Beyond the amusement, puzzlement and challenges: An enquiry into international students' academic acculturation

Abstract

This paper investigates the phenomenological experiences of academic acculturation of selected non-British post-doctoral academics with a retrospective focus on their experiences as PhD students. The participants came from different disciplines and countries of origin to pursue several years of postgraduate research in different British higher education institutions. The typical, yet distinct, experiences of an exceptional group of early-career academics offer invaluable insight into the joys, excitement, puzzlement and challenges that international students often encounter as they embark on studying and living in a foreign country such as the UK. Using Urie Bronfenbrenner's bio-ecological theory of human development, our paper presents a theoretical perspective that can help elucidate and offer a greater understanding of what appear to be complex incidences in international students' experiences. These incidences can, arguably, be crucial to the success or failure of students' sojourns.

Keywords

Introduction

Studies on the intercultural experiences of overseas students are indeed both a fascinating and a critical terrain with increasingly globalised economies, mobility between cultural communities, and/or knowledge diffusion via higher education institutions (HEIs). Our research focus is on the last component due to the well-documented rapid internationalisation of HEIs in the late 20th and early 21st centuries owing to the considerable number of students studying overseas (Schweisfurth and Gu 2009) and more importantly, because internationalisation is considered to be 'high on the agenda for institutions of higher education around the world' (Jones 2013, 95). Predictably, key players are universities from countries whose academic systems are perceived to be 'world class' and which 'command great international respect' (Kemp and Lawton 2013, 21). The United States has always retained its place as the most popular destination for international students; this amounts to revenue of approximately $20 Billion (£12.3 Billion) each year generated from American universities' educational provision to international students as noted on the BBC website on March 10, 2011. Since the quality of British HEIs is also globally acknowledged, British universities are the next contenders in the recruitment of international students. In the UK, the Higher Education Statistics Agency reports that of the 2,340,275 students who studied at HEIs in 2012/13, almost a fifth (18%), i.e. 425,265, were international students (www.hesa.ac.uk).

What makes international education a complex journey?

Not wanting our focus to be obscured by the different nuances surrounding the interpretations of international education (Gu and Schweisfurth 2011; Jones 2013), we offer a simple definition for the key term. International or overseas students are defined as students in a foreign land for a fixed period[i]. They are

commonly regarded as 'student sojourners' in this paper because of the temporary nature of their academic experience (Ward, Bochner, and Furnham 2001). Although, study sojourns are relatively short, their transformative effects, arguably last a lifetime (Jones 2013). Growth and transformation beyond academic-related experiences need not come as a surprise since a core element of studying abroad involves students being enveloped by the very fabric characterising the host culture (Gu, Schweisfurth, and Day 2010; Marambe, Vermunt, and Boshuizen 2012).

For international students, studying overseas is regarded as equally enticing and frightening! Often, there exist unchartered psychological dimensions in the student sojourners' lives, as they contend with academic acculturation and societal adaptation. At its best, they result in serendipitous and novel experiences (McAlpine and Amundsen 2009; Zhou et al. 2008), leading to new possibilities, e.g. friendships, interests. At their worst, they account for sojourners' experiences of culture or learning shock (Ward, Bochner, and Furnham 2001), feelings of estrangement and alienation (Schweisfurth and Gu 2009), and/or acculturative stress (Yeh and Inose 2003). Depending on the severity, the negative effects of acculturation could have an adverse impact on students' day-to-day functioning and academic performance.

As observed by Ward, Bochner, and Furnham (2001), when research studies on overseas learners started after the 1950s, the primary focus was on the negative impact of exposure to a different culture, particularly in relation to the social- and psychological-related issues. In fact, overseas education was viewed as a concern for students' psychological wellbeing, and so 'the early theories applied to the study of international students were clinically oriented and strongly related to medical models of sojourner adjustment' (36). This initial view of overseas education being a 'medical nuisance' gradually changed in the intervening three decades (Zhou et al. 2008) to an educational experience that was to be desired. Latterly, views tended to highlight the advantages and added 'transformative' value offered by international education in the context of the increasingly competitive globalised workplace (Jones 2013). Despite the shift of focus from the problems to the benefits of overseas learning, Marambe, Vermunt, and Boshuizen (2012) stress that studying abroad is intertwined with the reality of the adaptation challenges with which students need to contend. This therefore necessitates an in-depth appreciation of the concept surrounding student sojourners' psychosocial adjustment to a new environment by using Bronfenbrenner's Ecological Systems theory to offer new theoretical perspectives.

Bio-Ecological Systems Theory of Human Development

The Ecological Systems Theory proposed by Urie Bronfenbrenner (1979, 1994) aims to explain the entire ecological system from cradle to grave governing human growth and development and is seen as a synthesis of a number of developmental psychology-related theories. This theory does not just take into account historical but also cross-cultural intricacies and subtleties affecting an individual's development. Bronfenbrenner (1979) contends that understanding

human development requires consideration of the different sub-systems, i.e. the microsystem, mesosytem, exosystem, and macrosystem (situated within specific contexts but varying in terms of its parameters) and the chronosystem (critical changes over the life course) comprising the whole ecological system.

