence and political machinations over the course of 2015–2016 in many ways may undermine university and public support for the protests (Habib, 2016; Hodes, 2017).

For the call of 'free, quality decolonised education' to be realised, cognisance needs to be taken of the work that has come before this moment, with the successes and failures tallied to plot a new trajectory. In 2016, Petro du Preez, Shan Simmonds and Anné Verhoef conducted a meta-study of transformation in Higher

Education in South Africa. They report that '[f]our main patterns emerged in the findings: transformation through curriculum, transformation through structures, transformation through redressing equity and transformation through access' (du Preez, Simmonds & Verhoef, 2016: 5). These elements are intertwined and must all be addressed for decolonisation to take place. The structures of the national education system and our universities directly impact the access that students have to higher education. Equity in the classroom and the academic body stems from access to higher learning, and articulates into the curriculum as it is planned and lived. Decolonisation, therefore, requires interventions enabling epistemic access that reach from the socio-economic framework to the structure and content of curricula.

Teaching Games

The construction of a curriculum is not a neutral act. At its core, it defines what counts as, in Basil Bernstein's terms, valid knowledge (Bernstein qtd in Shay, Wolff & Clarence-Fincham, 2016). It therefore intrinsically and inescapably defines power relationships between forms of knowledge: what is worth knowing, and what is not. As a politicised act, designing a curriculum requires deep critical engagement with the designers' and instructors' gaze and positioning. Curriculum design must be a self-reflective practice. However, this self-reflective practice should extend beyond only the kinds of knowledge included; it also needs to address the ways knowledge is imparted. As Shay, Wolff and Clarence-Fincham (2016: 76) assert: 'Whatever else it may do, curricula must enable access to this knowledge—it must enable "epistemic access"'.

The difficulties of enabling access to knowledge when teaching games are visible in the extensive work on games education done by José Zagal and Amy Bruckman (Bruckman, 2007; Zagal & Bruckman, 2008; Zagal, 2008, 2010). Zagal and Bruckman differentiate between the difficulties faced by students who are experienced game players and those who are novices (Zagal & Bruckman, 2008). They find that experienced players often have '(1) difficulties stepping back from the role of "gamers", (2) problems articulating and describing gameplay, [and] (3) problems assuming different viewpoints and perspectives on games' (Zagal & Bruckman, 2008: 13). Students coming into games courses with extensive gameplay

experience, believing that they are already experts in the field, make little attempt to grapple with new ways of thought. Zagal and Bruckman find that 'in many ways, being expert video game players interferes with their abilities to step back from their role as "gamers" or "fans" and reason critically and analytically about the games they are studying or designing' (Bruckman, 2007: 7). On the other hand, prior experience can play a valuable role in learning, as it helps establish an engagement with the subject matter and provides students with a range of personal experiences from which to draw (Zagal & Bruckman, 2008). In their interviews, it also emerged that, because of their belief in their own superior knowledge, experienced players are more likely to challenge lecturers. These players are often highly skilled only in specific genres of gameplay. Novice players, on the other hand, struggle due to '(1) issues of accessibility to the medium, and (2) assumptions of prior gameplay experience on the part of course instructors' (Zagal & Bruckman, 2008: 13). While issues of technology compound this, gameplay itself often poses the core challenge: '[s]tudents who are unfamiliar with a particular game have to acquire and practice the skills necessary to be proficient at it. This entry barrier makes it harder to establish a common reference point for all the learners in a class' (Zagal & Bruckman, 2008: 10). To engage fully with a game takes large amounts of time, and sufficient player skill needs to be developed. Digital games with 40–90 hours of gameplay, often requiring high levels of player skill in the specific genre, become almost entirely unusable in a teaching scenario. Assumptions of prior experience in gameplay on the part of lecturers and other students also play a role. Even unconsciously, terms and phrases specific to games, and even genres of games, creep into the language used in a class environment.

Central to the project of teaching games is the development of what Zagal terms 'ludoliteracy' (Zagal, 2008, 2010). Following Gee, Zagal constructs games literacy as the ability to play, understand and make games. He breaks this down further and identifies *understanding* as:

> …having the ability to explain, discuss, describe, frame, situate, interpret, and/or position games:

1. in the context of human culture (games as a cultural artefacts),
2. in the context of other games (comparing games to other games, genres),
3. in the context of the technological platform on which they are executed,
4. and by deconstructing them and understanding their components, how they interact, and how they facilitate certain experiences in players. (Zagal, 2008: 34)

The complexity of facilitating games literacy in students, specifically when brought in line with the decolonial project, is critical, but is too vast to address here.

