

Transfer of Learning between Higher Education and the Workplace

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The candidate confirms that the work submitted¹ is her own and that appropriate credit has been given where reference has been made to the work of others.

The follow publication was developed during the development of this PHD and refers to the development of the learning transfer model (Chapter 3) and the discussion of data regarding employability (Chapter 6):

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- Para a minha querida avó Lena -

In the course of my research I came across the term “helpful others” (Eraut, 2007, p. 412) to define the people in our lives that mediate our learning and help us advance in our endeavours. The PhD was probably the biggest challenge I have ever enrolled in, voluntarily. Fortunately for me, there were plenty of helpful others in my way. This is the time and space to say **Thank You:**

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Abstract

This thesis examined the process of learning transfer between university and the workplace by investigating the one-year work-placement experiences of three undergraduate students. For this study, transfer was conceptualised as an ongoing process, based on three distinct dimensions: knowledge, social interactions and self; supported by physical and conceptual mediational means; and framed by the context(s) in which it occurred. In order to address these dimensions, a new learning transfer model was developed, drawing on classical and sociocultural perspectives on transfer.

The participants were three undergraduate students from the University of Leeds, from different schools and degrees. They were in between their second and third years, and they were undergoing a paid work-placement. The chosen methodological approach was a longitudinal case study with three instrumental cases, resorting to interviews with the students in transition, observation of two of the students, and further collection of secondary data, including students' placement reflections. The data was coded and analysed through thematic and cross-case analysis.

Using the developed learning transfer model enabled the understanding of transfer of learning, within the transition between university and the workplace, as a multidimensional and intercontextual process of transformation, experienced by the students in a developmental manner. The study's findings also identified a narrow understanding of learning transfer by the students and discussed the possible implications of this perspective on their ability to transfer. Regarding the context of the study, work-placements were found to be beneficial experiences for the students. However, the study proposes that placement experiences are reframed as broader opportunities for learning and development.

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Chapter 1 – Preamble

1.1 Introduction

The main focus of this study was to investigate the process of learning transfer within students' transition between university and the workplace. It focused on the one-year work-placement experiences of three undergraduate students from the University of Leeds, firstly to investigate how the students in transition navigated their new work-placements and the return to university for the completion of their degrees. Secondly, to contribute to the discussion of how transfer of learning can be examined and promoted within this context.

In this preamble I provide the reader with a roadmap to the research, by explaining the aims of this study and how my personal and professional experiences led me to question issues of transfer and pursue it as an important research area, specifically within the transition between university and the workplace (section 1.2). I then present the research questions that oriented this inquiry, and briefly summarise the research design (section 1.3). Finally, I provide an overview of the seven chapters in order to clarify the overall structure of this work and facilitate the reader's navigation through it (section 1.4).

1.2 Research Problem

Transfer of learning is not a new topic of research, notwithstanding, it is also not a resolved area of study. In a recent publication, Engle (2012) addressed the resurgence of educational research on transfer and listed the key expansions on the topic in the passing decades. These included how the concept of transfer had been gradually enlarged, for example, to include personal dispositions (Bereiter, 1995), to account for social aspects and context (Lave and Wenger, 1991), but also to test the possibility of transfer as preparation for future learning (Bransford and Schwartz, 1999).

In the same paper, Engle (2012) also stated that transfer of learning was, arguably, "one of the most important issues in the learning sciences" (p.347), thus reiterating the view already expressed by other researchers regarding

the importance of transfer (*inter alia* Georgenson, 1982; De Corte, 1999; Goldstone, 2012). The justification for such interest on transfer has been placed on its central role in the success of any education system (Lave, 1988; Marton, 2006; Engle, 2012), as it allows the investigation of how people themselves, their knowledge, skills and ability to learn move between settings and experiences. Therefore, the interest was placed on the idea that if transfer of learning was well understood, it could be used to facilitate and improve the transition of learning between settings.

However, transfer of learning remains a problematic and contested concept that is, overall, under researched (*inter alia* Barnett and Ceci, 2002; Packer, 2001). One of the main limitations of the study of transfer is that it is constrained by metaphors (Sfard, 1998) and assumptions regarding its processes (Guile and Young, 2003). Some of the problematic assumptions about transfer imply that: (1) students learn how to transfer what they learn in school and university to other areas of their lives, including the workplace (Atkins, 1999; Guile and Young, 2003; Larsen-Freeman, 2013); (2) that transfer is a mechanical one-way process of application of knowledge (Bransford and Schwartz, 1999; Guile and Young, 2003); and (3) that when students enter the workplace they effortlessly integrate theory into practice (Guile and Young, 2003).

These assumptions, however, contrasted with my personal and professional experiences of transfer of learning. For example, my transition from university to the workplace was and still is not a straightforward, one-way journey into professional life. Like with my personal journey, OECD (2015) has warned that the transition between university and the workplace is becoming increasingly more difficult and less linear for young graduates. This warning reiterates the problem of transfer as a general, rather than an individual, issue of concern. However, Human Capital Theory, on which so much higher education policy is based, also seems to take transfer of learning for granted.

Regarding transfer, my experience was also not just a matter of “carrying over” (Lave, 1988, p.24) what I learned in university to a different setting. I clearly remember thinking and discussing with my friends that were undergoing the same transition at the time, how we struggled to know what we knew and how

to make use of it. This resonates with Eraut's (1993) work, who while researching about the development of professional expertise in management and teaching, found that it was common for young practitioners to struggle to articulate their knowledge, which in turn, would possibly create barriers in their ability to transfer that knowledge.

Finally, when in my new job as a training consultant and coordinator I had to develop large-scale in company training for different areas, the transfer problem resurfaced again. How could I ensure employers that transfer of learning would occur and that their employees would apply in the workplace the knowledge provided in training? I found that in this situation the mere assumption of transfer was not enough to support the suggestion to invest in more training and that taking steps towards promoting transfer of learning was necessary.

So, the need to study transfer became imperative to, not only understand my own educational and professional journey, but also to develop my job confidently and accurately. What is learning transfer? How does it occur? How can it be improved? Those were some of the questions that required answering.

My aims for this study were, then, to contribute to the theoretical understanding of transfer of learning; to determine what is being transferred between university and the workplace; how is it transferred; and finally, to establish some of the factors involved in the process of learning transfer between higher education and the workplace.

1.3 Research Questions and Design

This research's main aim was to improve the understanding about the process of transfer of learning within undergraduate students' transitions between university and the workplace. The chosen context for that inquiry was the students' experiences and understandings of a one-year work-placement. The research questions that orientated my investigation were:

1. How do students experience and make sense of the transition between university and the workplace, in their one-year work-placements?

2. In what way, and to what extent, are students' experiences of the transition between university and their placements reflected by the developed learning transfer model?
3. How do students' perceptions of their transition between university and the work-placement and its theorisation inform and enhance our understanding of current debates on graduate employability?

Regarding the research's design, which is discussed in greater detail in Chapter 4, this study was conducted as a longitudinal study with three instrumental cases (Stake, 1994), in which a small sample (N=3) of undergraduate students from the University of Leeds were followed during their paid one-year work-placements. Data was collected through interviews with the three students during and after the work-placement; through observations of the students in the placement for two students; and through blog reflection pieces on the placement experience from one student. Additionally, some secondary data - a placement handbook for one of the participants and placement reflections' for three additional students, also from the University of Leeds and undergoing a one-year work-placement - were also collected. Analysis of the data started with the development of a codebook, subsequent coding of the data, followed by thematic and cross-case analysis. During the design stages and throughout the implementation of the research several steps were taken to ensure its quality, including following a multimethod approach to data collection and analysis and implementing member-checks of the data by the participants. In addition, this research followed the ethical guidelines proposed by the University of Leeds and the British Education Research Association.

1.4 Summary of Following Chapters

In total, this thesis comprises 7 chapters. The overall organisation of the study consists of Chapter 2 and 3 providing the background to the research, Chapter 4 addressing the methodological aspects of the study, while Chapter 5 and 6 present the findings for the study and its discussion. Finally, Chapter 7 provides a conclusion for the study. Below, I provide a more detailed description for each chapter:

Chapter 2 provides some context for the study, by focusing on the relationship between higher education, the workplace and placements. It introduces the argument that Human Capital Theory and employability frameworks put forward a narrow, economic-based understanding of the transition between university and the workplace, in which placements are defined as instruments for employability and the students' developmental opportunities in placements are overlooked in favour of a skills-based approach.

Chapter 3 provides an overview of learning transfer theories, describes their main contributions to the study of transfer while also acknowledging their main conceptual and methodological challenges and limitations. Then, drawing on the shortcomings of previous theories and research on transfer an alternative framework to study transfer as a multidimensional and intercontextual process is developed.

Chapter 4 addresses the research design and methodology, presenting the main research questions, a rationale for the longitudinal case study approach and a detailed description of the data collection and analysis processes used for investigating the three undergraduate students' transition between university and the workplace, in their one-year work-placements. Considerations regarding research quality and ethical concerns are also discussed.

Chapter 5 presents the individual journeys of Julie, Maggie and Daniel during their one-year work-placements. It explores the students' transitions by looking at their experiences during the placement and on the return to university. This chapter attempts to make sense of the students' experiences in light of the several conceptual tools presented and discussed in Chapter 3, namely drawing on sociocultural concepts and views about learning.

Chapter 6 provides a cross-case analysis of the main findings regarding the individual cases and provides a discussion of these findings. By looking across the cases, this chapter focuses on what was common and what was different between them, regarding the learning transfer process in their work-placement experiences and the research questions. Tables and figures are used throughout this chapter to better illustrate the comparison of findings

between the cases and, therefore, improve the understanding of the findings for the reader.

Chapter 7 provides a summary of the main findings of the research, discusses the possible implications of those findings to the study of transfer of learning more broadly, and to students' undergoing the transition between university and the workplace in one-year work-placements. Further research possibilities are also identified by drawing on the study's limitations and main contributions to knowledge.

Chapter 2 – Establishing the connection between education and the workplace

2.1 Introduction

In the past decades the connection between university and the world of work has received pronounced attention from higher education policies and research (Gracia, 2009; Puhakka et al., 2010; Keep, 2012; Tan, 2014; Teichler, 2016). This attention has addressed several issues, from the processes and implications of higher education massification to, following a more critical approach, concerns with the marketization of higher education and “students-as-consumers”. Regardless of the approach taken, these higher education policies have emphasized an economic-based understanding of the transition between university and the workplace. They have depicted the move from university to the workplace as a mechanical transition, emphasised the application and development of skills and assumed transfer of learning as unproblematic.

Rooted in a particular interpretation of Human Capital Theory (Becker, 1993; 2002), supported by research on the returns to education, and implemented through an employability agenda, this economic-based perspective, I argue, created a restrictive narrative of students’ transitions between university and the world of work. Therefore, this chapter critically discusses the economic-based framework of the transition between university and the workplace by focusing on the arguments put forward by the understanding of higher education as productivity enhancing and addressing its limitations on the characterisation of work-placements as instruments for employability.

The argument proposed here is that a focus on process, on iterations and on students’ identity development is necessary to counteract the narrow and ambiguous approach provided by the overall mechanistic, unidirectional view of the transition between university and the world of work. Moving forward, Chapter 3 argues that conceptualising this transition as a process by focusing on learning transfer might provide a more sophisticated understanding of students’ placement experiences.

2.2 Education as productivity enhancing

The economic-based perspective on the transition between university and the world of work is founded on the argument that education enhances individuals' productivity and leads to economic growth (*inter alia* Hanushek and Weossmann, 2012; Holland et al., 2013; World Bank, 2014; European Commission, 2016). This view has been largely supported by Human Capital Theory and by empirical evidence drawing on research on the returns to education, developed by national governments (e.g. BIS, 2012; BIS, 2016a) and supranational organisations such as the OECD and the European Commission.

One implication of following these economic-based frameworks within higher education was that the connection between university, knowledge and the workplace was framed by policy makers in a specific manner, as employability development and by favouring the monetary returns to education. Indeed, according to Teixeira (2014), what Human Capital Theory provided as a framework for education and training was an investment rationale, through which the underlying assumption became that "the more we learn, the more we earn" (Brown, 2003, p.142).

However, the transition between school and work has become increasingly more difficult for youth (OECD, 2015), and from relevant literature emerges a picture of the transition between education and the world of work that is ever more, less linear and straightforward (Walther, 2006; Lundhall, 2011; Keep, 2012). This, I believe, questions the current applicability of the economic-based rationale as an interpretative framework of students' experiences of the transition between university and the workplace. Furthermore, I believe it also requires a review of the interpretation of Human Capital Theory's premises to higher education and of the most recent research on the returns to education, which are addressed in the following sections.

2.2.1 Human Capital Theory

A major contribution to place education at the core of national and international economic policy was provided by Becker's (1993; 2002) Human Capital Theory and its assumed connection between education and

productivity (Brown and Lauder, 2006). According to Becker (2002, p.3), “human capital refers to the knowledge, information, ideas, skills, and health of individuals”, which is developed through education and training and contributes to the individuals’ future earnings and productivity.