The Ecological Systems Theory (Bronfenbrenner 1979, 1994) consists of layered systems, which place emphasis on the interaction with the individuals' environments as contexts for development, and states that at the very core of the microsystem lies the child/individual. Within this microsystem occur direct and close interactions through socially engaging activities with one's immediate environment, e.g. family, school, peers, (and, later, workplace). Linkages and interactions exist between the constituents of the microsystem, which are referred to as the 'mesosystem'. The quality and strengths of these constituents, e.g. family-school connections, are noted to have a remarkable developmental influence on a child/individual. Beyond these immediate settings is a middle layer where the exosystem is situated. The exosystem considers processes whereby the immediate setting interacts with another setting that has an indirect impact on the child/individual, e.g. parents' workplace, social network and neighbours in the community. Strictly, the exosystem is outwith the setting containing the child/individual, yet, the linkages, processes, or changes that take place within the exosystem remain powerful and can change the course of the child's/individual's development. The outermost layer is the macrosystem, which comprises 'the overarching patterns of micro-, meso-, and exosystems characteristic of a given culture or subculture, with particular reference to the belief systems, bodies of knowledge, material resources, customs, lifestyles, opportunity structures, hazards, and life course options that are embedded in each of these broader systems' (Bronfenbrenner 1994, 40). Despite being the farthest system from the child/individual, the influences brought about by one's culture, customs, traditions and practices, national values and laws permeate the other systems and are discernible as the person matures. Consequently, a child/individual adopts a sense of national identity with all the manifestations of specific and collective ideas, social behaviour and psychological attitudes that that entails – also regarded as 'a societal blueprint' (Bronfenbrenner 1994, 40). A final feature of the Ecological Systems Theory creates a theoretical third dimension as the chronosystem encompasses time as well as events in a person's development that are considered milestones (e.g. changes in the family structure, marital status, employment) or significant historical events (e.g. wars). Within the chronosystem, a change in place of residence is a contributory factor to the person's wider developmental processes. Arguably, either consistency or change within the surrounding environment across time could create unique interactions that significantly affect development. Bronfenbrenner's theory has evolved, and as the person's own biology and genetic aspects are given more prominence, due to their unique role 'both as an indirect producer and as a product of development' through active interaction with the 'multilevel ecology', this theory was latterly referred to as 'bio-ecological systems theory' (Bronfenbrenner 2005, xix).

As such, this theory hypothetically embraces the intricacy involved in the study of student sojourners' complex, multi-factorial, and multi-dimensional academic

acculturation. Bronfenbrenner and Ceci (2005) maintain that the 'principal intent [of the bio-ecological approach] is not to claim answers but to provide a theoretical framework … to make further progress in discovering the processes and conditions that define the scope and limits of human development' (183). This, therefore, potentially serves as a useful framework for understanding the international student academic acculturation journey bearing in mind that it is both unnecessary and impossible to address all the aspects of this framework within a single investigation (Bronfenbrenner 1979). In relation to academic acculturation, it is reasonable to probe the study sojourn period within the chronosystem – how a change in one's environment, e.g. studying overseas, impacts on one's development. In this paper, we tease out the intricacy entailed by such a change. We argue that a student sojourn, albeit temporary, entails a complex change and re-orientation of the ecological system from the micro-, meso-, and exosystems through to the macrosystem, requiring effective management and re-negotiation of old and new ecological systems. Such experience offers both opportunities for 'developmental generativity', i.e. promoting development or 'developmental disruption', i.e. preventing development (Bronfenbrenner 2005). A useful metaphor for this phenomenon involves the idea of 'transplanting' a mature plant after it becomes accustomed to the soil conditions, the special care provided by its gardener during its growing years, with the expectation that as it adjusts to the new environment, it will cope easily with problems and thrive.

Methodology

With a strong emphasis on the phenomenological 'lived experience' underlying a psychological concern, i.e. international PhD students' academic acculturation, a robust research approach that is exploratory, analytical, reflective and in-depth, is mandatory for our research. The nature of the study demanded a comprehensive understanding of the way the phenomenon existed and was experienced in the participants' 'lifeworld' (Giorgi and Giorgi 2008, 29). Consequently, seeking a retrospective view brings its own challenges. Since memory lapses tend to lead to erratic and unreliable findings, it was imperative to consider techniques, which can trigger, strengthen, enhance, and validate participants' recollection, introspection and reflection on their PhD experiences. Consideration of these issues urged the team to go beyond the conventional use of research techniques and instead adopt innovative means of investigating phenomenological and psychological notions by employing the visual methods and metaphors approach (Karm and Remmik 2013; Reavey 2011), which is considered suitable in generating recollections of past events, especially the in-depth and personal meaning of the participants' experiences. Non-British post-doctoral academics who completed their PhD education in the UK between 2008 and 2013 and were subsequently employed by an 'ancient' university in 2013-14 were purposively selected for various reasons: a) PhD study affords a more comprehensive scrutiny of academic acculturation; b) a PhD provides excellent training in developing reflective and critical thinking; c) post-doctoral academics are regarded very successful on two levels: PhD completion and employment in a Russell group British institution; and d) post-doctoral academics provide ideal access to a non-British cohort who completed their PhD in the UK. Invitation via

targeted group e-mail, a conference, and word-of-mouth attracted the participation of 14 academics from different countries of origin and disciplines.

The two-tiered reflective methodology for this study comprised a) participants being given a disposable camera (24 exposures) for two weeks with information and instructions for taking photographs that reflect their educational experiences; and b) participants' self-selected photographs were used for discussion during a one-hour interview. The reflective process commenced when participants were instructed to capture photographs which were symbolic and/or representative of their experiences. Reflection continued during the interviews as these photograph were used to stimulate in-depth discussion about these experiences. These photo-elicitation interviews, characterised by informal face-to-face conversations, also offered a twofold advantage: a) with the participants' strong sense of data ownership, this facilitated access to their data-rich 'world' enabling descriptive articulations of their views and experiences; b) the collective use of photographs and interview narratives served as a form of triangulated evidence which strengthened and helped validate the emergent findings. Taking into account the study's phenomenological focus, employing the Interpretative Phenomenological Approach (IPA), which is extensively used in Psychology (Reid, Flowers, and Larkin 2005; Smith and Osborn 2008) for analysis was regarded a perfect fit. IPA is an inductive qualitative approach with a two-stage analysis process, i.e. 'the participants are trying to make sense of their world; the researcher is trying to make sense of the participants trying to make sense of their world' (Smith and Osborn 2008, 53). With a focus on the study sojourn, the phenomenological nature of the study and the IPA analysis facilitated the exploration of participants' experiences of transitioning from an old to a new ecological system.