Additional difficulties also plague the teaching of creative practice. In highly specialised fields like Game Design, lecturers are often deeply immersed in discipline-specific ways of thinking. This can occur to such an extent that the modes of thought required to gain access to the knowledge become invisible to them, and are therefore not made explicit to students (Middendorf & Pace, 2004). When access to knowledge incorporates creative production, in this case the making of games, it becomes increasingly difficult. Joan Middendorf and David Pace argue for 'Decoding the Disciplines', a methodology for curriculum redesign that highlights assumed modes of thought alongside assumed knowledge of the field. The method requires a deconstruction of stumbling blocks students encounter in the curriculum in such a way that it forces lecturers to articulate their internalised ways of thinking and to build that consciously into the ways that they present the content (Middendorf & Pace, 2004).

This process could be enormously beneficial in the teaching of game design as propositional knowledge and procedural knowledge are often imbalanced. Propositional knowledge, the conceptual 'know-that', is required for critical engagement with procedural knowledge, the 'know-how' of a discipline; but many courses focus on one at the expense of the other (Shay, Wolff & Clarence-Fincham, 2016). This is exacerbated when naturalised discourse in propositional knowledge on the part of lecturers elides explicit modelling of the necessary procedural ways of thinking in a discipline, which, in creative courses, rely on experiential learning and assimilation.

First Steps toward Decolonisation

Mapping the Terrain

This study presents an audit of the lived experience of the first-year core course: 'Key Concepts in Game Design'. This course is offered to students in the Game Design programme, registered for both the Bachelor of Engineering Science in Digital Arts and the Bachelor of Arts in Digital Arts. It is the foundation of the Game Design major that students in the two degrees share throughout the course of their studies.

Interventions into the course curriculum, thinking about and reassessing the syllabus and the ways we teach, have been an ongoing process as part of normal teaching practice since the course was first taught in 2012. With the heightened tensions arising from the FMF protests of 2015, academics became acutely aware of the need to address issues of transformation, diversity and decolonisation with their students. Revising the curriculum had always been on the agenda, but the socio-political climate gave it urgency. Lecturers embarked on a series of surveys, workshops and open-floor discussions with students to air anxieties and work collaboratively toward solutions.

Data and observations from the preceding five years are reported and discussed here, with several provisos. Because the data is retroactive, it reflects on lived practice. The selection of evidence is limited, data collection was not strictly controlled and noise is visible in many of the observations. Given the incomplete nature of the data collected to this point, this phase of the research serves as a status check, mapping the terrain against which progress in the process of decolonisation will be measured in future years.

The Game Design Programme at Wits

In 2011, Digital Arts and the School of Electrical and Information Engineering (EIE) embarked on a joint undergraduate programme, Game Design, which would eventually lead to twinned degrees: the Bachelor of Engineering Science in Digital Arts (BEngSc DigA), and the Bachelor of Arts in Digital Arts (BA DigA). I developed and rolled out this programme in 2012 with a small cohort of 30 students; 15 in each degree stream. The first alumni from the program graduated at the beginning of 2016.

These programmes are the result of a collaboration between EIE and Digital Arts. The shared Game Design core courses, therefore, reflect the academic projects of both schools. While the curricula for the BA DigA and the BEngSc DigA situate students within their home disciplines, the programmes also give them the opportunity to develop a familiarity with a range of areas in the multidisciplinary field. The shared Game Design courses have strong practical components, but also emphasise a solid academic foundation. Areas of study in the shared courses include the role of games and play in society, game history, player interaction and engagement, player behaviour, game mechanics, system design, programming, and basic asset creation and implementation. The most emphasis is placed on interaction and mechanics, as these are the central units of meaning creation in games.

Students work on non-digital (table-top) games in the first year, and in the second year move into digital game creation using Unity 3D and Maya. A key focus of the third year of the programme (exit level for the BEngSc DigA) is the development of a capstone project and a portfolio with which the graduate can approach the industry. The fourth year is the exit level for the BA DigA and is also available as an Honours Degree to the BEngSc DigA graduates. It focuses on student-defined creative and research projects. Students are required to link their academic research with their creative practice closely, and to reflect on this process critically.