Despite being developed within the field of economics, Human Capital Theory has been widely used in other areas as an explanatory device for certain human behaviours (Teixeira, 2014; Weiss, 2015). In education, the interpretation of Human Capital Theory’s premises provided an explanation for individual and governmental investment in more education. Accordingly, at the individual level, Human Capital Theory’s argument was that education increased individuals’ earnings due to the relevance of the learned information and skills to the labour market. On the other hand, the main argument underlying the national investment in more education, according to Human Capital Theory, was that the number of years in school produced knowledge and skills that made the educated individuals more productive when they entered the labour market, which consequently contributed to make enterprises more productive and competitive. The correlation between education and national economic growth implied that education would not only improve productivity, but also create positive externalities such as lower unemployment and greater social mobility (Tan, 2014). The argument for government investment in more education was, as Pritchett (2001, p. 368) clarified that these “positive externalities should mean that the impact of education on aggregate output is greater than the aggregation of the individual impacts”, meaning that society as a whole would also benefit from more education.

One immediate consequence of such interpretation of Human Capital Theory’s arguments to education was that education should then be considered as an investment good (Brown, 2001; Brown and Sessions, 2005; Tan, 2014) through which it increased educated individuals’ future market value (Brown and Sessions, 2005), thus making them more motivated to invest on education based on these future monetary benefits (Tan, 2014). Indeed, Becker’s work (1993; 2002) focused mostly on the study of the private returns to education (Teixeira, 2014) and these allowed him to argue that human capital could explain an increase in wages at the individual level, in

productivity at the company's level, and on economic growth at the national level (Brown, 2001).

However, within the current contexts of economic and financial crisis, limited funding availability for education and increasing costs of higher education, Human Capital Theory's premises, which have been widely used to shape national policies on education (Tan, 2014), might no longer provide an adequate explanation for individual and national investment in more education, nor to students' experiences of the transition between university and the world of work.

The change in returns to education is addressed in the following section, but the main trend seems to be of an erosion to the education premium advocated by Human Capital Theory. According to Brown and Lauder (2006) the realisation that education's returns are not constant through time and not always evident reinforced their argument that Human Capital Theory should not have been assumed by policy makers as a "universal law of economic development, but as a 'transitional' case where there are no guarantees that the educational system will meet the expectations of students, families or governments" (p. 29). Furthermore, in a moment of mass higher education, increasing unemployment among graduates (e.g. OECD, 2015) and of research emphasizing the overeducation and underutilization of graduates (*inter alia* Groot and Van Den Brink, 2000; Chevallier and Lindley, 2007; Felstead and Green, 2013), this interpretation of Human Capital Theory's premises to higher education seems to be contradicted.

From the adaptation of Human Capital Theory to education and educational policies emerged many practical, moral, methodological and empirical criticisms (Weiss, 1995; Pritchett, 2001; Brown and Lauder, 2006; Tan, 2014) that questioned the implications of this framework to education. Among the criticisms to Human Capital Theory was an empirical criticism that pointed to an alternative explanation for the increased wages other than education (Weiss, 1995; Brown and Sessions, 2005; Tan, 2014). One possibility was the existence of a "market signalling" system (Spence, 1973, p.355), in which education acted as a signal for ability rather than knowledge. This signalling theory (Spence, 1973) assumed that education did not increase productivity,

but developed into a screening process of students (Eicher and Chevaillier, 1993; Barr, 2005) that was based on their innate abilities (Williams, 1999), even prior to education (Weiss, 1995). In this case, schools and universities acted as a mere classification device that could “reflect higher productivity without causing it” (Tan, 2014, p.422). The bottom line here was that it was problematic to differentiate between Human Capital Theory and screening theories because they both claimed that education increased earnings (Brown and Sessions, 2005). This explanation led some authors to present the latter as a development of Human Capital Theory rather than as an alternative theory (Pritchett, 2001). This criticism is relevant because it contributes to refute the argument that more education leads to economic growth, which is the main interpretation of Human Capital Theory that supports national investment in more education.

Another criticism was presented by Tan (2014), who argued that Human Capital Theory was based on the flawed theoretical premise that individuals’ behaviour was based on a model of economic rationality. For Brown (2001), who posed the same argument, this view overlooked other possible motivations for the individuals to invest in education and, thus, “perpetuates a mechanistic view of the individual worker” (p. 13). For Brown (2001), the educational policies deriving from Human Capital Theory provided a limited understanding of learning, reducing it to the acquisition of technical skills and emphasising a “model of technological progression from low to high skilled work” (p.16). According to these authors’ criticisms (Brown, 2001; Tan, 2014) the application of Human Capital Theory to education depicted a linear model of the transition from university to the world of work that failed to represent students’ experiences and trajectories between university and the workplace.

Accordingly, the mechanical transition from education to the world of work and the focus on transfer of learning as the acquisition and application of technical skills promoted by this particular reading of Human Capital Theory (Brown, 2001) no longer seems to represent students’ experiences. Instead, research has emphasised that students’ transitions are becoming increasingly more individualised, diversified and multi-directional (Walther, 2006; Lundhall, 2011; OECD, 2015). Additionally, Cedefop (2015) has recently clarified that any student graduating after 2008 was twice as likely to be overqualified for

the first job, as a student who graduated in the nineties. So, the growing understanding is that, generally, the transition between school and work has become increasingly more difficult for youth and this interpretation raises some concerns regarding the framework provided by Human Capital Theory towards understanding the students' transitions.

To summarise, in terms of the connection between education, knowledge and the workplace, the policy adopted reading of Human Capital Theories' premises seemed to describe a linear and straightforward transition that was supported by a direct application of technical knowledge and skills from education and university to the workplace. The possible differences between both contexts (university and the workplace) or the possible difficulties faced by the students during that transition were overlooked and it became the students' own responsibility to ensure the transfer of his or her knowledge and expertise from one context to the next, in a one-way journey from education into professional life. Chapter 3 proposes an alternative framework to interpret the students' transitions between university and the workplace as more than linear and unidimensional. But for now, this chapter continues to examine the economic-based frameworks and supporting arguments that led to the development of an employability agenda for higher education.

2.2.2 Research on the returns on education

The main argument of Human Capital Theory for education was that individuals should invest in more education because of the subsequent, and mainly monetary, returns and that enterprises and governments should invest in more education because of the correlation between more education and productivity and economic growth. The existence of individual returns to education was the cornerstone of Human Capital Theory's assumptions regarding the transition from university into the world of work. However, measuring them has been acknowledged in research as "notoriously difficult" (Brown, 2001, p. 5).

Overall, returns to education have been classified as private and social, monetary and non-monetary benefits. Private returns refer to the benefits that individuals experience in the labour market due to their qualifications (Chevalier et al., 2003) and OECD (2014) has described them as the benefits

obtained by the individual, over-time, after accounting for the costs of education. Social returns, on the other hand, were the “benefits from the education of each individual that benefits others in the society in both current and future generations” (McMahon, 2005, p. 211). They were conceived of as a spill-over effect, including aspects related to health, criminality, human rights (McMahon, 2005; OECD, 2013; 2016), culture (Tan, 2014), but also reduced public expenditure on welfare programmes and increased tax payments (OECD, 2014). Social returns are often called externalities and, when associated with non-monetary benefits, meaning, those that “are not measured directly in terms of additional income or increased productivity and therefore contribute to the quality of life” (Bynner et al., 2003, p.342), are referred to as the wider returns to education (e.g. Chevalier et al., 2003).

The distinction between these two types of returns is crucial as they support the rationale for investment in education for individuals (private returns and mostly wages) and governments (social returns, externalities). On the one hand, the prevalence of private benefits to education supports the rationale for individual funding of more education, and individual gains have been argued by policy makers as a major rationale for increases in private contributions to the costs of higher education. Indeed, in a recent publication the Department for Business Innovation and Skills reported that the “majority of funding for tuition (in the UK) now comes from those who benefit the most from it, through income-contingent loans repaid by graduates and backed by the taxpayer” (BIS, 2016b, p. 7). On the other hand, it was the existence of social, wider benefits to education that provided the rationale for public funding, due to the possibility of a market failure. Indeed, recent governmental publications reinforce this view by stressing that “higher education continues to be a sound financial and personal investment with a wide range of societal benefits” (BIS, 2016b, p.7), namely that higher education “nurture(s) the values that sustain our open democracy” (BIS, 2016a, p.8).

Overall, research findings on the returns to education have continuously highlighted increased wages for graduates (Conlon and Patrignani, 2011; Walker and Zhu, 2013; Britton et al., 2016; OECD, 2016); better chances of employment (Conlon and Patrignani, 2011; OECD, 2014; 2016); and greater resilience against long-term unemployment (OECD, 2014). In its annual

Education at a Glance, OECD (2014) stated that concerning wages, adults with a degree could expect to earn 70% more than those without it. Recent research also continues to reinforce the idea that there is a substantial monetary return for more education (e.g. Conlon and Patrignani, 2011; de Vries, 2014; Britton et al., 2016). More specifically, de Vries (2014) identified this estimated premium in previous research as 28% for men and 53% for women.

Looking at non-economic benefits, research has reported that graduates were more likely to experience reduced criminality (Levin, 1991); better job satisfaction and better enjoyment of leisure (Barr, 2005). There was also some evidence regarding better health, more engagement in society and a greater overall satisfaction with life (Bynner et al., 2003; OECD, 2016). Brooks and Everett (2008), for example, made the case that graduates were more likely to engage in further studies and to experience satisfaction from dedication to the study of a subject matter. So, regarding individual benefits, monetary and non-monetary, there was a well-argued case for individuals investing in higher education. Indeed, OECD (2014) recently stated that the impact of education on individuals' life chances has even increased in the past years.

However, Brown and Lauder (2006) presented several issues to consider when looking at data on the returns to education. They questioned if the difference in wages was, in fact, due to an increase in wages of graduates or the consequence of a reduction of non-graduates' wages, while also questioning why past returns were an accurate guide for forecasting future earnings (Brown and Lauder, 2006). Furthermore, they raised a criticism also identified by other authors (e.g. Wolf, 2002; Moreau and Leathwood, 2006) regarding the use of average earnings to present benefits, which could have been hiding great discrepancies between the wages of apparently similarly qualified individuals. This was Wolf's (2002, p. 15) well-known argument that "qualifications pay: but not equally". Evidence showed that, even after accounting for the possible variability hidden by the average wages, returns varied based on gender, ethnicity, social class, degree or university attended (*inter alia* Wolf, 2002; Chevalier et al., 2003; Moreau and Leathwood, 2006; De Vries, 2014; Britton et al., 2016). For instance, Walker and Zhu (2001) found a negative return to art related subjects for both men and women. Such

finding was reinforced by another report (Walker and Zhu, 2013) where the same authors advised caution on the analysis of earning differences by degree because these could also be the consequence of innate differences. For instance, in their recent study, Britton *et al.* (2016) acknowledged that the estimation of causal impact from education on earnings is challenging because these might hide an ability bias in the choice of degree and, because there is a difficulty in separating the value of education in terms of productivity or signalling. Indeed, the problem of using wages as proxies for productivity, when they can be showcasing either ability or education (Holmes et al., 2012) has been a recurrent criticism to research on the returns to education.

The account developed so far argues that while Human Capital Theory has been increasingly used to develop educational policy and shaped some of the new demands on universities, its implications for university practices and particularly for the understanding of the transition between university and the workplace may have been too limitative. The critique here is placed on the economic view promoted by a particular reading of Human Capital Theory and on the underlying representation of the transition between university and the workplace as a one-way, vertical transition from education to work. Moving forward, this critique is extended by demonstrating how this link is further developed in higher education around notions of employability.

2.3 Consequences for higher education

The political interpretation of Human Capital Theory's premises for higher education policy and the overall research on the returns to education created the conditions for a "fundamental shift in the way universities and other institutions of higher education have defined and justified their institutional existence" (Olssen and Peters, 2005, p. 313). From this emerged a stronger discourse towards higher education as a "career education and human capital program curriculum development" (Hyslop-Marginson and Sears, 2007, p.7) and universities engaged to a greater or lesser extent in a marketization process. This process came with consequences for funding, increasingly more competitive on the search for students, grants and private funding; for the curricula, more focused on professionalization and transferable skills; and

for the conditions of work and study regarding what Altbach *et al.* (2009, p. 70) have called the “higher educational austerity”.

Overall, the changes implemented during this process contributed to the growing reformulation of higher education as a private good and highlighted universities’ new commitment towards the promotion of economic growth through the focus on individual employability (Brown and Lauder, 2006). Regarding transfer of learning, this reinforced focus on the economic side of higher education and on the development of employability contributed to the prioritisation of cognitive transfer and of learning as acquisition of transferable knowledge and skills (Konkola *et al.*, 2007; Garcia, 2010).

All these changes led to many criticisms of the “input-output system (...) reduced to an economic production function” (Olssen and Peters, 2005, p. 324), to the loss of democratic learning and development (Hyslop-Marginson and Sears, 2007) and to the subordination of democratic citizenship to market values (Giroux, 2002). What these authors criticised was the way higher education responded to the conditions created by the political interpretation of the premises of Human Capital Theory for higher education policy, the focus on the economic benefits of education and the creation of a university increasingly directed by employability and skills.