Following IPA's inductive approach, transcripts were read several times. Initially, preliminary reading to increase researchers' familiarisation with the contexts presented was helpful in classifying themes and noting impressions and salient ideas. Two researchers separately generated emergent themes from three transcripts. Through discussion, a list of preliminary themes was produced and employed for application to the rest of the transcripts with the aim of scrutinising the credibility of the analysis through data comparison. Following a complete round of analysis using NVivo 10, a hierarchical structure of superordinate themes and subthemes was identified (Smith and Osborn 2008). (See Table 1 for the themes specific to this paper.) Simultaneously, corresponding photographs were identified; photographs served to enrich and validate narrative themes. Finally, with the bio-ecological framework in mind, the final superordinate themes and subthemes and corresponding photographs, were reflected upon for further interpretation of the participants' world. The College of Social Sciences approved the ethical requirements concerning all aspects of this photo-elicitation research: the study design; participants' consent; safeguarding participants and photo subjects' identity; extent of the use of visual data, and data storage among others.

[To insert Table 1 here]

Results

Table 2 contains the participants' profile, i.e. their pseudonyms, geographical regions of origin and colleges, which reflects research participants' very diverse cultural background and academic disciplines.

[To insert Table 2 here]

To offer greater insight into the phenomenological experiences of the sojourners, two illustrative vignettes are selected to highlight their proactive effort towards academic acculturation. These vignettes are carefully summarised based on the original transcript narratives and edited to remove any personal references.

[To insert Table 3 here]

As discussed earlier, a student sojourn tends to impact on the entire bio-ecological system; the primary focus of this study is on the sojourn period within the chronosystem. The following sections discuss the most significant elements of participants' successful transition from the old to the new environment, which is predominantly characterised by proactive management of the personal, societal and academic components.

Personal transition

Almost half of the participants reported that the 'very welcoming' reception was comforting and the novelty of the experience exciting, enabling them to settle in swiftly. To some, adjustment to a new environment was initially difficult – an 'organic' process – helped by their personal strengths and resilience in the face of challenge.

Personal values and family upbringing
In Piers' case, pursuing a Master's and a PhD in biochemistry in Britain started as a daunting experience. His previous supervisor and course convenor commented that the inadequacy of his knowledge and lack of familiarity with the technical equipment meant that he neither had 'the foundation' nor 'the requisite background' and therefore, 'didn't stand a chance' of completing a 'very lab-based and very intensive' programme. He was reminded of the recurring nightmares he experienced early in his PhD when he feared breaking a very expensive 'complicated robotic machine for protein purification' (see Figure 1).

[To insert Figure 1 here]

Yet, taking 'one step at a time', he endeavoured to conquer his fear and 'was able to master not just the lab but also living' in a new societal system. After about a year and half, he felt he had 'become part of the system' and was able to say with confidence that he 'was almost British'.

> I think it has to do with ... the way I was brought up ... I always believed that challenges are things that you could overcome ... You might not be very good at some things, but if you work really hard at it, you become good at it.

Life experiences
Calum feels that he is now settled in Britain, particularly in a city that he regards as 'home' after having stayed there for about seven years – the longest time he has ever stayed in one place. This was in contrast to his childhood experience, which subsequently helped him cope during his time away from his family and assimilate more quickly into a different cultural environment.

> My parents [had] a transferable job, so I had to move with my parents every two to four years from one state ... to another... India is quite diverse ... different language ... village ... culture, food ... I was moving around quite a bit during my childhood and ... that helped shape who I am ... I was never rooted to a particular place ... a particular culture per se, but it made me highly adaptable.

Likewise, Oliver experienced working and living in three South East Asian countries in between studying in British universities as an undergraduate student and latterly for three postgraduate programmes. Like Calum, Oliver identified lacking in 'social roots' as a concern, as a result of 'not remaining in one place for long', but equally, this sharpened his sense of adaptability.

Personal disposition
Studying a PhD and living abroad is fraught with struggles, from confusion arising from differing societal and academic practices, loneliness, supervision-related issues, and other unforeseen frustrating issues, e.g. costly visa extensions and pressing financial difficulties. No international student is exempt from this, but what makes the difference is the strength of character that they exhibit in the face of challenging circumstances. On reflection, Ella conveyed how 'almost every negative thing' she encountered turned into a strength, moulding her to becoming an efficient academic.

> ...all of these realisations, however upsetting and frustrating ... made me a better independent researcher. If there was somebody telling me how to do everything ... I'm not sure I'd be the person who could write successful grant applications.

Passion and commitment

[To insert Figure 2 here]

Oliver's photograph of a mythical Greek character, Sisyphus, pushing a boulder up a mountain is a metaphor for the weight that undertaking a PhD involves. This is perhaps due to the intellectually demanding task behind the pursuit of high quality scholarly research that offers a genuine contribution to knowledge; a PhD necessitates cultivation of critical and reflective thinking while acquiring key research skills and is, therefore, considered exceptionally challenging. The challenge facing them was supported by other participants' stories that are filled

with accounts of passion and commitment, determination and perseverance against the odds. Consistently working for long hours in the office, 'day and night' was typical among many participants. For three participants, parental responsibility added a further challenge.