'Key Concepts in Game Design'

'Key Concepts in Game Design' is the shared first-year, first-semester course for students from both degrees in the Game Design programme. On completion of the course, students should have a firm understanding of the history of non-digital games and their value in the game design process. Students should have a basic understanding of the requirements and constraints of game design and be able to produce a fully playable prototype of an analogue game. The course takes place over 14 weeks, and has eight hours of contact time per week. Theory lectures are presented weekly, and cover common terms, introductions to play, games and rules, player agency, mechanics, chance and skill. As core texts, the course uses Brenda Romero and Ian Schreiber's *Challenges for Game Designers* and Katie Salen and Eric

Zimmerman's *Rules of Play*: *Game Design Fundamentals*. It also draws on selected essays from *The Game Design Reader*: *A Rules of Play Anthology* as additional reading (Salen & Zimmerman, 2003, 2005; Brathwaite & Schreiber, 2008). During the course, students work in groups of four to five to produce a series of analogue games. The course culminates in an exam-equivalent project consisting of a game and a technical report on the design process and final product. In this project, students are required to build an abstract table-top game in which player skill and the effects of chance are balanced. The lecturers organise the groups and change them for each assignment.

The course introduces students to analogue games as a first point of contact in the program, for several reasons. Primarily, it delays the introduction to the digital work. On one hand, it prevents students from being distracted by technological demands and leaves them able to concentrate on understanding games and the process of game design in its own right. But this choice also stems from a concern that an immediate focus on the digital would alienate students who have little computer literacy. Additionally, the use of analogue systems in teaching game design has significant international precedent and resources to draw from. This course was the first one rolled out for the Game Design programme and has been taught six times. While it has been adapted in small ways over the past years, mostly in response to student feedback, the core syllabus has remained the same.

Decolonising in increments

Any new programme or individual course faces many challenges, which makes it difficult to single out only those that pertain to decolonisation. Often, the issues intersect and compound each other. The danger in this is that the decolonising project may be sidelined in favour of privileging challenges at the operational level. A pragmatic approach to forming a new course is to draw from established disciplines and pre-existing structures within the institution, to base the curriculum on those taught elsewhere. This practice, however, immediately creates a situation of embedded colonisation. It not only replicates the challenges of the institutional structures and the 'foundational' disciplines, it also imports a curriculum deeply embedded in Western discourse. In many ways, this cannot be avoided, as one can

neither operate outside of established institutional structures nor create a curriculum without carefully considering and drawing on pre-existing best practices. The task in the creation of the Wits programme was therefore to balance these imperatives. While 'Key Concepts in Game Design' attempted to address this challenge, a long process of decolonising still remains to be carried out.

Gaining Entry

One of the key overall challenges facing higher education in South Africa is a marked decline in university readiness amongst high school graduates (Case, Marshall & Grayson, 2013; Shay, Wolff & Clarence-Fincham, 2016; Langa, 2017). The idea of extending degrees to incorporate a foundational year to help address this articulation gap is under consideration (Shay, Wolff & Clarence-Fincham, 2016). While the gap has been noted across the board, in many ways it plays out most vividly in science and mathematics (Case, Marshall & Grayson, 2013). The gap is also not equal, but is deeply entrenched in socio-economic divisions. Vijay Reddy demonstrates that performance in science and maths, in particular, is determined by access to adequate resources in schools (Reddy, 2005). Outside of science and maths, access to subjects like visual arts and information technology in the South African government school system is heavily skewed towards wealthier schools and communities. A 2013 ministerial report on science, maths and technology found that '[w]here schools are fortunate enough to have computer centres, these resources are often only used to teach computer literacy and are not used for curriculum purposes' (South African Department of Basic Education, 2013: 25). The visual arts fare no better, with less than 30% of public schools offering visual arts as a subject (Hagg, 2010). Most students entering higher education with prior knowledge in these disciplines are therefore from the privileged private education sector. This leaves many of our most vulnerable students facing compounded barriers to entry. Students from underprivileged backgrounds are unlikely to be able to afford the cost of study and, if funding is sourced for tuition, it often leaves little available for living expenses (Langa, 2017). Additionally, they may be less prepared than their peers for the demands of university studies (Case, Marshall & Grayson, 2013). When then faced with a curriculum that is deeply imbued with colonialism, these students often feel set up for failure.