In this study, although coming from a place of agreement with some of those criticisms, the argument being tested is more specific. What this study problematizes is the interpretation of the transition between university and the workplace, and of the learning transfer process within that transition, departing from Human Capital Theories and employability frameworks as too limitative for understanding the students’ actual experiences. The argument proposed here is that the characterisation of the transition between university and the workplace as unidirectional and mechanical limits the understanding of students’ motivations and agency and oversimplifies the process of learning transfer to the application of transferable skills and knowledge.

2.3.1 The employability agenda

The 21st century slogan affirming that “credentials are the currency of opportunity” (Brown, 2003, p. 142) clearly encapsulates the perceived close connection between education and work. Following this perspective, current

higher education policy assumes that universities should prepare students for the world of work and promote graduates' employability. Consequently, universities have been increasingly involved in developing strategies to promote graduate employability in what became generally known as the employability agenda.

Some of the strategies adopted by universities as part of this employability agenda included embedding skills in the curricula (Atkins, 1999; Yorke & Knight, 2004; Cole and Tibby, 2013), promoting partnerships with the private sector (Healy et al., 2014) and advocating for a wider university experience for students, for example, through work placements (Wilton, 2011; Gallagher, 2015). The purpose of these strategies was to promote the "tightening bond between education, jobs and rewards" (Brown, 2003, p.142), and gradually the employability agenda became a dominant discourse in the UK (Moreau and Leathwood, 2006). It then became a policy priority (Tomlinson, 2012) and, ultimately, a measure of universities' success (Støren and Aamodt, 2010). Indeed, through the employability agenda, the development of graduates' employability has been perceived as a "university-wide responsibility" (Cole and Tibby, 2013, p.4), in which the underlying rationale is that universities are responsible for equipping graduates with the relevant skills and knowledge for the world of work (Tomlinson, 2012; Cole and Tibby, 2013; Andrews and Higson, 2014), which in turn makes graduates more employable.

However, the understanding of employability remains limited (Gracia, 2009; Clark and Zukas, 2013) and its definitions often highlight a skill-list approach, which raises concerns regarding what is deemed a relevant skill for the world of work when there are multiple skills-lists available for students and universities to develop (Jackson, 2014c).

Overall, the dominant definition of employability adopted in higher education discourses focuses on the possession of skills by graduates, on their personal traits or attributes (Tymon, 2013) and on their ability to get a job after graduation and maintain it (Støren and Aamodt, 2010). One good example of this type of definition is proposed by Yorke (2004, p.410), who defined employability as "a set of achievements - skills, understandings and personal attributes - that make graduates more likely to gain employment and be

successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy”.

This definition has later been criticized for highlighting the individual responsibility for employability, disregarding its relative dimension and for generating a multitude of lists of skills and attributes that become confusing for universities, schools and students (Tomlinson, 2012; Holmes, 2013). Building on these criticisms to the dominant definition of employability as a possession of skills and attributes, Holmes (2013) provided two other competing views, employability as social positioning and employability as processual. Employability as social positioning addresses the relative dimension of employability by proposing the argument that higher education may be, to some extent, reflecting pre-existent inequalities in the students' social capital (Holmes, 2013). In his 2003 keynote speech at ECER Lisbon, Phillip Brown alerted the audience to the “opportunity trap” (p.142) that devalues students' efforts to get a graduate job. He explained how students are increasingly requested more knowledge, abilities, attributes and experiences in order to secure a job that only exists for a few, despite the overall knowledge, abilities, attributes and experiences of all the candidates. Brown's argument was that although the degree is becoming a necessity to get a job, it does not guarantee one (Puhakka et al., 2010). This overall credential inflation in higher education revealed a facet of employability as a competition for graduate jobs. In this view employability is no longer just about the possession of skills and attributes but includes a relational dimension in which some graduates' skills and attributes are better than others. Being employable and being employed, students are finding, is not the same thing. Wilton (2011, p.87) further explains that “it is possible to be employable, yet unemployed or underemployed”, as employment is a consequence of multiple variables other than education. What these arguments revealed was that there is a “relative dimension” (Wilton, 2011, p.87) within employability that is ignored in definitions that frame employability only as the possession of skills and knowledge.

Finally, in employability as processual, Holmes (2013) highlighted recent research on employability that focuses on identity development and examines the “social processes by which graduates achieve a satisfactory and settled

position in employment” (Holmes, 2013, p. 549). Also following this view, other definitions have emerged since Yorke’s (2004) proposal that frame employability in a more holistic manner, more focused on the developmental nature of the university-placement experience and on the identity development within these experiences (Tomlinson, 2012; Jackson, 2014b). What these later efforts to reframe employability as identity development aim is to emphasise the fact that not all graduates move to employment in a straightforward way.

Building on these recent developments regarding the interpretation of graduate employability and on the notion of learning transfer that is explored in the following chapter, the argument presented in this study is that a focus on process, on iterations and on students’ identity development is necessary to counteract the mechanistic approach to the transition between university and the workplace based on a view of employability as possession.

2.3.2 Skills

Embedding skills in higher education’s curricula was one of the widest and more visible strategies adopted by universities to promote employability and putting education to work¹. The rationale adopted was promoted by policy documents (*inter alia* Carneiro et al., 2003; BIS, 2012; UNESCO, 2012; Holland et al., 2013), stating that “the economic benefits, both to the individual and to the wider economy, of a university degree will clearly depend on the quality and breadth of skills imparted” (Holland et al., 2013, p.9).

For policy-makers skill acquisition by students is the best way to develop a successful economy (Wolf, 2002) and to keep pace in the race between education and technology (BIS, 2012). UNESCO’s (2012, p.170) report on the relationship between youth and skills follows this argument and clearly calls out governments to promote transferable skills. In that report it is possible to read the warning that, “if countries are to grow and prosper in a rapidly changing world, they need to pay even greater attention to developing a skilled

¹ “Putting Education to work” was the exact title of UNESCO’s 2012 report on skills, in which the development of transferable skills was presented as the main strategy towards preparing youth for the world of work.

workforce". Consequently, in the past decades, higher education focused strongly on employability skills (Tomlinson, 2012; Tymon, 2013). Skills are now part of higher education's vocabulary (Hind and Moss, 2011) and they can be found in "student handbooks, course documents, module descriptors, and built into records of achievement or transcripts" (Atkins, 1999, p.268).

Hind and Moss (2011) explained that employability skills are skills mastered by individuals that can be used in several situations in order to help them interact and work with others and, therefore, help students gain employment. They also identified as employability skills: personal communication skills, numeracy skills, career management skills, presentation skills, learning and studying skills, group work skills, among others (Hind and Moss, 2011). A relevant assumption about this skills-list was that they were transferable. Taking on this nomenclature, UNESCO (2012, p.172) stated that transferable skills included "analysing problems and reaching appropriate solutions, communicating ideas and information effectively, being creative, showing leadership and conscientiousness, and demonstrating entrepreneurial capabilities". Other authors have other skills-lists and in an effort to systematise them, Tymon (2013) identified and compared six employability frameworks, each with a more or less different set of skills that are considered transferable and promote employability. It was not just the skills themselves that differed in these multiple frameworks, but also the terminology used. Overall, there is a confusing proliferation of terms regarding skills, such as, "core", "key", "transferable", "generic", "soft" or "hard" skills (Atkins, 1999). Furthermore, there is ambiguity in the meaning of these skills (Jackson, 2014c) between authors, but also between universities, students and employers (Tomlinson, 2012; Tymon, 2013).

One trend that has become evident is the broadening of the skills lists in terms of the classification of skills as personal attributes, process skills and technical competencies. Knight and Yorke (2004) brought attention to the fact that the term skills is often used interchangeably with competencies and attributes, which might be a consequence of the multidimensional nature of employability as a concept and the evolving nature of employers' demands, that these skill-lists attempt to address.

The main purpose of this section is to argue that employability and skills are a controversial topic (Moreau and Leathwood, 2006). Starting from the criticisms of a narrow view of employability that ignores its relational dimension and diminishes the importance of the individual, to the lack of shared understanding of meanings and the multiple definitions of skills (Tomlinson, 2012; Tymon, 2013; Jackson, 2014c) that become problematic for universities, employers and students regarding their development and measurement. Furthermore, it is argued here that these skills-lists are oversimplifying the transition between university and the workplace to learning that is simply carried over from one setting (university) to another (workplace) and disregarding the developmental nature of university and of the transition between university and the workplace.

2.3.3 Placements as instruments for employability

Placements are one of the instruments used by universities to promote students' employability (Auburn, 2007; Bullock et al., 2009; Gracia, 2009) and have also become an important area of educational policy (Humburg et al., 2013). They are defined as short-term experiences in real workplaces, under real work settings, whose conditions vary across programmes and universities (Duignan, 2002).

Universities target placements as promoters of employability due to a belief that "supervised work experience produces highly positive outcomes" (Auburn, 2007, p. 118), namely for students' employability by making the transition from school to work smoother (Anakwe and Greenhouse, 2000; Humburg et al., 2013). Other reported benefits included the reduction of a cultural shock (Jackson, 2014b), better access to work communities, the tools they use (Stanley, 2013), their language and the overall culture of the organisation (Anakwe and Greenhouse, 2000; Gracia, 2010). Reported benefits also include the development of generic skills and personal attributes (Wilton, 2012). This belief in the overall benefits of supervised work experiences has been backed up by some studies, such as Blackwell *et al.* (2001) that found higher employment rates and higher self-rating of skills in graduates that had some supervised work experience, compared to students that had no such experiences.

However, Auburn (2007, p.119) advised caution as these studies were “useful but limited”. For example, they failed to account for the developmental nature of higher education and how these experiences might be integrated in students’ wider experiences of university (Auburn, 2007). Departing from this criticism of the lack of understanding of the developmental process students undergo in higher education, it is important to remember that, during the work-placements, students might experience “role transitions” (Allen and Van de Villert, 1984), whose management may influence the breadth and depth of the achieved outcomes. Role transitions are moments in one’s life (unemployment, divorce, jail time, motherhood) that imply a change in the way individuals perceive themselves and are perceived by others regarding their identities, duties and rights (Allen and Van de Villert, 1984). Therefore, it is easy to understand why the way such role transitions are managed by the individuals, for example in the transition from student to a professional in a placement experience, might have a huge impact on graduates’ future work experiences.

Other criticisms pointed to the nature of the transition between university and the workplace as bidirectional, and argued that the return to university has been poorly managed by universities and is generally under-researched (Auburn, 2007). The author supports this criticism with several studies (Ryan et al., 1996; Blackwell et al., 2001; Fell and Kuit, 2003). Indeed, Fell and Kuit (2003) reported that when students returned to university, the focus was concentrated on reporting back what happened in the placement and there was a lack of support for the (re)integration of the students into the academic life. Another aspect that I would like to add to Fell and Kuit’s (2003) concerns regarding students’ returning to university after spending one year working in an organisation has to do with the transfer of the learning that occurred during that experience back into students’ experiences of university. For instance, Kettis *et al.* (2013) reported that supervised work experiences are connected with better academic performance, which is also an idea commonly divulged in the promotion of these types of experiences. Mansfield (2011) also focusing on the improvement of academic performance after placement experiences reported mixed data from previous studies. From her own data, however, Mansfield (2011) reported evidence of benefits in final year students, but, with

possible gender differences. So, the answer to the questions of how and why this performance improvement happened, or how to assure it for every student is still unknown. This might have been one possible reason why Kettis *et al.* (2013) reported a wider potential in supervised experiences that has not yet been systematically researched and implemented.

Adding to these criticisms there are some mixed findings regarding the overall perception of supervised work experiences being positive experiences for the students. For example, Blackwell *et al.* (2001) reported that some students also have negative experiences in the placement. For the authors (Blackwell *et al.*, 2001) these could be related with features such as the lack of opportunity to integrate theory into practice, or lack of supervision (Ryan *et al.*, 1996). Another possible explanation may be that students may experience a reality shock when they enter a new workplace and struggle to adapt to the unfamiliar setting (Louis, 1980). This view was also supported by Arnold (1985), who argued that how students deal with the unexpectedness of the workplace in comparison to university has important implications in their overall placement experiences. Regarding this ability to adapt to the unexpectedness and the surprises of the workplace, Van Maanen (1976) argued that the newcomers' main task upon entering the workplace would be to develop the appropriate "mental maps" (p.80) that would allow them to act independently in the workplace.

These contributions to the study of the transition between university and the workplace become even more relevant in the context of understanding the university setting and the workplace setting as intrinsically different. For instance, Resnick (1987) provided a useful comparison between university and the workplace regarding learning and depicted almost two opposite worlds. For Resnick, university was focused on individual cognition, pure mentation, symbol manipulation and generalised learning while the workplace was focused on shared cognition, tools manipulation, contextualised reasoning and situated-specific competencies (Resnick, 1987). Such discontinuities between these two settings was also identified by other authors (Candy and Crebert, 1991; Tangaard, 2008), who argued that part of the difficulty the students experience in this transition is due to the dissimilarities presented by Resnick (1987) and others that the students in transition might

identify. For Tangaard (2008), managing successfully the transition between university and the workplace is, then, about “creating a familiarity with the objects, people and processes of that strange world of work” (p. 221).