> At the end of the first year of my PhD I gave birth to my first son ... I had the university nursery place when he was four months old ... I had to leave every lunchtime to breastfeed him ... when I'm at work ... doing my experiment, I would have to stop and express milk.... (Kelly)

Third space
According to six participants, loneliness – encompassing both social and academic dimensions – came with the long arduous task of doing a PhD. Ten participants disclosed how having a third space helped to offset their longing for social connection, e.g. volunteering in an Oxfam bookshop, going to sports clubs, joining a church choir, or looking after young children. For Oscar, going to the pub opened doors to deeper cultural understanding and social relations with local people, establishing lasting relationships, with one person becoming like a father to him. This, in turn, strongly contributed to a mastery of English – his first major challenge after arriving in Britain. A photograph taken in a pub with two pints represented Oscar's way of socialising and establishing social connections.

 [To insert Figure 3 here]

> This is my home pub ... almost every day after work I went to the Whey Pat Tavern and had a couple of pints and then at that place I got to know some of the local people ... they accepted me as one of the regulars, so that was a very heartwarming place for me.

Societal transition

Familiarity with the system and culture
Nadine's experience of acculturation was remarkably smooth mainly due to her familiarity with British culture, music, films and her knowledge of the language.

> ...I was so keen to live in the UK and I had been so immersed in British culture since the age of 13 or 14. All the music that I listened to, all the books that I read, all the films that I went to ... I already had ... a lot of the cultural references long before coming ... it never felt like I had to make an effort....

For Faith, her familiarity with British ways strengthened upon realising that the cultural values generally held in Britain matched her own so much so that she soon ceased to feel homesick. Being settled meant being 'very happy' and being able to affirm that she felt 'much more at home' in the UK.

Societal challenges
The larger the disparity between cultures, languages and religious practices, the more challenges arose. The contrast between oriental and western, collectivist and individualistic practices was so apparent; even acceptable social customs in the host country created a feeling of alienation and hindered assimilation.

> I do remember that evening it was after we had gone caving … it was great and we went to a pub … someone went to the bar and bought a round and people just stood around talking and I found it really contrived, really awkward and the topics of conversation just alien to me … I couldn't make out some of the accents … after that, it was no thanks … I will go on my own in the future. (Oliver)

> I don't drink alcohol at all and I am a bit uncomfortable just around it … I tend to avoid … going to bars as well even if I'm not drinking. I go to bars … but … I'm not in my comfort zone. (Toby)

Even two cultures sharing a common language is not a guarantee that cultural misunderstandings never occur. As Ella came to realise, her straightforward e-mails were interpreted to be 'mean and threatening'. The similarities between American and British cultures are obvious, but this also proved to be 'the biggest mistake' as people's psyches are very different, and so are their notions of what is acceptable, right or wrong: 'because you speak the same language, it's supposed to be very close, but certain things Americans just do completely wrong and you can't see them coming'.

Social connections
Five participants strongly indicated that doing a PhD was 'a really lonely experience'. As Ophelia reflected:

> [PhD experience] felt lonely. I didn't have friends … apart from my dog … a puppy … became my baby, my friend, my everything … especially when I was writing my thesis … I talked to my mum, I talked to my supervisors and I talked to my dog, that's it – these three.

Therefore, a crucial element of acculturation, both culturally and academically, involved being socially attached, either with their significant others or to their newfound friends in the host country. Two participants attributed their PhD success to their partners. Whereas Oscar spoke about the constant emotional support, e.g. cards and telephone calls from his then girlfriend (now wife), despite geographical distance, (see Figure 4). Likewise, Nigel appreciated his partner's local knowledge, which facilitated his own assimilation.

[To insert Figure 4 here]

Eight participants conceded that there was value in pursuing existing 'cultural connections' especially during the initial acculturation period to seek solace from something they 'feel more comfortable with' and fully understand. Nevertheless, six participants also viewed it as a 'hindrance' and advocated that international students be courageous, leave their 'comfort zone' and 'branch out' if they desire to experience as full an adaptation as possible.

> I have seen especially Indian students … more or less liv[ing] in a ghetto. Their friends are all Indians … they go together to the university, they go shopping together and they return home, so they are physically separate from India, but not mentally separate. I think that is a hindrance. (Calum)

From Nadine's experience, openness is the key to '[having] a really diverse group of friends from all sorts of walks of life', including outwith academia; she shared a photograph in which they engaged in a group hug (see Figure 5). Six participants also noted how coming to 'cosmopolitan' UK meant learning more than just British culture, but 'a lot of other cultures', where making international connections comes naturally as shown in Figure 6.

[To insert Figure 5 here]

[To insert Figure 6 here]

Academic transition

Differing academic cultures
How does British academia differ from other academic systems? Faith stressed two major differences: 'the lack of bureaucracy in British academia compared to Spain' and that 'academic writing in Spanish … tend[s] to be very wordy and very pompous [whereas] in British academia … you have to be very concise'. Piers and Nigel commented on the informal, relaxed and 'personal' relationships between students and supervisors, where calling people by their first names is standard. This is in contrast to what Oscar, Toby and Helena described as the 'old-fashioned hierarchical structure' with 'emphasis on respect for elders' preserved back home. Ophelia and Helena appreciated the academic support towards enhancing students' writing, communicative and presentational skills. Such an open and supportive academic atmosphere was largely responsible for making Kelly feel at ease, eradicating her feelings of inferiority: 'you can really talk [to your supervisor] at the same level that you can say, "I don't know", he can say, "I don't know" '.