In the case of Game Design at Wits, excellent prior performance in maths and English are requirements for access to the program. While this is necessary to ensure that students can cope with the subjects they will take, it automatically disadvantages second-language English speakers, as well as applicants with fewer financial resources, as Reddy has shown (Reddy, 2005). Students with prior access to technology and arts education also have a distinct advantage. Applicants for the Arts degree are required to submit a portfolio for admission, and applicants from schools that do not offer visual arts have no support for preparing one. While every effort is made by assessors to identify potential and not consider only 'polished' work, lack of formal instruction in the arts may easily exclude a candidate with great talent from admission. While no prior knowledge of programming is required for admission to the degrees, students who have had the opportunity to take information technology courses as a high school subject have a distinct advantage in the second year of study, when they are introduced to the programming language C#. We had postulated that using analogue games in the first year of study would help to level the playing field and allow students an additional year to gain foundational knowledge. But while this worked in some ways, systems of privilege persist.

In preparation for the 2018 intake, the Game Design programmes have moved to a different method for assessing applicants. Based closely on the protocols used in the Theatre and Performance and Music divisions at Wits, applicants to both degree programmes are now invited to attend a workshop. At the workshop, all students submit a short essay on any kind of game that they have played recently, to allow us to establish some familiarity with play as well as their discursive ability, which is not always reflected in high school results. Applicants to the BA Digital Arts still need to bring a portfolio, but now have the opportunity to discuss it with assessors, allowing us to understand the level of prior exposure to arts education and more fairly judge potential. The workshop itself consists of a short, closely facilitated, analogue game jam. This enables us to observe applicants' interactions with others and, most importantly, gives them a fair idea of what they can expect to encounter in the first year of the programme. While applicants still need to achieve the minimum academic requirements for entry to the University, this process allows us, in awarding places in the programmes, to give priority to those who showed potential in the

workshop situation, rather than only on paper. Thus far the workshop process appears to have resulted in a selection of a more diverse, better prepared cohort of students, who understand the program they have entered more clearly. As the 2018 teaching year has only just commenced, the longer-term impact cannot yet be determined, and assessing the success of the new selection procedure would depend on the throughput rates and classroom observations made throughout the period.

Demographics and diversity

The demographics in the course have changed substantially since its inception in 2012. Racial classification in South Africa is fraught and complex, and often extremely problematic. While the classifications adopted by the South African government need to be actively interrogated these constitute the legal framework in which the University operates, and reports on. 'Coloured' in South African terms is a distinct ethnic and cultural group, and not at all a derogatory term. 'Indian' refers to peoples of Indian, Pakistani, Malaysian, and at times even Arabic decent, while 'Chinese' refers to all peoples of East Asian descent. These classifications elide nuanced cultural differentiation on one hand, and perpetuate an obsession with classification on the other. Despite these concerns, the data collected on the programme uses these racial classifications, as contested as they are, to enable reporting within a national context in line with the country's legal framework.

The first intake group was overwhelmingly comprised of white men from privileged schools. The racial diversity in the class has subsequently increased steadily, as shown in **Figure 1**. 2017 shows a breakthrough, with just over 40%

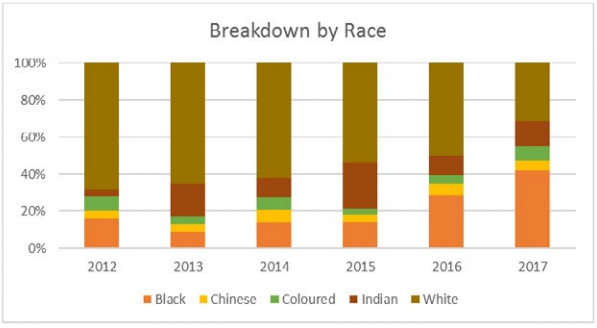

Figure 1: Racial demographics over time.

black students and 30% white students, with Chinese, Coloured and Indian students making up the rest. The South African population is 80% black, so there is a long road ahead to achieve proportional representation. While not an explicit aim, equitable representation is nonetheless desirable.

Student diversification unfortunately looks far worse when seen along gender lines, as revealed in **Figure 2**. As with race, the gender data has been taken from the University's system, which currently offers only a binary gender option, a point of concern and contestation that is actively challenged in the University environment. Once again, 2017 shows the most progress, with female students at 36.8%, but the representation remains extremely low. The intersection of gender and race can unfortunately not be shown from the data obtained from the University system at this time. Anecdotally, the number non-white women is growing, proportionally to the increase in racial diversity. Most non-white women, however, are focusing on the arts. Indian and Chinese women are more likely to enter the engineering stream than their black counterparts, and far more needs to be done to encourage young black women to enter this aspect of the programme.