However, the lack of research focusing on how students manage this transition and make sense of their experiences is another common criticism. According to Gracia (2010) most studies on the transition between university and the workplace and on supervised work experiences ignore the personal experiences of the students. According to Johnston (2003, p. 419) “the voices of other partners in the graduate recruitment process, the graduates, are deafening in their silence” and there is little research and information regarding possible negative experiences, which might skew the overall understanding of the actual implications of work-placements regarding the transition between university and the workplace (Brown, 2002; Duignam, 2003; Gracia, 2009).

To conclude, this study argues that the view of placements as instruments for employability development is a simplistic interpretative framework for understanding students’ placement experiences and sense making of the transition between university and the workplace. Regarding placements, literature claimed that there is a lack of understanding on how students experience and make sense of their placements in relation to their university experience and personal views on employability. The negative implication may be that their voices are being ignored by policy makers and current understandings of supervised work experiences are incomplete. Furthermore, for higher education and educational policy placements are an important instrument to investigate students’ transitions between university and the workplace and to assess the relevance of the widely advocated benefits of education for graduates’ employability.

2.4 Summary

This chapter argued that the higher education policy discourse on the instrumentality and usefulness of more education towards employability development has promoted a specific view of the transition between university and the workplace that is too restrictive. Accordingly, this chapter discussed

how that interpretative framework, rooted in a particular understanding of Human Capital Theory presented several limitations towards understanding students' experiences and sense making of the transition between university and the workplace, including depicting that transition as a one-way journey in which the individuals would move from being students to being professionals in a straightforward manner. Furthermore, this chapter also discussed how within the interpretative framework offered by that particular view of Human Capital Theory the focus was mainly on the transfer of knowledge and skills in an unproblematised way.

Consequently, the argument presented here is that both limitations created a very restrictive framework for understanding students' actual experiences of the transition between university and the workplace. A transition that research today is already describing as increasingly more diversified and multi-directional (Lundhall, 2011; Walther, 2006), which seems to contest the proposed view of placements as mere instruments for employability development. Instead, the following chapters argue for a focus on the students' personal narratives of the navigation between university and the workplace and the reframing of placements as "sites of possibility" (Urrieta, 2007, p. 109). Moving forward, the next chapter engages in the process of conceptualizing a different connection between university and the world of work by focusing on the concept of transfer of learning to make sense of what students experience in their navigation between university and the workplace.

Chapter 3 – Conceptualising transfer of learning between higher education and the workplace

3.1 Introduction

The previous chapter argued that the current economic-based understanding of the transition between higher education and the workplace, highly focused on employability as the development of transferable skills towards the acquisition of a job, presents several limitations as a conceptual framework to theorise and make sense of the students' transitions between university and the workplace.

In this chapter, learning transfer is conceptualised as a complex process that aims to explore students' transitions beyond that narrow definition of employability and offer an alternative interpretative framework for students' placement experiences. Therefore, this chapter identifies the conceptual and methodological challenges that should be considered in the study of transfer of learning between university and the workplace and that influenced some of the methodological decisions presented in Chapter 4.

Structurally, this chapter presents a brief overview of learning transfer theories (section 3.2), details the main limitations of those theories (section 3.3) and introduces the learning transfer process model.

3.2 Learning transfer theories

Learning transfer became a direct object of study in the early 20th century, however, it is not a “well-agreed-upon construct” (Lobato, 2006, p.438) amongst researchers up to this day. On the contrary, when literature focused on transfer it was out of concern for the transfer problem or failure²

² In 1982, Georgenson wrote a paper in which he aimed to present transfer of learning as a critical concern for researchers and stated that “I would estimate that only 10 percent of content which is presented in the classroom is reflected in behavioural change on the job” (Georgenson, 1982, p.75). Despite not coming from empirical evidence the reference to 10 percent was generally taken as evidence of a transfer problem that had to be addressed and figured in many other papers as an introduction to this problem (Fitzpatrick, 2001). Nonetheless, further research into transfer of learning continued to present low levels of learning transfer, which provided some empirical evidence to Georgenson's rhetorical device (see Bransford and Schwartz, 1999 for a summary).

(Georgenson, 1982; Bransford and Schwartz, 1999). This referred to the lack of transfer between the moment of learning and the moment of application (transfer), which was addressed as an educational problem that required solving (Georgenson, 1982; Bransford and Schwartz, 1999; Carraher and Schliemann, 2002).

Another important recognition regarding transfer of learning as an overall area of research was that there are several theories and frameworks of transfer and the selection of one over the others might result in very different results (Lobato and Siebert, 2002; Marton, 2006). According to Lobato and Siebert (2002), different theories of transfer have an impact on the definition of transfer used, the research design and the amount of transfer that is perceived to occur due to the limitations on what counts as learning transfer and as evidence. This problematic aspect of the inquiry on learning transfer draws more broadly from the question of what is learning. Illeris (2010, p. 2) wrote that “traditionally, learning has been defined as the process through which an individual acquires knowledge, skills and possibly also attitudes and opinions”. Following this definition transfer could be defined in its most traditional form, as the application of previous learning to a new situation. However, learning could also be explained as either occurring as an inner psychological process, as a social process or both (Illeris, 2010). Accordingly, transfer could also be defined using a view of application, for the first case, or as participation, for the second (Sfard, 1998). The interaction between both as Illeris (2010) proposed for learning, has been more problematic to achieve in learning transfer. However, one definition of transfer that could be used was proposed by Marton (2006, p.499) – “transfer is about how what is learned in one situation affects or influences what the learner is capable of doing in another situation”.

So, while acknowledging the complexity of the concept of transfer of learning and of the theories and perspectives that have been developed to investigate it, Table 3.1 summarises and represents some of the multiple views on transfer, the multiple theories and even several attempts at reconceptualising it (*inter alia* Beach, 1999; Bransford and Schwartz, 1999; Hatano and Greeno, 1999; Lobato, et al., 2012; Billett, 2013).

Table 3.1 – Summary of some theories of learning transfer

THEORY	MAIN AUTHOR(S)	SUMMARY	RELEVANCE FOR THE STUDY
<i>Classical Theories</i>			
Identical Elements (Behaviourist)	Woodworth and Thorndike, 1901 Thorndike, 1906; 1924	Was developed as an alternative to Formal Discipline and instead of a general transfer theory, it is a specific transfer theory focusing on the presence of identical elements in learning and transfer situations. Identical elements in this theory are “shared features of the stimulus environment of the two tasks” (Royer, 1978, p. 11).	The idea that transfer is facilitated when there are perceivable similarities in both contexts, learning and transfer, university and workplace.
General Principles (Gestalt)	Judd, 1939	Was developed around the idea that transfer was dependent on the learning of general principles that would apply to different situations. Therefore, facilitation of transfer would imply the development of higher mental processes.	The argument proposed by Judd that “transfer does not occur effortlessly and mindlessly, as a reflex” (Tuomi-Grohn and Engestrom, 2003, p.21) is important. However, the theory in itself, as implying the separation between school and life becomes less useful.
Lateral and Vertical Transfer	Gagné, 1965	Defined transfer as vertical – refers to “a skill or bit of knowledge (that) contributes directly to the acquisition of a super-ordinate skill or bit of knowledge”; or lateral – refers to “a kind of generalization that spreads over a broad set of situations at roughly the same level of complexity” (Royer, 1978, p.4).	Introduces the view of transfer as a dichotomy which this study criticises as an overall strategy to conceptualise and investigate transfer of learning.
Near and Far Transfer	Royer, 1978 Mayer, 1975	These authors proposed a dichotomist view of transfer based on near and far. Near transfer would be transfer occurring in similar conditions and far transfer would be transfer occurring in less similar conditions. For these authors transfer is maximised in near transfer situations.	These approaches were useful to address the conditions that may promote transfer regarding the existence of similarity and dissimilarity between the contexts of learning and the contexts of transfer.

<i>Cognitive Theories</i>			
Dispositional Transfer*	Bereiter, 1995	Within the dispositional view, "transfer is no longer thought of as skill training or skill instruction but as something more like character education" (Bereiter, 1995, p.21)	Focus on the individual and also another attempt to broaden the study of learning transfer beyond direct application of knowledge.
<i>Situated Theories</i>			
Legitimate Peripheral Participation	Lave and Wenger, 1991	Was framed as a criticism to learning transfer as conceptualises learning as participation in a community of practice.	Acknowledgement of the context and of people as a relevant part of learning transfer. Also the concept of community of practice to conceptualise context.
Productivity*	Hatano and Greeno, 1999	In this theory, transfer was reconceptualised as productivity, which refers to "the extent to which learning in some activity has effects in subsequent activities of different kinds" (Hatano and Greeno, 1999, p. 647)	Within this theory what counts as transfer was expanded beyond the "normative ('the correct') answer as the sole criterion for transfer" (Hatano and Greeno, 1999, p. 648) and included alternatives, such as the use of analogies. This was useful for considering how, what counts as transfer, is limited by the definition used and how it could be improved.
Preparation for Future Learning*	Bransford and Schwartz, 1999	Offers a view of transfer from the perspective of its effects on new learning.	The possibility that transfer can be framed beyond the idea of the application of previously learned material in a new situation.
Expansive Framing	Engle, 2006; 2012 Engle et al., 2010	Engle approaches transfer of learning as intercontextual and offers expansive framing as a mechanism for the promotion of transfer.	This theory offered the possibility to address the bidirectional nature of transfer within the transition between university and the workplace.
<i>Sociocultural and Socio-Personal Theories</i>			
Consequential Transitions*	Beach, 1993, 1999, 2003	Proposes the reconceptualization of transfer as lateral, collateral, encompassing and mediational.	The opportunity for broadening what counts as transfer of learning and thus offering new possibilities for defining and measuring learning transfer.

Adaptability*	Billett, 2013	In this theory transfer was recast as adaptability, which “comprises individuals construing what they experience, then aligning and reconciling with what they know, and enacting responses” (Billett, 2013, p. 5).	This theory focused on the interconnection between different dimensions of transfer and provided an alternative to look at both, the individual and the social aspects of learning transfer.
<i>Activity-Theory Theories</i>			
Developmental Transfer	Engeström, 1990 Engeström and Sanninno, 2010	This theory understands transfer as the collective activity in different social organizations.	Despite its relevance as a theory of transfer, its focus on collective activity systems was not particularly relevant for this study.
* Within these approaches transfer of learning is reconceptualised and acquires a new denomination.			

Some views of learning transfer depicted in Table 3.1 were developed as a direct criticism to previous theories. Beach (1999; 2003) argued that such approach created a dichotomized debate on transfer, which constricted the emergence of an holistic research approach that is yet to be developed. That was the case, for example, with Lave’s (1988) arguments against cognitivist approaches, which led to new transfer conceptualizations towards a more situated perspective, such as the reconceptualization of transfer as affordances and constraints (Greeno and Middle School Mathematics Through Applications Project, 1998).

This debate between situated and cognitivist approaches continued and had its highlights in a series of journal articles published in the *Educational Researcher* (Anderson et al., 1996; Anderson et al., 1997; Greeno, 1997). Further developments on the concept of transfer continued with sociocultural perspectives reinforcing the dialogic relationship between the individual and the context (Beach 1993; 1999; 2003) and with the introduction of transfer as a collective action system explored by activity theory (Tuomi-Gröhn and Engeström, 2003; Konkola et al., 2007). With Billett (2013), for example, transfer was reconceptualised as adaptability, which included propositional knowledge as well as procedural and dispositional learning.

The next sub-sections provide more detailed descriptions about the concepts and research under the views that are relevant to the construction of the

conceptual framework that supports this study and that are further developed in section 3.4.

3.2.1 Classical perspectives

Classical perspectives of learning transfer included theories coming from a behaviourist and gestalt background. Here, a greater focus is attributed to Thorndike's identical elements theory (1906; 1924) because of its relevance and impact that still pervades in current research (Day and Goldstone, 2012).

Thorndike (1906; 1923; 1924) was one of the main proponents of a behaviouristic learning transfer theory. His approach, generally called identical elements (Woodworth and Thorndike, 1901; Thorndike, 1906) can be summarized, using his own words, with the statement "learning is connecting" (Thorndike, 1923, p.173). This meant that learning transfer required individuals to establish valid associations across time and space, which, for Thorndike (1906; 1923; 1924), was only possible if there were common links between situations that the students could identify in order to respond accordingly. For transfer to occur, students had to identify the stimulus in different situations and apply the correct response.

In this way, identical elements theory accounted mostly for specific instances of transfer and it focused on "surface similarities" (Carragher and Schliemann, 2002, p.3) between learning and transfer situations (e.g. a task). Consequently, identical elements' theory presented the individual learner as a passive agent who generalized a response when presented with a similar stimulus (Carragher and Schliemann, 2002). Consequently, learning transfer definitions within behaviouristic approaches were narrow in scope, being generally defined "as the application of knowledge learned in one context to a new (but similar) context" (Lobato, 2006, p. 436).

Thorndike's (1923, p. 148) basic assumption was that "to any new situation man responds as he would to some situation like it, or like some element of it". The consequences of such definition for learning, teaching and research was that the designed learning tasks were required to be as close as possible to the transfer assessment tasks (Thorndike, 1906; 1923). In terms of research on transfer, behaviouristic approaches often included a moment of instruction, an application task and a definition of transfer set from the start by

the researcher. One example taken from Thorndike and Woodworth's (1901) research included a moment of learning about measuring the area of squares, then attempting to measure squares with different sizes and finally attempting to measure different figures. Overall, findings of transfer within this view were frequently very low (Bransford and Schwartz, 1999; Day and Goldstone, 2012).