Norah, Helena and Nancy pointed out how the system back home is tailored to 'learn everything by heart' as it is 'more focused on exams' and 'less focused on writing'. Coming from a similar system and consequently being immersed in British academic practices from undergraduate through to two Master's and a PhD, the impact on Oliver was life-transforming:

> … my whole life went off in a different direction when I went to [a British university] … not just because it was a different country [but] it was the style of higher education, the kind of training, kind of values … Singapore … was in transition, moving from what is quite rote-based to one that encourages critical thinking … It was a massive, massive leap and … I really loved it.

Academic challenges
Participants' perception and lived experiences of academic challenges were essentially informed by the divergent academic traditions to which they had been exposed. Contingent upon previous learning styles, scholastic traditions and access to resources, challenges varied between struggling to use a 'massive' library and advanced laboratory equipment (Piers), having English as the learning medium (Oscar), grasping distinct accents (Kelly, Nadine) or culture-induced misunderstandings (Ella, Ophelia).

The challenge of academic writing was a real concern that many student sojourners had to contend with and in which several factors were at play. For the majority, English was not their mother tongue. Nigel explained that fluent usage of English necessitated 'know[ing] how sentences and words and meanings have nuances that [one may] not be completely *au fait* with, so it's juggling with things that are implied and … are right rather than what [one is really] saying'.

> [Academic writing] is difficult, not natural … it adds to the task. My [supervisor] spent some time correcting my English, my grammar, my spelling … I'm not a gifted writer. It is difficult because you know it's going to come back to you with sentences struck through with red pen and annotation … 'That doesn't make sense, that doesn't make sense, that doesn't make sense.' (Nigel)

Faith added that 'learning how to write academically' was not part of her earlier learning. Norah struggled to convert descriptive writing into something analytical and critical, being mindful not to plagiarise. Unsurprisingly, the thesis was considered a major accomplishment in more ways than one, as reinforced by several participants' photos of their thesis. Notably, one's sense of alienation (sometimes compounded by a disability) or inferiority arising from the transitional challenge of being in a new society was sometimes translated into being part of the academic challenge.

> There is a lot of effort [when] somebody says something … you just don't understand it right away the way you do in your native language … In my case I had a challenge of the hearing and … then a lot of the discussions, the jokes and the kind of context you don't understand … so a lot of times you end up being a bit like a fish out of water. (Toby)

> … we have a bit of … an inferiority complex. … they always see the west as a great place and the east as miserable [due to] communism … when I came here, it was very difficult … because the difference was so big, the learning systems … I had to spend many, many days in the library to cover things … read introductions…. (Helena)

Shared academic values

As previously discussed, exemplars of academic challenges facing international students abound. Yet, finding congruence with the academic values in the British institutions paved the way for Faith and Norah to adjust successfully to new learning systems.

Discussion

It is commonly acknowledged that to study at PhD level, students are expected to be academically bright and talented and are likely to be high achievers, i.e. recipients of awards or scholarships. Having completed an undergraduate degree (and a Master's) also means richer and more mature life experience, which arguably increases perception of self-worth. Coming from this vantage point, PhD students' privileged background gives the impression that with little

effort, they are able to clear all the hurdles that studying abroad presents. However, academic acculturation is indeed a multi-factorial, multi-dimensional and an altogether complex construct. The literature on student sojourners' experiences consistently points to adaptation and adjustment as part and parcel of their experience (Gu, Schweisfurth, and Day 2010; Ridley 2004; Zhou et al. 2008; Ward, Bochner, and Furnham 2001) regardless of the personal strengths and qualities that students possess. The group of successful young academics in this study was no exception when it came to the puzzlement and challenges they had to contend with during their PhD study in Britain. Notably, participants came from different countries and pursued different disciplines resulting in each experience being distinctive, yet somewhat mirroring other sojourners' experiences. Another article deals with their PhD experience as a specific academic journey or 'a rite of passage' (Elliot, Baumfield, and Reid forthcoming). Linking our study findings to Bronfenbrenner's bio-ecological theory (Bronfenbrenner 2005), we aim to foster greater understanding of the factors, dimensions and processes that determine one's academic acculturation construct by extending the original framework (see Figure 7).

[To insert Figure 7 here]

Following Bronfenbrenner (1979, 1994, 2005), each student on a sojourn constitutes their own multilevel ecological system – their accepted norm prior to contact with a new ecological system. The sojourn instigates disruption at all levels, as the sojourner becomes part of another ecological system, severely affecting the person's principal sources of support, e.g. previously sustained relationships with significant others (Microsystem, Mesosytem). Likewise, the person's sense of identity achieved through relations with the Macrosystem (e.g. national and cultural values, religious and political affiliation) and displayed through social behaviour (Bronfenbrenner 1994), is somewhat disturbed. The sojourn itself is a decontextualising tool, facilitating reflection beyond what used to be the sojourners' norm and has a threefold effect: to cling to familiar aspects from their original ecological systems (i.e. mainly continuing social and cultural connections with people from one's country); to be more accepting of the new ecological systems; or combining the two. Depending on the disparity between the two ecological systems, confusion and ambiguity at the personal, societal and academic level ensues. This experience leads not only to puzzlement and challenges but also to serendipity and amusement.

On the surface, academic acculturation seems mainly to involve adjustment to pedagogical conceptions and practices. However, as demonstrated by a group of successful student sojourners in our research, there are interlinks between personal, societal and academic elements affecting the overall acculturation process. More importantly, a successful transition necessitates an effective management of students' old and new ecological systems. As exemplified by the participants, this includes personal reflection and a critical analysis of the extent to which the familiar old contexts are a tool or a hindrance when resolving unfamiliar problems in the new setting. There is little doubt that continuing pursuit of cultural connections is helpful at the beginning. The route towards growth or 'developmental generativity', however, requires 'openness' to the new

system as clinging to the 'old' system eventually becomes a 'hindrance' leading to 'developmental disruption' (Bronfenbrenner 2005). Heeding the advice of successful student sojourners themselves, international students need to be courageous by leaving their 'comfort zone', building social relations, and exploring learning opportunities in the new ecological system. This, in turn, is likely to lead to new opportunities, new learning, and new relationships that serve as nutrients for the transplanted mature plant, using an earlier metaphor.