While achieving equity is still a long way off, these trends are nonetheless encouraging because they are occurring in spite of the fact that no preferential acceptance to the programme is given on the basis of race or gender. The increase therefore reflects a growing interest and excitement about the possibilities of making games amongst non-white and female students. I hope that as the South African

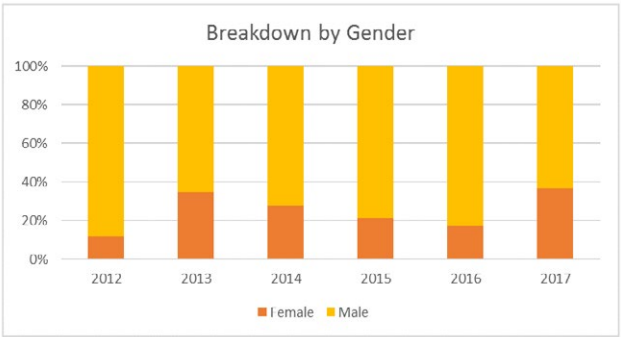

Figure 2: Gender demographics over time.

industry grows, a more diverse range of aspirational figures and more inclusive African games will inspire young design students.

Growing Student Numbers

The economic pressures facing South African universities themselves (Habib, 2016) have imposed additional challenge. Programmes are increasingly required to bring in larger numbers of students to help offset this pressure. In the case of Game Design at Wits, the high demand for the programme from applicants to the University, in conjunction with the high costs of running such a specialised discipline, necessitated admitting more students into both degree streams. Student numbers in the shared first-year Game Design course have consequently doubled since the initial rollout of the programme (see **Figure 3**). This has placed severe strain on the University's resources, both in terms of infrastructure and teaching capacity. Although these issues are being addressed, the fundamental impact of growing student intake is on the teaching practice. Lecturers are unable to give as much individualised attention to students as they had previously done. In primarily lecture-based courses, where content is delivered to students in a formal presentation environment, individual attention is not core to learning. However, when teaching a practical, creative subject like game design, each student or student group requires focused input from an instructor. This helps cement the theory to which students are exposed in formal lectures, reinforcing it as applied knowledge. Instructors discussing work with students in small groups

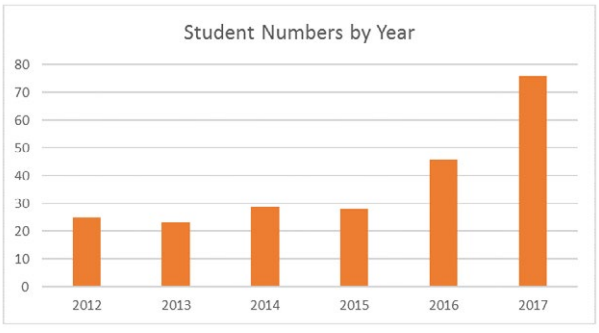

Figure 3: Student numbers by year, showing increased intake into the 'Key Concepts in Game Design' course.

as it is being produced also encourage shared learning and communal practice. Emphasising applied knowledge and communal learning are two strategies for decolonising the lived curriculum (Woolman, 2001; Le Grange, 2016). Institutional realities necessitating a shift away from this kind of teaching are therefore in direct conflict with what is needed for curricular decolonisation, which requires a student-centred pedagogy.

The curriculum for 'Key Concepts in Game Design' was designed to reinforce theory through constant discussion between students and lecturers. At around the sixth or seventh week of study, students are given a small class test. The test is intended to gauge their understanding of the work covered thus far in the lectures by requiring them to relate knowledge gained in a theoretical milieu to an analysis of a lived game. To enable us to track our own teaching process, we have administered the same test at the same point of the course, using the same moderator, for five of the six years. The trends in the test results can be seen in **Figure 4** – Class test result comparison, 2012–2017. Test results have declined since the first year of the course. One can speculate that this correlates with a decline in individualised student attention. In 2012, one lecturer and two tutors were assigned to teaching the course and were able to dedicate large amounts of time to individual students. As the course grew, and instructor capacity shrunk, there was a slight decrease in test scores until the large student intake spike in 2016, when results dropped and more than 50% of the students failed. It is also notable that the percentage of Distinctions also went down.

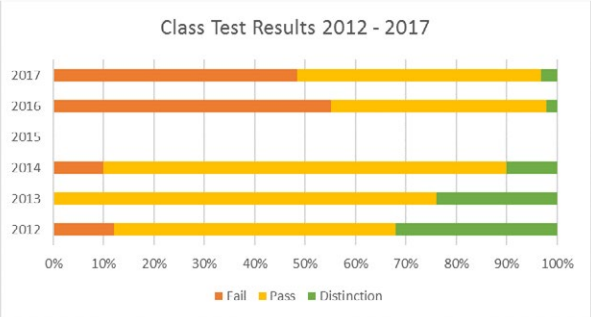

Figure 4: Class test result comparison, 2012–2017.