Also related to the notion of similarity and dissimilarity was Royer (1978) and Mayer's (1975) view of transfer as near and far. For Royer (1978), near transfer refers to "instances in which one classroom learned skill, or bit of knowledge, transfers to another classroom skill or bit of knowledge", and far transfer refers to "situations in which material learned in the classroom transfers to events or problems encountered outside of the classroom" (Royer, 1978, p. 10). For Mayer (1975), who focused on content, near transfer referred to when learning items were similar to the ones presented in the handbook and far transfer "require(d) interpretation such as recognizing that the formula does not apply, solving story problems, or using just part of the formula" (Mayer, 1975, p. 531). These perspectives provided an interesting approach to learning transfer in which the possibility for transfer would be increased in near situations, due to the similarity between the learning situation and the application situation. Overall, these approaches focused on transfer of learning as "people being able to do similar things in different situations because of similarities between those situations" (Marton, 2006, p. 507). For Marton (2006) this doctrine of sameness was a limitation of these perspectives as he believed that it was possible for transfer to exist also within dissimilarity. Another possible limitation refers to these approaches' dichotomist nature, in which transfer is either near or far, which in real life contexts might be difficult to differentiate. Accordingly, this aspect is further explored along this study (Chapter 5 and 6) and its implications are addressed in section 6.2.1.

Nonetheless, the reason why identical elements theory and near and far perspectives are highlighted in this study relates to subsequent research continuing to focus on identical elements and sameness, thus reinforcing surface similarities as promoters of transfer (Day and Goldstone, 2012). The key aspect taken from these theories and that informs this study in its approach to transfer of learning was that similarities may provide continuities

between time, space and people that possibly facilitate students' transitions between contexts. Therefore, in the definition of learning transfer presented in section 3.4.1 (Learning transfer definition), identical elements and near transfer situations are introduced as cues that may bridge students' experiences from previous learning into current situations. One difference from how it was applied by Thorndike (1906; 1921; 1924) was that it did not focus only on the characteristics of the tasks themselves, but it paid equal attention to the knowledge and the individuals in the situations. Such additions were the contribution of cognitive and situated perspectives on transfer that are described in the following section.

3.2.2 The cognitive-situated debate

The debate between cognitive and situated theories of learning and transfer introduced an important development in how transfer was conceived, and represented a transition from a focus on the individual, to a focus on social aspects of learning and transfer.

As explained in the previous section, behaviourist perspectives on transfer relied on similarities between situations to promote and explain transfer (Bransford and Schartz, 1999; Tuomi-Gröhn and Engeström, 2003; Day and Goldstone, 2012). This emphasis on the links between situations was also present in cognitivist perspectives. However, the similarities that would account for transfer within this were "schema", which can be broadly defined as knowledge structures (Bereiter, 1990). For the cognitivist perspective, knowledge structures, meaning the mental representations (Bereiter, 1990) that explain how the brain stores and represents information (Tuomi-Gröhn and Engeström, 2003), had to be the same in the learning and transfer situation for transfer to occur (Lobato, 2006). The focus here is not on specific transfer, as with classical views, but on a broad transfer of mental capacities and knowledge structures.

However, what remains the same is the attention to similarities, whether they were surface similarities or structural similarities (Day and Goldstone, 2012). Hence, despite profound differences, both views, classical and cognitive, focused on the transfer of a task (Tuomi-Gröhn and Engeström, 2003) and depended on conceptualizations of learning transfer that treat "knowledge as

quite a static property of individuals” (Hatano and Greeno, 1999 p. 647) and as independent of context beyond the identification of similarities that link the settings of learning and transfer.

Situated perspectives emerged as a direct criticism to this conceptualization of transfer, namely of how it separates the mental dispositions of the individuals and the social world in which they operate (Konkola et al, 2007). The main claim of situated views of transfer is that action is situated and consequently knowledge does not transfer between situations, abstraction is of little use to promote transfer and instruction should always occur in complex environments (Anderson et al., 1996). What these claims ultimately provide is a criticism of schooling (Lave and Wenger, 1991) and a reconceptualization of learning as “progress along trajectories of participation and growth of identity” (Greeno, 1997, p.9).

Consequently, one of the innovations that situated views presented was the shift from individual cognitive behaviour to larger systems of action that also accounted for the individuals’ interactions with the environment (Greeno and Middle School Mathematics Through Applications Project, 1998). The context became a relevant feature of learning and transfer beyond issues of similarities and the static nature of knowledge was questioned so as to include a discussion about the co-construction of knowledge (Carraher and Schliemann, 2002).

One of the major contributions to this new understanding came from Lave and Wenger’s (1991) analysis of several groups (e.g. alcoholics anonymous, tailors) and their recognition of a learning pattern in which novice members developed their knowledge through group participation and from interacting with more experienced members. They described this as legitimate peripheral participation, a theory for learning focusing on the relations between novices and old-timers and their efforts to create, reproduce, transform or even eliminate their communities (Lave and Wenger, 1991).

3.2.2.1 Learning as legitimate peripheral participation

Deriving from the situated perspectives was the idea that learning took place, or should take place, as legitimate peripheral participation (Lave and Wenger, 1991). This concept developed by Lave and Wenger (1991) referred to

individuals moving from newcomers to full participants within the social practices of any community, while describing participation as a form of membership to that community. Participation was, within their view, the result of constant negotiation between the community members of the “meaning(s) in the world” (Lave and Wenger, 1991, p.51). That meant that knowledge would be co-created within the community in a mutually constitutive manner between understanding and experience, aiming at a greater involvement and understanding of that community and culminating in full participation (Lave and Wenger, 1991).

The process of participation was described by Roberts (2006, p. 624) as a gradual increase in participation, in which “firstly, members interact with one another, establishing norms and relationships through mutual engagement. Secondly, members are bound together by an understanding of a sense of joint enterprise. Finally, members produce over time a shared repertoire of communal resources, including, for example, language, routines, artifacts and stories.” According to Lave and Wenger (1991) this last stage of full participation could take many forms and, ultimately, it was a way of belonging but also a representation of the individual’s positioning in the community. Therefore, legitimate peripheral participation can describe the type and nature of the interactions between newcomers and masters as they relate with the activities, the practices, the knowledge and the artefacts that are part of that community (Lave and Wenger, 1991). Ultimately, belonging to a community and engaging in legitimate peripheral participation would lead to the development of “knowledgeably skilled identities” (Lave and Wenger, 1991, p.55), as they are developed amongst the social interactions provided by the community.

For this study, the possible construction of learning in the workplace as legitimate peripheral participation allows the interpretation of the participants’ changing position within their communities of practice, from the start to the end of their work-placements. Furthermore, it might allow the investigation of how the others that are part of the students’ placements facilitate (or not) their learning and subsequent move from newcomer to full participant (Lave and Wenger, 1991).

3.2.2.2 Expansive Framing

Another important contribution from a situative perspective to explain transfer of learning was expansive framing (Engle 2006; Engle et al., 2010; Engle et al., 2012). Expansive framing was presented by Engle *et al.* (2010) as a mechanism to promote transfer of learning based on the argument that “transfer is more likely to occur when learning contexts are framed as part of a larger ongoing intellectual conversation in which students are actively involved” (Engle, 2006, p. 451).

For the authors (Engle et al., 2010), the term “framing” referred to the communicative processes that could be used to create a connection between contexts, namely the learning and transfer contexts. This connection could be made regarding time and participation (Engle, 2006), but also, space and content (Engle et al., 2010; Engle et al., 2012). When these connections were expansively established, Engle *et al.* (2010; Engle et al., 2012) considered that intercontextuality was created. Intercontextuality, which the authors defined as the creation of “connections between settings” (Engle et al., 2012, p. 220) would give “the learners the message that they are allowed, encouraged, and even responsible for transferring what they know from one context to all others linked with it” (Engle et al., 2010, p. 605).

One important consideration at this point is also that the authors’ (2006; 2012) focus regarding the promotion of expansive framing was placed on investigating how teachers framed learning episodes. For example, regarding time framing, they noted how teachers would provide meta-comments that included “references to past and future in a manner that encourages(d) accountability for what one is(was) learning over time” (Engle, 2006, p. 482-483). Therefore, in Engle’s (2006; Engle et al., 2010; Engle et al., 2012) perspective, teachers worked to frame contexts as being temporally, spatially, contextually and content-wise connected with other contexts. For the authors this would facilitate students’ transfer of learning by creating in them the expectation of transfer sometime in the future and/or in a different context.

Overall, the contribution of expansive framing for this study lays in the possibility of investigating transfer as intercontextual, thus as an ongoing process rather than a two-moment event (learning and transfer) and by

identifying different ways in which learning can be framed. This last aspect, I believe, can be particularly relevant to augment classical learning transfer theories' focus on knowledge.

3.2.3 Sociocultural perspective

Departing from the possibilities offered by situated perspectives, sociocultural theories describe learning and transfer as a cultural and personal endeavour that focuses on the dialectic relation between the individual and the setting, including the people and objects within the setting (Beach 1999; 2003). According to Beach (1999, p.106), this dialectic relation posits that "learners and organizations exist in a mutually constitutive relation to one another", in which, both the individual and the context are transformed by each other. Conceptually, this means that within sociocultural perspective the nature of transfer moved from a transition between static contexts (Konkola et al., 2007), to the incorporation of movement and transformation in a multi-directional and reciprocal way (Beach, 1993; 2003; Lobato, 2006; Konkola et al., 2007).

Methodologically, it might also mean that research should incorporate a third space into the analysis of transfer. That space would be the interaction between individuals and context, where new meanings, identities and artefacts are created. This third space would, then, contribute to the research developed by classical perspectives, focusing on the individual (Bereiter, 1995; Bransford and Schwartz, 1999) and the tasks (Thorndike, 1924) and situated perspectives, which highlighted context as a focus of analysis. For this, Beach (1999; 2003) introduced developmental coupling as the concept that would become the unit of study of consequential transitions. It focuses on the outcomes of changing individuals and social activities and relates to artefacts, as the "objects that embody human intention and agency" (Beach, 1999, p.120). The relevance of this concept is that it offers new lenses to look at transfer of learning and understand how individuals progress in different settings.

Following this, Beach's study (1999; 2003) of Nepalese students becoming shopkeepers explained how the students' struggle between keeping the notation style learned in school or the identification with that practice in the

workplace resulted in the development of their own notation style. This new notation style was not the isolated consequence of each setting but the outcome of the dialectic relation of those students with both contexts.

Another relevant contribution of the sociocultural perspective is the reconceptualization of transfer as consequential transitions (Beach, 2003, 1999), which is further developed below, and the definition of generalization as "the continuity and transformation of knowledge, skill and identity across various forms of social organizations" (Beach, 1999, p.112). Lobato (2006) explains that such a definition characterizes transfer as more than the reproduction of something previously learned, or the mere movement of knowledge between spaces. It is not just the knowledge that is transformed, but also the individual, with his or her identity and social interactions, enacting a constant reconstruction of their relationship with the context (Konkola et al., 2007).

Here, a key aspect for Beach (1999; 2003) is that transitions are indeed consequential and developmental in nature. Transitions are consequential when they are "consciously reflected on, often struggled with, and the outcome changes one's sense of self and social positioning" (Beach, 1999, p.114). Beach (1999; 2003) often addressed these consequential transitions as becoming someone different, which is why transitions must be understood as developmental.

Overall, the outcome of the dialectic relationship between the individual, the context and the artefacts can be "life transforming" (Beach, 1999, p. 113) in the sense that the individuals can change their knowledge, identity and ways of knowing (Beach, 1999; 2003). However, not all consequential transitions are the same, and Beach (1999; 2003) developed four types of consequential transitions that individuals can go through in their lives. They are, as presented in Table 3.2, lateral, collateral, encompassing and mediational transitions. According to Beach (1999, 2003), all individuals experience such transitions at some point in their lives, which is why being able to categorise them was an important step towards the analysis of consequential transitions.

For example, in traditional views of transfer or even within the interpretation of Human Capital Theory and employability frameworks presented in Chapter

2, the transition from university to the workplace would be characterised as a lateral transition, meaning a unidirectional, progressive transition. For this study, however, collateral, encompassing and mediational transitions are also important options to describe the students' placement experiences, as they open the scope for interpretation and understanding of less linear and progressive transitions.

Table 3.2 –Types of consequential transitions (Beach, 1999; 2003)

	DEFINITION	FEATURES	EXAMPLES
LATERAL	The individual moves from one activity to another in a pre-existing and progressive manner.	Between pre-existing social activities, Unidirectional, Progressive.	School; Moving from school to the workplace; Becoming a parent.
COLLATERAL	Individuals participate simultaneously in more than one related activities.	Between pre-existing social activities, Multidirectional, Negotiated.	Part-time job while working; Entering alcoholics anonymous.
ENCOMPASSING	The individual moves within the same activity.	Within the boundaries of the same activity, some sense of progress.	Promotion within the same company; Introduction of new software in the workplace; Introduction of new legislation or rules.
MEDIATIONAL	The individual participates in simulated activities.	Within the boundaries of the same activity, simulation of real activities.	Role-play games; Placements and internships.