With a specific emphasis on the chronosystem, we recognise that the study is a contribution towards rather than a comprehensive understanding of the processes underlying student sojourners' acculturative experiences. As Bronfenbrenner (1979, 1994) has suggested, the framework would necessitate multiple investigations to study the entire ecological system, and even with that, it cannot possibly offer all the answers concerning human development (Bronfenbrenner and Ceci, 2005). Notwithstanding this limitation, we strongly argue that the framework has helped clarified cross-cultural complexity in the context of a study sojourn.

Conclusion

Although the primary concern of a student sojourner is their academic performance, academic acculturation for it to be genuinely successful demands managing old and new ecological systems and being attentive to the reciprocal interconnection between the personal, societal and academic components that enables successful transition. Without discounting the various mechanisms that host universities can employ to facilitate transition and promote greater social cohesion through stronger student communities, student sojourners need to reflect continuously on the subtle but powerful mechanisms underpinning their thoughts and actions, being mindful that maximising the benefits from their sojourn requires nothing less than proactivity on their part. As Bronfenbrenner stressed in the bio-ecological model, and as demonstrated by the successful sojourners in our study, the person remains 'an active agent', arguably, in whichever ecological systems they find themselves; 'the characteristics of the person function both as an indirect producer and as a product of development' (Bronfenbrenner 2005, xix). In summary, it is imperative for student sojourners to manage proactively both old and new ecological systems in order to take greater advantage of what international education has to offer!

References

Bronfenbrenner, U. 1979. *The Ecology of Human Development: Experiments by Nature and Design*. Cambridge, MA: Harvard University Press.
Bronfenbrenner, U. 1994. Ecological models of human development. In *International Encyclopedia of Education*. Oxford, England: Elsevier Sciences, Ltd.
Bronfenbrenner, U. 2005. *Making Human Being Human: Biological Perspectives on Human Development*. Thousand Oaks, California: Sage Publications, Inc.
Bronfenbrenner, U., and S.J. Ceci. 2005. "Heredity, Environment, and the Question "How": A First Approximation." In *Making Human Beings*

Human: Biological Perspectives on Human Development, edited by U. Bronfenbrenner, 9. Thousand Oaks, California: Sage Publications, Inc.

Elliot, D.L., V. Baumfield, and K. Reid. forthcoming. "The world is your oyster': the International PhD students' academic journey."

Giorgi, A., and B. Giorgi. 2008. "Phenomenology." In *Qualitative Psychology: A Practical Guide to Research Methods*, edited by J.A. Smith, 26–52. London: Sage Publications Ltd.

Gu, Q., M. Schweisfurth, and C. Day. 2010. "Learning and growing in a 'foreign' context: intercultural experiences of international students." *Compare: A Journal of Comparative & International Education* 40 (1): 7–23.

Gu, Q., and M. Schweisfurth. 2011. "Rethinking university internationalisation: towards transformative change." *Teachers & Teaching* 17 (6): 611–617.

Jones, E. 2013. "Internationalization and employability: the role of intercultural experiences in the development of transferable skills." *Public Money & Management* 33 (2): 95–104.

Karm, M., and M. Remmik, (2013). *The challenge of using photo interviews in researching university teachers' conceptions*. Paper presented at the 15th Biennial EARLI Conference, Munich, Germany.

Kemp, N., and W. Lawton. 2013. A strategic analysis of the Scottish Higher Education Sector's distinctive assets. Edinburgh: British Council Scotland.

Marambe, K.N., J.D. Vermunt, and H.P.A. Boshuizen. 2012. "A cross-cultural comparison of student learning patterns in higher education." *Higher Education* 64: 299–316.

McAlpine, L., and C. Amundsen. 2009. "Identity and agency: pleasures and collegiality among the challenges of the doctoral journey." *Studies in Continuing Education* 31 (2): 109–125.

Reavey, P. (2011). *Visual Methods in Psychology: Using and Interpreting Images in Qualitative Research* (P. Reavey Ed.). East Sussex: Psychology Press.

Reid, K., P. Flowers, and M. Larkin. 2005. "Exploring lived experience." *The Psychologist* 18 (1): 20–23.

Ridley, D. 2004. "Puzzling experiences in higher education: critical moments for conversation." *Studies in Higher Education* 29 (1): 91–107.

Schweisfurth, M., and Q. Gu. 2009. "Exploring the experiences of international students in UK higher education: possibilities and limits of interculturality in university life." *Intercultural Education* 20 (5): 11.

Smith, J.A, and M. Osborn. 2008. "Interpretative phenomenological analysis." In *Qualitative Psychology: A Practical Guide to Research Methods*, edited by J.A. Smith, 53–80. London: Sage Publications Ltd.

Ward, C., S. Bochner, and A. Furnham. 2001. *The Psychology of Culture Shock*. 2nd ed. East Sussex: Routledge.

Yeh, C.J., and M. Inose. 2003. "International students' reported English fluency, social support satisfaction, and social connectedness as predictors of acculturative stress." *Counselling Psychology Quarterly* 16 (1): 15.

Zhou, Y., D. Jindal-Snape, K. Topping, and T. John. 2008. "Theoretical models of culture shock and adaptation in international students in higher education." *Studies in Higher Education* 33 (1): 63–75.