Increased intake and increased diversification of the student body also correlate. A larger number of spaces on the course allowed for students from underprivileged backgrounds to compete more fairly for admission against those from private high schools. However, this also affects the performance on the class test because levels of university readiness amongst such students are lower. This is a side effect of the racialised economic and educational divide previously discussed. To overcome it, students need to be provided with additional academic support. Directly related to issues of privilege, and therefore made visible by increased class diversity, is the level of gameplay experience that students have. This also influences the test scores and will be discussed more fully further on.

In 2017, interventions were made to counteract this decline. Small group tutorials were introduced with a student-to-tutor ratio of 20-to-one. These groups discussed games that the students played and related them to the concepts covered in lectures. Students were also assigned a 'Key Words' project in which they were asked to define and discuss several concepts that had been covered either in class or in the assigned readings. The test results in 2017 have improved despite a further increase in student intake, though more needs to be done to refine assignments and modes of interaction to support students. For the next iteration of the course, more structured tutorials in which students are led to discursively apply theoretical knowledge to game experiences need to be designed. Additional training also needs to be provided for tutors, to better prepare them to integrate the theoretical framework into the games they discuss.

Exclusionary practice

2016 was a year of considerable unease in South African universities. The FMF protests of late 2015, and the early rumblings of what would become more violent protest in 2016 unsettled many students and staff. Tensions were high across campus, and the effects of an erosion of trust between all parties became increasingly visible. Having watched the protests of 2015 unfold in the media, many of them were wary of the University environment as a whole. This affected the first-year group of 2016 significantly, but still remains of great concern in 2017 (see **Figures 5** and **6**). Even accounting for students' perceptions of their personality types, the percentage who

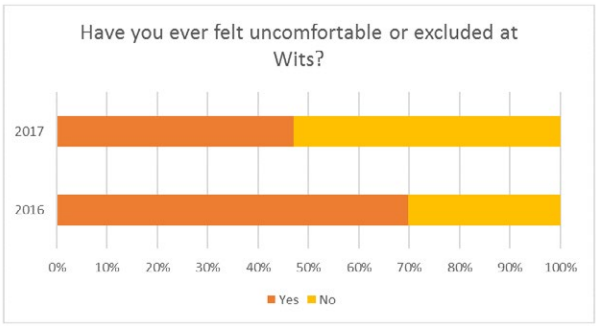

Figure 5: Students feelings of discomfort and exclusion at the University.

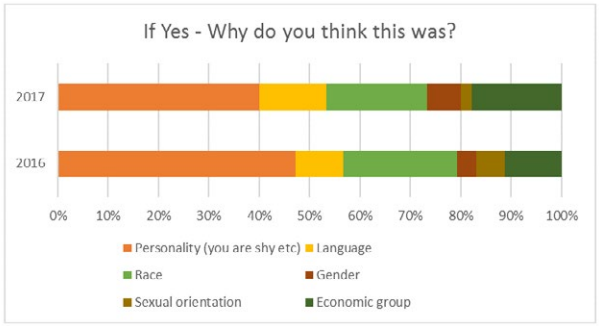

Figure 6: Reasons for feeling discomfort and exclusion at the University.

feel excluded due to language, race and economic group is very high. While 2016 reflected the racial tensions most visibly, economic disparities have affected students' perceptions of inclusion in 2017.

While the responses shown in **Figures 5** and **6** are revealing of the situation at the macroscopic level, of far greater immediate concern are the results of the same question asked about the Game Design programme (see **Figure 7**). In 2016, fewer students reported feeling uncomfortable or excluded in Game Design than in the university in general, although the number was still high, at 60%. 2017, however, has seen far fewer students feeling uncomfortable or excluded at the University, and yet more reporting the same perceptions in the Game Design programme itself (**Figures 5** and **7**). Highlighting discomfort and exclusion in the formulation of the question asked skews the statistical value of the data as it prompts a high number of affirming responses. This is an artefact of the way that the survey was originally used, which was not for data collection, but rather to prompt an open class discussion.