The argument is that work-placements or internships can be seen, for example, as mediational transitions of real workplace experiences, some type of "as if" experiences of what is to be a professional and work in any given organization (Beach, 1999; 2003). In the placements students can experience real interactions with colleagues, costumers, employers and, to a large extent, live through the main features of a real workplace.

However, the placement experience is also a negotiated experience of belonging and professional development and in this sense may be correlated with the dialogic nature of collateral transitions (Beach, 1999; 2003). Students

will be somewhere in between their student and professional identities, somewhere in between university and the workplace, and must, at all times, negotiate their goals and learning with both contexts. This struggle is also present within the placement itself, where students progress in the workplace practices by continued engagement with the setting, the activities and the people. This is the definition of an encompassing transition, focusing on the development that exists within the boundaries of any given activity or organization (Beach, 1999; 2003).

What this study takes from this brief conceptualization of the transition between higher education and the workplace as consequential transitions is that it is complex and can be investigated through several analytical lenses. Therefore, one of the purposes of the next sections is to shed some light on the possible constraints to explore the transition between university and the workplace and provide a rationale for the conceptual and methodological decisions that are made in developing this study.

3.3 Some limitations of learning transfer theories

This section began by stating that transfer is not a “well-agreed-upon construct” (Lobato, 2006, p.438). Instead, and as the previous sections demonstrated, it is hard to define and controversial (Packer, 2001; Barnett and Ceci, 2002). Multiple criticisms have been made of the transfer concept and whole new theories emerged from some of these criticisms. This was the case with identical elements theory (Thorndike, 1906; 1923; 1924), legitimate peripheral participation (Lave and Wenger, 1991), or consequential transitions (Beach, 1999; 2003). What all of these have in common is the identification of conceptual and methodological limitations that led its authors to propose new ways of investigating and understanding learning transfer.

Another aspect to consider is that often debates became too polarized and created difficulties in achieving a holistic understanding of transfer of learning. In the next sections both methodological and conceptual issues are addressed. The aim here is to promptly identify the main constraints that could hinder this research and use them as a starting point for reflections on the appropriate learning transfer definition and conceptual model.

3.3.1 The metaphor problem

Some of the main limitations attributed to the study of transfer derive from conceptual formulations that are too narrow (Bransford and Schwartz, 1999; Packer, 2001; De Corte, 2003); that provide a functionalist view of knowledge (Lave, 1988; Billett, 2013), in which knowledge is regarded as a static property of the individual (Bransford and Schwartz, 1999; Hatano and Greeno, 1999; Beach, 2003); or that conceives of knowledge and tools as independent of context (Lave, 1988; Lave and Wenger, 1991).

Most of these criticisms derive from the fact that conceptualizations of transfer are intrinsically connected with the use of metaphors (Sfard, 1998). Metaphors are informative objects used as tools to enable memory, to promote understanding, and to bridge old and new knowledge (Sfard, 1998). However, using metaphors in education can limit our understanding of the educational process (Bereiter, 2002; Edwards, 2005), since metaphors are always bounded by context and confined within people's imagination and past experiences (Sfard, 1998).

Within learning transfer theories metaphors are widely used and one of the most criticized views of transfer is the "carrying over" metaphor (Lave, 1988, p.24). In this learning transfer metaphor the mind is seen as a "container" or as a "toolbox" (Lave, 1988, p.24) that is filled with knowledge, which is then moved from one place to others, without ever changing (Sfard, 1998). As a way to deal with the problems generated by this learning transfer metaphor, some authors have denied the very existence of transfer (Lave, 1988), or supported the idea of dropping it as a concept (Carragher and Schliemann, 2002). Some have reconceptualised transfer into new metaphors (*inter alia* Greeno, 1997; Bransford and Schwartz, 1999; Beach, 2003; Tuomi-Gröhn and Engeström, 2003), while others attempted to bridge existing metaphors (Cobb, 1995; Billett, 1996).

What these authors argued against was the implication that transfer of learning described a very passive, individual and factual, carrying-over of intact pieces of knowledge, from one place to another (Lave, 1988; Carragher and Schlieman, 2002; Day and Goldstone, 2012). This was also Lave's (1988) criticism of classic theories of transfer, in which the tools once learned would

be used in the same way in following situations. The metaphor seems to imply that “knowledge is theoretically separable from the situations in which it is developed or used, rather than a function of activity, social interactions, culture, history, and context” (Lobato, 2006, p. 435). The choice of a metaphor is then a “highly consequential decision” (Sfard, 1998, p.5) with several consequences, namely the methodological possibilities and limitations that it imposes on researchers.

3.3.2 Methodological limitations

The conceptual limitations attributed to learning transfer resulted in some follow up criticisms in the research designs of several studies. For example, Lave (1988) criticized the matching game developed in classical research of transfer, where the assessment activities were very similar to the learning activities. Day *et al.* (2012, p.164) also highlighted this problem in transfer research by calling it the “two-problem design” and emphasized how it provided a narrow scope for understanding transfer, for example, by focusing on knowledge and disregarding the individuals and the context, which invariantly led to low levels of measured transfer of learning.

Further criticisms to learning transfer research designs included the short time span between learning and assessment activities and also the lack of spontaneity in the tasks (Barnett and Ceci, 2002). The research activities were criticized for being fabricated away from individuals’ real contexts and for using, for example, cues that would increase the possibility for transfer (Anolli *et al.*, 2001; Barnett and Ceci, 2002). Overall, research on transfer has been criticized for using faulty transfer measurements (Bransford and Schwartz, 1999) that prevent a real understanding of, not only how much it transfers, but how and why.

3.3.3 Definition of learning transfer

This study assumes that previous learning transfer theories and subsequent definitions of learning transfer portrayed a problem with agency, by either placing much emphasis on individual mental agency, or on environmental agency (Beach, 1999).

There were, however, relevant concepts and empirical evidences to build on, like the importance of identical elements to promote transfer (Day and Goldstone, 2012), the relevance of personal dispositions, like motivation and schema development (Bereiter, 1995), but also, an increasing acknowledgement of the relevance of social interactions occurring in and between contexts (Lave and Wenger, 1991; Wenger, 1998; Beach 2003).

Therefore, in this study, transfer is defined as a consequential and developmental process of transformation that is experienced by the individuals regarding their knowledge, behaviours and identities, within the transition and interactions between contexts. Such definition provides the opportunity to understand transfer in a holistic manner by looking at the individual, the social and the interactions between them. Additionally, it allows for a longitudinal understanding of transfer, rather than just small snap-shots of very narrowly defined learning transfer.

In the next sections I provide a more detailed description of the learning transfer process model (section 3.4) and of the analytical possibilities (section 3.4.4) that it provides to the study of learning transfer between university and the workplace.

3.4 The learning transfer process model

The development of the learning transfer model arose from the need to find a suitable framework that could account for both transition, transformation and continuity within students' experiences of work-placements. It was also relevant for this study that the chosen model would be able to encompass a focus on the individual, the content and the context in which the work-placements take place. And lastly, the transition between contexts had to be understood within notions of consequential personal development and co-construction. Therefore, in this section the developed conceptual framework is presented, its dimensions are described and its usefulness as an analytical tool is explained.

3.4.1 Dimensions

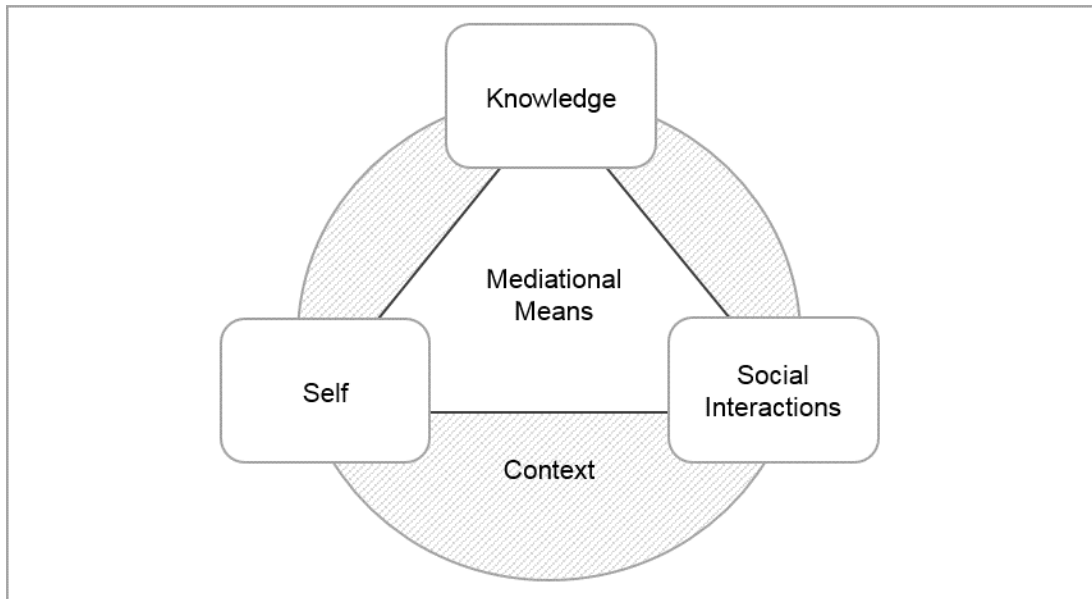
The development of the learning transfer process model began with the recognition that people interpret figured worlds (Holland et al., 1998) of the

contexts that they are part of. Figured worlds are “socially produced, culturally constructed activities” (Holland et al., 1998, p.40-41) that shape individuals actions and identity development. Accordingly, Holland *et al.* (1998) stated that figured worlds were more than a mental image, since they enabled the individual’s contribution to the construction of that same figured world. What they meant was that a figured world is never just a realistic painting of a certain reality, but rather, an ever changing representation of the individual’s perceptions upon a certain reality and of their actions within it.

My understanding of the figured world of university, for example, includes libraries, offices and students’ unions. It has classes, but also seminars, workshops or reading discussion groups. In my figured word of university, libraries are the place where books and papers are stored and where I have to go to get them. In my personal experience they are not a place for working. So, what this figured world encompasses is not only the possible features of a university, but, and more importantly, my understanding and uses of it. In this sense, figured worlds shape the individuals’ actions, much like my figured world of university shapes the way I interact and use university libraries. Other people figured worlds of university might be different from mine, but what remains is that, in any case, that individual, yet socially and mediated dialectic construction shapes our actions and the way we decide to engage with that particular figured world.

The point here was that, investigating and understanding the features and constructions of students’ figured worlds of work while they are in their placements might provide opportunities to help them shape positive constructions that would lead to a fuller and more interactive engagement with that world. Overall, the figured world can be a relevant tool for investigating educational contexts and the identities that are formed in them (Urrieta, 2007). Therefore, it is used in this research as the umbrella concept that explains how students integrate and shape all the dimensions from the learning transfer process in their understanding of the context. Figure 3.1 presents the dimensions that constitute the learning transfer model and the different aspects that could be part of individuals’ figured worlds of the transition between higher education and the workplace.

Figure 3.1 – Learning transfer model



As presented in Figure 3.1, the learning transfer model is formed of three interrelated dimensions, knowledge, self and social interactions, and each of these is supported by physical and conceptual mediational means that either exist in the context or are created by the individuals. Context is also a relevant aspect of the model as it frames all the actions and further reinforces the social and contextual features of this model.

These dimensions were developed from literature on learning transfer and from an attempt to integrate relevant contributions from classical, cognitive and situated perspectives on transfer. In the next sub-sections, each dimension is described, including how they were developed and the analytical units that are used to investigate students' experiences of their one-year work-placements.

3.4.1.1 Knowledge

One concept that is immediately connected with learning and learning transfer is knowledge. Knowledge is a very generic concept (Lundvall, 1996; Eraut, 1998), but it is most often used to describe factual and codified information. Within this study, and following the learning transfer definition presented before, using knowledge regarding its factual dimension is not enough to understand students' transitions between higher education and the workplace. Therefore, in this study, knowledge is conceptualised as know-what, know-why, know-how and know-who (Lundvall and Johnson, 1994; Lundvall, 1996).

Know-what refers to facts and information, and it can be divided or simplified (Lundvall and Johnson, 1994; Lundvall, 1996). Within placements this type of knowledge might include the theoretical knowledge students learned in school and university, but also, information about the company, the sector, the products, and even the people that are part of that company or sector.

Know-why is the type of knowledge that is usually produced within universities or research institutes and refers to scientific knowledge, principles and laws that are part of nature (Lundvall and Johnson, 1994; Lundvall, 1996). This type of knowledge is more relevant to certain sectors than others. However, in this study, its meaning will be broadened to include the processes and rules of the workplace and, following this, might include formal aspects such as working hours, trainees' rights and duties, but also informal aspects such as lunch arrangements, coffee time, anniversary cake, and so on.

Know-how is the ability to do something and broadly refers to the necessary skills for production (Lundvall and Johnson, 1994; Lundvall, 1996). This type of knowledge usually remains within the boundaries of one activity sector, or group or organization (Lundvall and Johnson, 1994; Lundvall, 1996). Understanding knowing-how within placements might lead into the analysis of the use of specific software programs or specific procedures for action. Overall, there is an expectation that both know-how and know-what cross the boundary of university into the workplace, where they are used in a more practical manner.