Table 1. Classification of Data.

Personal transition+	Societal transition+	Academic transition+
a. *Personal values and family upbringing.* Familial influence. b. *Early life experiences.* Distinct incidences in an individual's life. c. *Personal disposition.* Resilience in the face of challenging circumstances. d. *Passion and commitment.* High expectations and pushing the limits. e. *Third space.* Personal area(s) for growth and development.	a. *Familiarity with the system and culture.* A perceived notion of cultural assimilation. b. *Societal challenges.* Difficulties encountered in the host culture. c. *Social connections.* c1. Connections with the host country. c2. Connections with their home country	a. *Differing academic cultures.* Comparison of academic systems and practices between home and host countries. b. *Academic challenges.* Challenges arising from different academic cultures, c. *Shared academic values.* A sense of congruence with the academic systems practised in the host country.

+ Superordinate themes
The rest are sub-themes

Table 2. Participants' profile (n=14).

Pseudonym	Geographical region	College
Faith	Western Europe	Arts
Helena	Eastern Europe	Social Sciences
Ella	North America	Social Sciences
Nigel	Western Europe	MVLS*
Oscar	East Asia	MVLS
Piers	West Africa	MVLS
Ophelia	Central Asia	Science & Engineering
Kelly	South East Asia	Science & Engineering
Calum	South Asia	Science & Engineering
Nancy	Western Europe	Social Sciences
Norah	East Asia	University services+
Toby	South Asia	Science & Engineering
Nadine	South America	Arts
Oliver	South East Asia	Science & Engineering

* Medical, Veterinary and Life Sciences
+ The unit is not a part of any of the colleges

Table 3. Vignettes.

Nigel's first taste of British education was as an Erasmus student at an English university. This experience orientated Nigel to an approach to learning that promotes thinking skills rather than answering 'straightforward questions'. This motivated him to study in the UK at Master's and PhD levels. Despite geographical proximity between Nigel's home country and Britain, the differences between academic practices were evident. Whereas the UK was characterised by very 'down-to-earth' and approachable academics, a formal and hierarchical way of addressing academics applied back home; in contrast, graduations in the UK were formal celebrations with hood and gown compared to the diploma merely being delivered by post. His initial lack of familiarity with the host country's idiosyncrasies posed challenges but Nigel's experiences improved after achieving a better command of English. He considered some staff members 'unsung hero[es]' as their willingness to help made a qualitative difference. Having 'always played tennis', he joined a club and this became his 'way of getting into that world'.

Nigel found the concept of academic acculturation challenging. In his words: 'I found it difficult to differentiate between my experience in the UK higher education institution [and] my experience in the UK as a whole, so, for example, I took a picture of tennis court, but that's not really [the university] per se. I played tennis and I felt that continuing to do this in the foreign country … is part of becoming accustomed to life here, meeting people, being part of tournaments and competitions … but that wasn't really my experience of the university. The two are linked … I still find it difficult to differentiate the two.' The concept of being fully integrated started when Nigel met and settled with a British woman. At about the same time, after visiting his parents and travelling back to the UK, Nigel found himself saying 'I'm back home now'.

Faith 'always looked up to the big academy world from quite a young age' but her disappointing university experience led to a decision not to do a PhD at home. For Faith, studying abroad was not an option due to the expense involved. A visit to an 'ancient' British university inspired her to seek alternatives. Faith found British academia's impression of happiness, continuous pursuit of learning and relaxed atmosphere very appealing and she realised that she was neither learning nor making good use of her skills in her home country. Faith subsequently obtained a partial PhD scholarship at another British university while also taking a job to make ends meet.

Living in a city was ideal for befriending other postgraduates and having better access to academic resources. Ongoing 'money concerns', however, necessitated living in the countryside and travelling long distances to the city, which caused Faith's social life to suffer. Longing for social connections and having an interest in music, Faith joined the university chapel choir, but no 'strong friendships' with undergraduate students were formed due to their very different interests. Striking a balance between academic and social life, which for Faith constituted a holistic PhD experience, was a constant struggle: 'I was so focused on … getting my PhD because … I wanted to make the most of it, but on the one hand I'm usually quite a shy person, so it doesn't come too easily to talk to strangers … on the other hand there was this pressure, self-imposed pressure … to finish my PhD on time.' Nonetheless, living in the UK made her feel 'very happy' and 'at home' primarily due to the congruence between her own values and the host country's e.g. mutual love of dialogue and reticence. Through her current post, Faith was able to continue living in the country she now considers 'home', working in a system that has values that reflect her own. Nowadays, Faith says: 'when I'm away for a few days, I feel homesick for the UK'.

Figure 1. Protein purification machine costing £60,000.