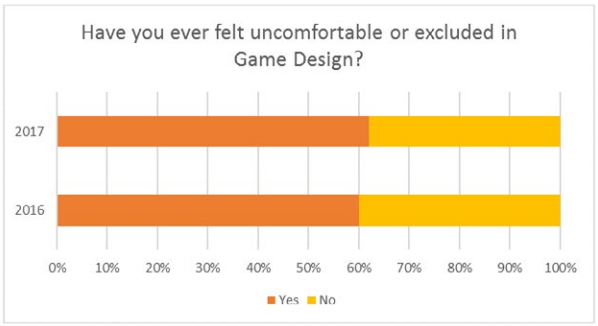

Figure 7: Students feeling of discomfort and exclusion in Game Design.

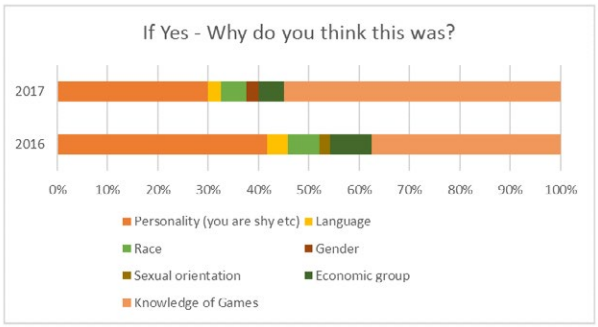

Figure 8: Reasons for feeling discomfort and exclusion in Game Design.

When asking students to identify the cause of feelings of discomfort or exclusion in Game Design, an additional option was added: their knowledge of games (**Figure 8**). In 2016, 37.5% of students felt that their knowledge of games was impacting their feelings of inclusion or exclusion in the course. In 2017, this rose to 55%. This correlates strongly with the increase in student numbers, and the linked change in demographics. It also clearly reflects one of the key difficulties in teaching games that Zagal and Bruckman have outlined. Throughout their observations on games education, student access to, and prior experience with, games forms a core challenge (Zagal & Bruckman, 2008). They argue that students coming into the course, both as prolific game players and as novices, present complications, but that this is exacerbated by a heterogeneous class composition (Zagal & Bruckman, 2008). The programme has always faced the challenge of catering for students from two distinct degrees, immersed in very different discourses in their home disciplines. This mix of situated knowledge and skills is beneficial to creative

practice: 'particularly in design-focused classes, the heterogeneity of the students provides them opportunities to experience different perspectives and move away from their areas of familiarity' (Zagal & Bruckman, 2008: 6). They nonetheless insist that a vast difference in exposure to, and proficiency with, games 'makes it harder to establish a common level of academic discourse in the class. When you have people with different backgrounds, the common denominator becomes quite low' (Zagal & Bruckman, 2008: 6). This makes the teaching environment, already under strain due to increased student numbers, even more challenging and creates a negative spiral in the ability of lecturers to model knowledge formation.

While the decision to open the programme with the study and creation of analogue games proved effective in creating a more level playing field, this has not been sufficient. There is still a discrepancy in the class along financial, and therefore racial, lines. Despite working in analogue, students with extensive digital game experience are privileged because of their familiarity with language and with the examples used by lecturers. Modes of thought and practice, embedded in the discourse, are more penetrable to students who are prolific game players, and are still not sufficiently modelled for and made explicit to novice players (Middendorf & Pace, 2004; Zagal & Bruckman, 2008). In the South African context, with its complex economic and racial dynamics, this effectively excludes many black students (Walton & Pallitt, 2012).

Through observation and discussions with senior students and the first-year group, we determined that our response to students' feelings of discomfort and exclusion would need to be immediately visible. With tensions rife in the larger environment, it was crucial to increase their perception of agency and to abate their anxiety through active involvement in the processes of redefining the terms of their own education. The core of the work of decolonisation, however, needs to be systemic and carefully implemented, reviewed and revised over a period of time. The curriculum will need study, we will need to take stock of the work that will have been done thus far, to create an African Game Design programme, rather than a Game Design programme in Africa. Furthermore, decolonisation should be more actively pursued, and the next steps to be taken should be determined. To meet both of these

needs, we worked through a mid-tier, participatory design, involving as many parties in the discussion as possible and allowing student feedback to heavily influence decisions, but not dictate them (Bovill, Morss & Bulley, 2009; Bovill & Bulley, 2011).

Several changes were made in 2017 from the input collected in 2016, and the same process was repeated in 2017 for continued adaptation of the curriculum. These measures arose from observing the course and from student feedback. Feedback was collected during in-class conversations with students, where they were asked to identify things that they felt should 'continue', 'start', and 'stop' in the course. Students wrote their suggestions on post-it notes and stuck them on the wall where others could contribute. This collection of student feedback was augmented by an anonymous online survey, which asked them to identify measures that they thought would be effective in increasing inclusivity and understanding in the course.