The last type, know-who is socially embedded and refers to knowledge about who knows what and who knows how (Lundvall and Johnson, 1994; Lundvall, 1996). This type of knowledge is not so much about knowing who are the people working in a certain institution, which would fall under know-what, but the very "specific and selective (knowledge about) social relations" (Lundvall and Johnson, 1994, p. 28) and the ability to establish them with specialized groups (Lundvall and Johnson, 1994; Lundvall, 1996). Other way to think about know-why can be using Edwards' (2005; 2010; Edwards and D'arcy, 2004) notion of relational agency. According to the author, relational agency "involves a capacity to offer support and to ask for support from others" (Edwards, 2005, p.168) and further "involves working together purposefully

towards goals that reflect the motives that shape the specialist expertise of each participant" (Edwards, 2010, p.61). In Chapter 5 I present a case in which Edwards' notion of relational agency is particularly useful to understand the participants' approach to learning in the work-placement (section 5.4.2).

Additionally, the way individuals develop these types of knowledge is also relevant. While know-what and know-why can be developed through books, lectures and databases and are easily codified, know-how and know-who are the result of social interactions and practical experience (Lundvall and Johnson, 1994; Lundvall, 1996). Taking these definitions to the analysis of placements meant that most students should have developed a certain level of know-what and why before going to the placement, while know-how and who, as they are "expertise(s) developed over time in handling particular kinds of problems" (Eraut, 1998, p.131) are more situated and acquired within the experiences provided within the placement (Eraut, 1998).

Overall, the aim of this conceptualization of knowledge was to encompass the knowledge that belongs to the realm of books, mostly explicit and codified knowledge (Eraut, 2004), and the knowledge that belongs to the realm of social interactions, referring to the tacit and personal knowledge that, according to Eraut (2004), is harder to develop. Figure 3.2 presents an example, taken from a movie, to show how disregarding, for example, tacit knowledge might result in misunderstandings about people's experiences.

Figure 3.2 – Relevance of explicit and implicit knowledge

Captain Ross: Corporal Barnes, I hold here the Marine Outline for Recruit Training. You're familiar with this book?

Cpl. Barnes: Yes, sir.

Captain Ross: Have you read it?

Cpl. Barnes: Yes, sir. (...)

Kaffee: Corporal, would you turn to the page in this book that says where the mess hall is, please.

Cpl. Barnes: Well, Lt. Kaffee, that's not in the book, sir.

Kaffee: You mean to say in all your time at Gitmo you've never had a meal?

Cpl. Barnes: No, sir. Three squares a day, sir.

Kaffee: I don't understand. How did you know where the mess hall was if it's not in this book?

Cpl. Barnes: Well, I guess I just followed the crowd at chow time, sir.

Excerpt from the movie A Few Good Men, 1992.

Consequently, in this study the dimension of knowledge includes information about the type of theoretical knowledge students need to operate the transition between university and the workplace, but also the knowledge that they acquire through being involved in the placement and engaged in its social interactions. The argument here is that only through this combination of knowledge coming from books and from "following the crowd" that the contexts can be fully understood.

3.4.1.2 Social interactions

Stating the relevance of context in the definition of learning transfer that underpins this study required the definition of some tools to understand what happens in the workplace. Part of that understanding would relate to the knowledge that is used in the workplace, but also how people operate that knowledge. Eraut's (2004; 2007; 2011) work on workplace learning presents some clues as to what could be more relevant to frame students' experiences. His research highlights the need to learn from other people, either from supervisors, mentors, shadowing experiences, or some combination of them (Eraut, 2004; 2007). Another aspect that would become relevant on its own but also in relation to supervision is feedback. Indeed, Eraut (2004, p.268) stressed the need for both "short-term, task-specific feedback and longer-term, more strategic feedback on general progress". In the workplace, feedback is the most immediate way for students to understand their progress. However, students might find it difficult to understand the unstructured and mostly informal nature of feedback in the workplace, when comparing it with their previous experiences at being given feedback.

Pro-activity is also a relevant concept to mediate students' interactions and could include aspects like asking questions, looking for information and requesting to engage in certain activities (Eraut, 2004; 2011). For example, Bransford and Schwartz (1999) emphasized the students' ability to seek help as a fundamental part of learning transfer. Also Edwards (2005; 2010) addressed the importance of working together with others towards the development of goals. Overall, this aspect of social interactions is also related with students' identity development and the use of negotiation in the

placement to increase participation towards achieving full-membership (Lave and Wenger, 2001).

Overall, within social interactions it is possible to understand the students' positioning in the community of practice of the workplace and delineate the type of interactions the students are exposed to. Furthermore, through the analysis of the students' social interactions in the work-placement might be possible to identify the most relevant type of interactions for their professional identity construction.

3.4.1.3 Self

The dimension of "self" became relevant to this work as a consequence of a closer analysis of some of the main concepts used so far. References to participation (Lave and Wenger, 1991; Wenger, 1998), negotiation (Lave and Wenger, 1991), membership (Lave and Wenger, 1991; Wenger, 1998) and becoming (Beach, 1993; 1999; 2003; Wenger, 1998) seem to portray a dynamic view of individuals, and required some thinking on what happens to students themselves, when they move from university to the workplace or to the placement and then back to university.

Section 3.2.3 (Sociocultural perspective) highlighted that transitions may be consequential and developmental (Beach, 1999; 2003), and that the process of "becoming an experienced participant in some form of human activity" (Beach, 1993, p. 191) is actually the process of "becoming someone new" (Beach, 1999, p. 121). Consequently, within a framework of learning transfer that focuses on transition and transformation, rather than application, identity formation has to be a key concept. Looking to Lave and Wenger's work (1991, p. 81), identity can be defined as the "way a person understands and views himself, and is viewed by others, a perception of self which is fairly constant". Furthermore, other authors have established this connection between learning and identity. For example, Edwards and McKenzie (2005, p.290) state that they "make little distinction between learning and shifts in identity. For us identity is closely aligned with a disposition towards particular forms of action and the wherewithal to interpret and use environmental affordances to support action".

However, despite these references, identity is still a complex concept (Haynes, 2006) with multiple interpretations and frameworks in literature (Sutherland et al., 2010), which required some boundary setting for the purpose of this study. Here, identity will be described and used in relation to the development of a professional identity (Gee, 2000; Sutherland et al., 2010; Hamilton, 2013) and will focus on the development of that identity as a consequence of the interaction between the individual and the social (Holland et al., 1998; Gee, 2000; Geijesel and Meijers, 2005; Sutherland et al., 2010), a type of "identity-in-practice" (Lemke, 1997, p.3) that highlights individual agency as much as social interactions. Such view is in line with the overall understanding presented in this work that learning and learning transfer occur at the intersection between the individual, the knowledge and the context.

Therefore, professional identity is here described as resulting from a certain position within a community, the interaction with others in that community and the individual's interpretations of those interactions (Sutherland et al., 2010). It is understood as the result of a social construction but also of an individual sense-making ability (Geijesel and Meijers, 2005), a combination, as Holland *et al.* (1998) would say, of the intimate and personal and the collective. The consequence of this understanding is that professional identity formation will be looked at through the framework of legitimate peripheral participation (described in section 3.2.2.1) in communities of practice (described in section 3.4.3). As a reminder, legitimate peripheral participation aims to understand how students negotiate their membership to the work-placement in order to move from newcomers to full participants, and communities of practice can be broadly defined as groups of people with a shared expertise and goal working together (Wenger and Snyder, 2000).

Another relevant aspect is that, within this research, identity is studied in the transition between two settings, the university and the work-placement, and analysed through contrasting cases in order to understand in which way being a student is different from being a professional. Contrasting cases, according to Bransford and Schwartz (1999) affect the way individuals experience and interpret new situations and therefore can highlight relevant areas or aspects within this transition that might explain how students develop their identities

within work-placements and what means are the most relevant mediators of their experiences.

3.4.2 Mediation means

Both, social interactions and professional identities are developed within the individual's figured worlds (Holland, et al., 1998) through the creation, manipulation and transformation of artefacts (Holland et al., 1998; Beach, 1999; 2003; Geijsel and Meijers, 2005). Artefacts can be described as tools, that are material objects or signs, which are abstract, symbolic representations that people can use to mediate their activities (Holland et al., 1998). Consequently, artefacts bear within themselves a certain "practice's heritage" (Lave and Wenger, 1991, p, 101), narratives and knowledge that structures people's actions (Eraut and Hirsh, 1997).

However, not all artefacts are used to mediate one's learning and activity. Swain and Steinman (2010) argue that all artefacts bear some affordances and constraints, but that the individual must act on them or through them in order for them to become mediators. One simple example is that a key is just an object until it is used to open a door, in which case it becomes a mediator for action. The same key, however, in a different situation might be used to open a bottle, or to scratch something, therefore mediating other types of actions. That is why, when artefacts (both physical and conceptual) become mediators, it is important to consider the artefact in itself, but also, why it is used, in which way, to achieve what purpose and with what outcome (Swain and Steinman, 2010).

Other relevant aspects to consider about artefacts in the transition between university and the placement is the amount of professional knowledge necessary to use them (Eraut and Hirsh, 1997), their availability (Swain and Steinman, 2010) and individual's goals in using them (Swain and Steinman, 2010; Beach, 1993). In daily practices, artefacts carry information that newcomers need to understand and master in order to act (Eraut and Hirsh, 1997). This was the case, for example, with Lundsteen's (2011) participants' experiences with the special software required to operate at the bank where they were interns. While some interns were eager to use the specific software, others lacked the financial industry experience that allowed them a correct

use. Ultimately, the level of professional knowledge will shape those students experiences.

On the other hand, the availability of relevant artefacts to act as mediators is also something to consider (Swain and Steinman, 2010). For example, Beach (1993, p.191) highlighted that "external aids to memory such as lists, timers, notebooks, photographs, and calendars are critical to acquiring and maintaining knowledge necessary for effective functioning in the workplace". When such artefacts are not present, individuals might produce their own or look for alternatives. This idea is also in line with Swain and Steinman's (2010) view that social interactions and people can also become mediational means.

The last aspect to consider here is the individuals' personal goals within the selection and manipulation of artefacts. According to Swain and Steinman (2010), individuals' actions are shaped by their identities and "changing (dynamic) goals" (Swain and Steinman, 2010, p.6). This view is also supported by Beach's (1993) research into individuals' experiences of becoming a bartender, in which the move from the individual goal of learning the drinks' names to the goal of increasing tips and interaction with customers, made them change the way they used available artefacts. For this study, what this highlights is the need to look at students' experiences in the placement as interrelated between identity, knowledge and social interactions, while also accounting for how the context itself is framing students' experiences.

3.4.3 Context

Context is considered a relevant feature of the learning transfer model as it encompasses all the dimensions and adds to the individuals' sense making of figured worlds. Here context is considered an integrant part of learning and of the learning transfer process. Following this view, this study looks at the context of higher education, the context of the workplace and at the transition between them. In this analysis. Two concepts were particularly relevant, namely communities of practice (Wenger, 1998; Wenger et al., 2002) and intercontextuality (Engle, 2006; Engle et al., 2012).

Communities of practice are defined as "groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis"

(Wenger et al., 2002, p.4). In this sense, a community of practice is based on two principles; one, that people take part and share; and two, that relations are developed within the community (Wenger, 1998). Also, in the community of practice, individuals share problems and solutions, discuss and explore ideas and act in a concerted way (Wenger et al., 2000; Wenger and Snyder, 2000). They create explicit artefacts for the community such as tools, documents and standards, and tacit understandings for action (Wenger, 1998; Wenger et al., 2002). As a consequence, knowledge is conceived as dynamic and, “over time, they (the communities of practice) develop a unique perspective on their topic as well as a body of common knowledge, practices, and approaches” (Wenger et al., 2002, p.5), which they also regenerate within themselves (Wenger and Snyder, 2000).

Overall, the concept of community of practice shares understandings with the definition of learning transfer used in this study and the dimensions that shape the model. Communities of practice include, according to Wenger *et al.* (2002), three elements: (1) the domain of knowledge, including implicit and explicit; (2) the community of people, addressing issues regarding membership, individual identity, and, roles and status; and (3) the practices, including working frameworks, tools and language. Each of these enable some understanding about the common knowledge that is used in the community, the type of interaction and participation that creates the history and identity of that community and the common framework for action (Wenger et al., 2002).

The second aspect that this study focused on regarding context was intercontextuality (Engel, 2006; Engle et al., 2012). Intercontextuality is broadly defined as the connection between two or more contexts and can be promoted, according to Engle *et al.* (2012), by framing the learning situations in an expansive manner. Framing can be developed in terms of time and participation (Engel, 2006; Engle et al., 2012). In the first one, framing requires learning situations to be contextualized in past, present and future settings (Engle et al., 2012) and relates to a certain extent to Bransford and Schwartz’s (1999) theory of preparation for future learning. What both these ideas, preparation for future learning and time-framing learning have in common is the focus on motivational aspects of learning. Time-framing of learning

promotes the expectation of relevant learning, the preparation for the learning situation and transfer and the continuous expectation of the relevance of the learning in the transfer setting (Engle et al., 2012).