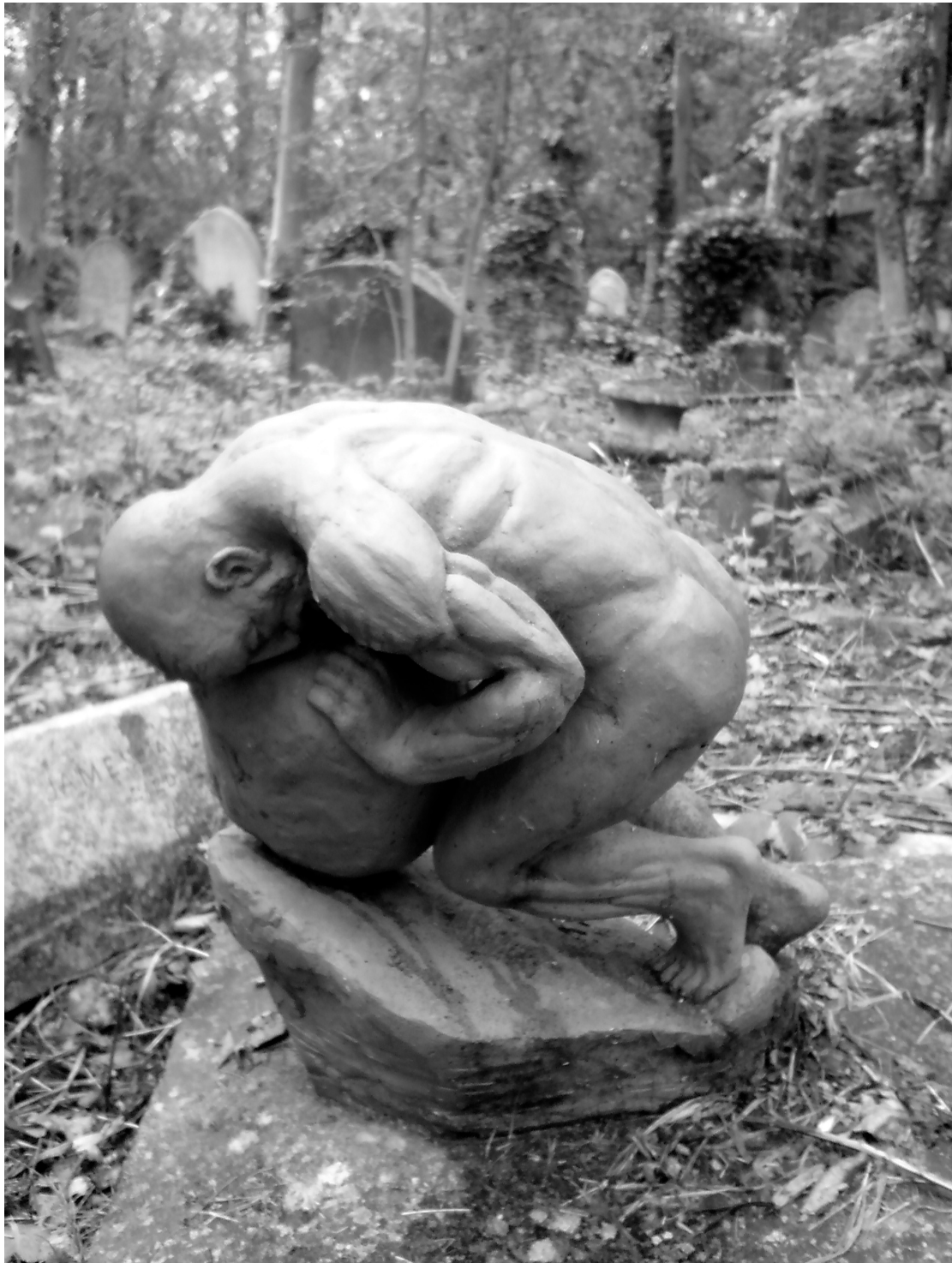Figure 2. Sisyphus statue in Highgate Cemetery.

Figure 3. A drink for two at the Whey Pat Tavern.

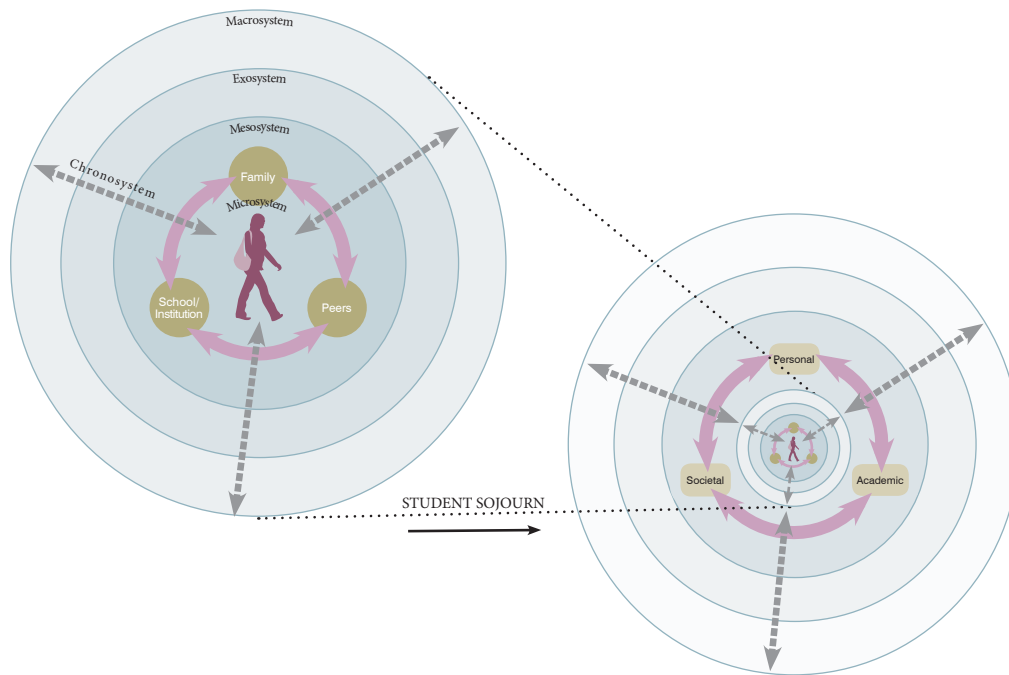Figure 4. Encouragement beyond geographical boundaries.

Figure 5. Group hug.

Figure 6. Cosmopolitan UK.

Figure 7. An academic acculturation model based on Bronfenbrenner's bio-
ecological theory.

---

i Our study sample is restricted to those who remained in the UK after PhD
completion.