In the first small, incremental revision of the curriculum in 2017, one two-hour session a week was set aside for structured play. Students would discuss their play in small group tutorials. A reflective writing project was introduced to encourage students to engage critically with their play. While this was met with some success, a second round of changes now needs to be planned and implemented. The feedback from students, as well as our own observations, highlights three areas for attention in the next iteration. First, students are calling for increased Africanisation of the games in the curriculum. To facilitate this, we are collecting, analysing and preparing to include a greater range of games played in different African cultures. Second, students have also raised issues of establishing common ground in the selection of examples used in lectures. In response, we have embarked on a large-scale survey of students, across years of study, to catalogue games they remember playing at various stages of their lives, in order to identify commonalities and divergences. Finally, the time allocated in the curriculum to broadening play experience needs to be increased. Encouragingly, students are not asking simply to play more, but for the processes of critical play to be made more explicit to them. For decolonised curriculum design, this is the area in which the most work needs to be done. Decolonisation depends on the diversification and restoration of knowledge, but also on increased access to the discourse of critical analysis. For the hegemonic base to be challenged and

subverted, new discourses and knowledges need to emerge, and therefore a core, shared, literacy needs to be fostered. Careful attention needs to be paid to teaching methodologies that increase critical literacies, considering the work done on critical literacies by James Paul Gee, Hilary Janks and Jose Zagal, and synthesising this with the lived curriculum of the course (Gee, 2007; Zagal, 2010; Janks, 2012).

Conclusions

The process of decolonisation is slow and arduous, with progress made only in small increments. It is, however, essential for the development of a just society with its own critical voice. As cultural products, games are not exempt from this process. In fact, as the significance and the penetration of the medium grows, the need to disinvest the field from the Global North becomes ever more pressing. Games need to be both studied and created from a language unique to the cultural frameworks in which they operate. In the case of South Africa, rich traditions of precolonial games exist to draw from, and the vast potential of digital innovation exhibited in the country beckons. The games we produce can, and should, speak without mimicking the work of the centres, without endlessly producing copies of Northern tropes. For this to happen, however, the way in which we understand games needs to be critiqued, and a decolonised body of knowledge needs to emerge from which we can create.

The onus, therefore, lies on education and academia to consistently challenge and redress the ways in which we analyse and produce games. This requires a systematic process of curricular and pedagogic review that actively engages in the decolonising of our subject and our teaching practice. The infancy of the field in South Africa brings with it several challenges, but also a great opportunity. As the first and largest game design programme of its kind in the country, the standards and best practices for South African games education are heavily influenced by the work we are doing at Wits. This allows us to act as pioneers in the field but also makes us responsible for driving the decolonising project.

In our work thus far, several concerns have arisen. They include issues that are national and institutional as well as programme-related and eventually course-related.

These include the gap in articulation between the structure of the two interlinked degrees and the teaching methods at the single-course level, a gap that leads to student alienation and exclusion.

The first-year course 'Key Concepts in Game Design' serves as an experimental space for possible curricular shifts. The choice of this course, as the first contact with the students, and the establishment of foundational principles, offers substantial opportunities for impact. To this end, small-scale interventions in content, teaching and assessment practice are being made to enable the monitoring of results and further adjustments. While this process is still in its infancy, several recommendations for future work can already be made. There needs to be a sustained engagement with critical game literacy at all levels: the playing, understanding, and making of games. This needs to be modelled into the curriculum itself. Space needs to be created to allow for more continuous play and critique. The selection of games needs to be brought in line with games that the majority of the students are familiar with and then branch out from there into less familiar genres. The students themselves have also expressed the desire to further Africanise the content with regard to the games being taught. The pedagogic concerns about the hierarchical teaching and assessment process remain challenging. While tutorial groups and peer feedback and evaluation hold promise, these require significant resources which are not readily available.

Institutional realities, including increased student numbers, limited infrastructure and capacity shortages, hamper the work of decolonising the curriculum, but need to be accepted as constraints and accounted for in the process of curricular design. Redevelopment on a programme-wide scale is a long-term project, requiring a delicate balance between strategic imperatives which pull in opposite directions. Interventions at a high level are therefore tentative. It is at the course level that the biggest impact can be made to address the immediate needs of our students.

Competing Interests

The author has no competing interests to declare.

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