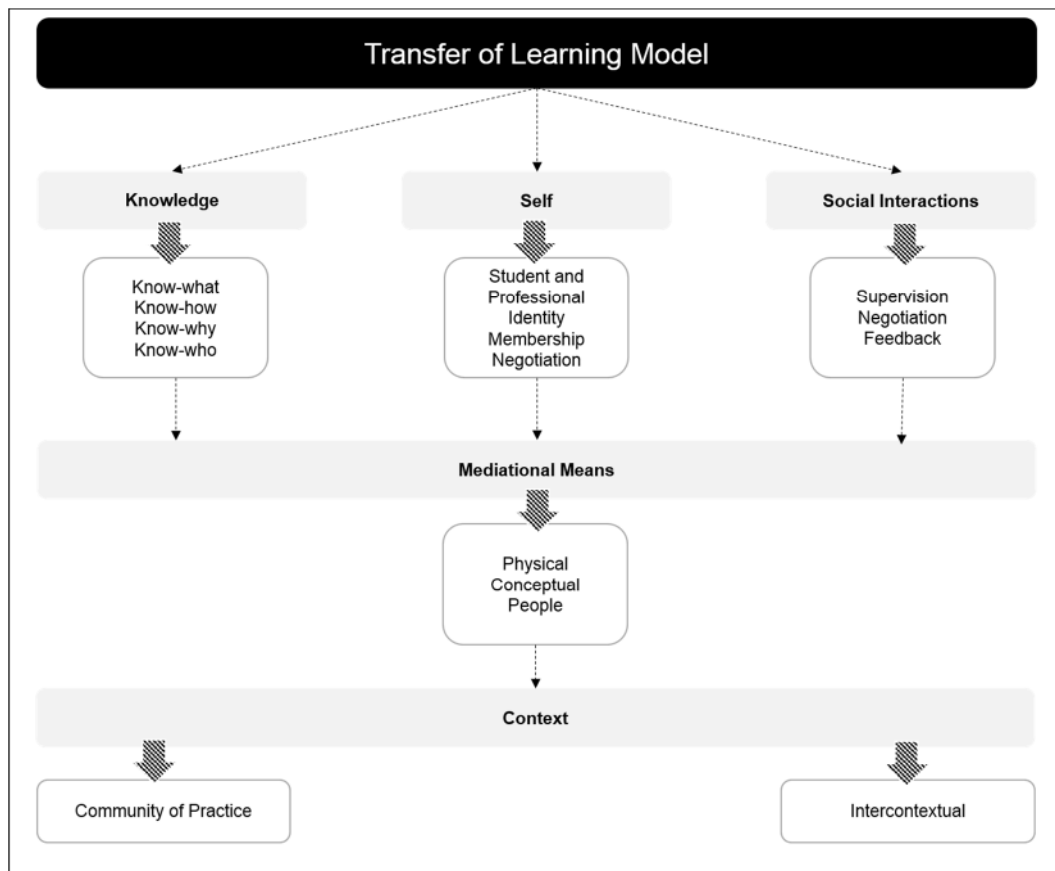
Framing of participation falls on issues of authorship and creation of new ideas that place agency in the individuals, while also promoting an accountability for the quality of the outcomes (Engel, 2006; Engle et al., 2012). Overall, expansive framing reconceptualises one-time events of learning into ongoing conversations, in which students perform active roles (Engel, 2006; Engle et al., 2012).

3.4.4 The model as a heuristic device for research

This section aims to provide a summary of the developed conceptual framework for the study of learning transfer between university and the workplace, within students' placement experiences. Developing a conceptual framework is not an easy task as it is a representation of the main concepts, theories and tools used to support the research (Miles and Huberman, 2014). As a representation it also holds limitations for understanding the depth of the ideas involved and that is the reason why Figure 3.5 is presented here as a summary of all the details provided until now about the learning transfer process models and the possible objects of inquiry for each dimension.

In this representation it is possible to understand how all the concepts are connected and how they will be integrated in the conceptual framework, deriving from the umbrella concept of figured world to the dimensions of the transfer process, to the underlying feature of context and mediational means. Figure 3.3 also presents the main dimensions that will shape the research design, data collection and analysis. For example, it is possible to see that under social interactions the focus is on how students are exposed to supervision and peers in the placement and how and in what form they receive feedback. Within each of these dimensions (self, knowledge and social interactions) this study will address not only the features of the transition (e.g. feedback), but also how the students in transition were exposed to them, how they interpreted them and how they made sense of them.

Figure 3.3 – A heuristic device of the conceptual framework



It is expected that the usefulness of the framework goes beyond the purpose of this study and could be used to inform higher education institutions, career advisors, students and employers on the relevant features to develop meaningful placements for students. It could also be of use to other researchers looking at the transition between school and work.

3.5 Summary

This chapter outlined the main theories of transfer of learning, focusing mostly on the theoretical resources they provided for the development of a new conceptual framework for the study of learning transfer within the context of the transition between university and the workplace. In addition, the main challenges and limitation to the study of transfer were also presented as a starting point to identify the contributions this study aims to achieve in the response to the research questions. Consequently, learning transfer was defined for this study as a consequential and developmental process of transformation that is experienced by the students in transition regarding their

knowledge, behaviours and identities, while making sense of the transition between contexts. This definition resulted in the proposal of a learning transfer model that focuses on knowledge, social interactions, self, mediational means and contexts as communities of practice towards examining transfer of learning in the transition between university and the workplace. The outcome of this inquiry is then explored in Chapters 5 and 6.

However, the next chapter describes the methodological concerns and processes in the design and conduction of the study, by detailing the steps taken in the research of the students' transitions between university and the workplace, in their one-year work-placements, regarding the process of transfer of learning.

Chapter 4 – Research Design and Methodology

4.1 Introduction

This chapter presents the research design and the main methodological choices made throughout the study. It presents the concern with research quality as the driving aim within the conduction of interviews and observations, ethical decisions and within the data analysis process. It discusses the development of a codebook as a tool towards systematic coding and integration of the conceptual framework in the coding of data. Theoretical concepts are, therefore, also present in this chapter through their increasing connection with the analysis of data and initial attempts at their interpretation.

4.2 Research design

This section presents the overall research design of the study, focusing specifically on the identification of the research questions (section 4.2.1), the rationale for the chosen case study methodology (section 4.2.2) and the selection of participants (section 4.2.3).

4.2.1 Research questions

This study investigates the placement experiences of three undergraduate students from the University of Leeds during their year in industry or year in research placement schemes. This focus on improving the understanding of the learning transfer processes students undergo in the transition between higher education and the workplace generated the following research questions:

1. How do students experience and make sense of the transition between higher education and the workplace, in their work-placements?
2. In what way, and to what extent, are students' experiences of the transition between university and their work-placements reflected by the developed learning transfer model?
3. How do students' perceptions of their transition between university and the work-placement and its theorisation inform and enhance our understanding of current debates on graduate employability?

With the purpose of answering the research questions, a longitudinal case study with three instrumental cases (Stake, 1994) was implemented and data was collected by multiple methods (Hitchcock and Hughes, 1995). More specifically, the fieldwork was comprised of interviews during and after the placement with all the students and observation in the placement for two students. Secondary data was also gathered through weekly blog reflections about the placement for one student (Julie), a placement handbook of another student (Daniel), and placement reflections for three additional students that only participated in the research in this manner (John, Martha and Lena).

4.2.2 Rationale for case study

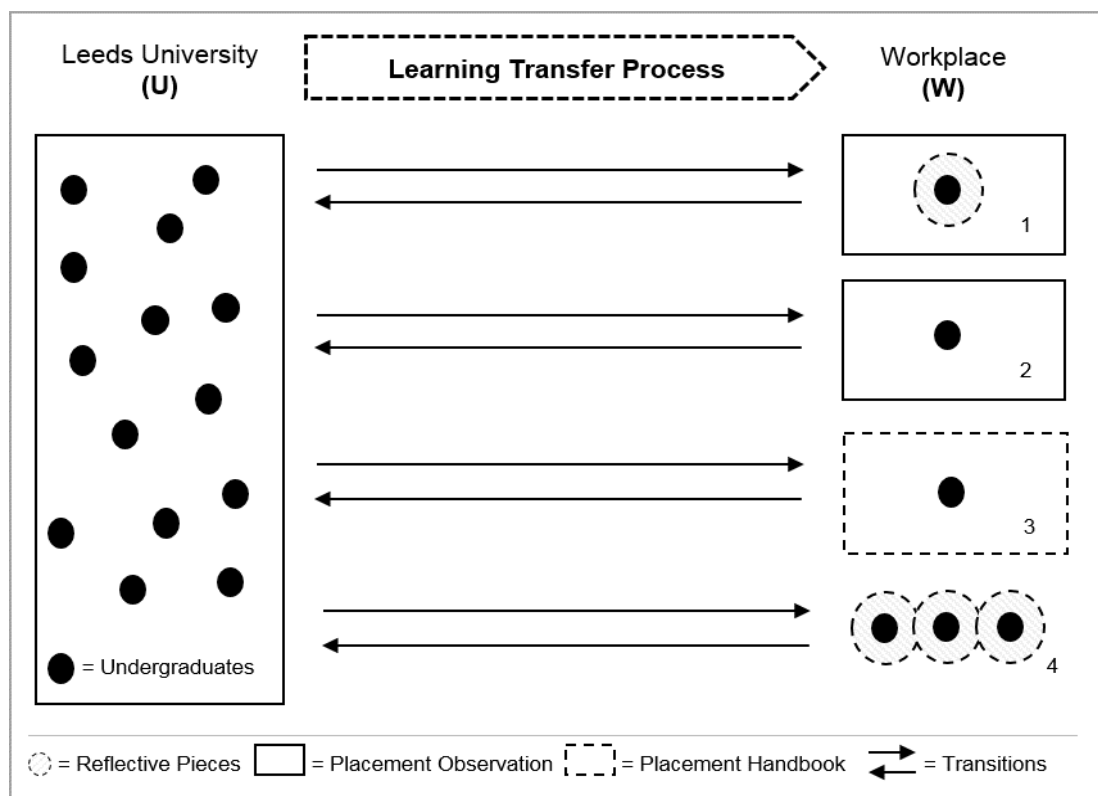
Case study was selected to provide insight into students' transitions between university and the workplace and to describe and understand their learning transfer processes. One of the reasons for this choice lies in Stake's (1994) argument that pursuing a case study is a choice of focus rather than methodology. The case is the specific object under study (Stake, 1994), bounded to a context (Miles et al., 2014), a "time and place" (Hammersley, 1998, p.31) and often referring to one "particular incident" (Hitchcock and Hughes, 1995, p. 317). Following this view, this research is a case study of the learning transfer process within three cases, Julie, Maggie and Daniel. The boundedness (Stake, 1994) of the main case is set between higher education and the workplace, more specifically within the placement experiences of the students in transition between university and the placement, which may be described as a mediational transition (Beach, 1999; 2003) of the workplace, meaning, an "as if" (Beach, 1999, p.118) experience of the world of work.

In its nature, this case study can be described as embedded (Yin, 2009) or instrumental (Stake, 1994), meaning that the three cases were selected to provide insight and advance understanding into the learning transfer process of students. Likewise, due to the selection of the three cases, it can also be considered a collective case study (Stake, 1994), and when regarding its outcome, the case study can be considered explanatory (Yin, 2009). That means that it was used to test and develop the proposed conceptual model of the learning transfer process against the participants' individual experiences.

This multiple definition of the case study is not problematic because they rather reveal a “zone of combined purpose” (Stake, 1994, p.237) within the research.

Overall, the case study provided several possibilities to the research. First, case study recognizes complexity in phenomena and enables the incorporation of context into the study (Cohen et al., 2011) as an “integral” element (Yin, 2012, p.4) for understanding the case. Consequently, the case study was selected to achieve in-depth knowledge and a close view of the students’ lived experiences of the transition between university and the workplace (Cohen et al., 2007; Yin, 2012). The second affordance relies on case study relevance when the researcher has little control over events and chooses to investigate the phenomenon in its natural occurring setting (Yin, 2009). In this study, learning transfer between university and the workplace is investigated as it naturally unfolds in that transition and the focus is on the students’ experiences and meaning-making of the setting(s), the tasks, the people and their development through the interaction with those features. As a summary, Figure 4.1 presents the multiple research’s inquiries enabled by the case study.

Figure 4.1 – Summary of the study's inquiries



The study examines the learning transfer process (U-W) students experience between higher education (U) and the workplace (W), by using three instrumental cases (1, 2 and 3). Each of these cases follows an undergraduate student from the University of Leeds during his/her one year work-placement. In terms of data collection, two of the cases (1, 2) comprise interviews with the participants and direct observation during the placement. For one of these cases (1) there were also some reflective pieces about the placement made available. Additional reflective pieces about placement experiences were also collected from three additional students (4). The third case (3) only includes interviews and a mediated view of the placement constructed through the interviews and a placement handbook produced by the company where the student conducted his placement. Within each of the three cases the research aim was to look at the students' transfer processes not just from higher education to the workplace (U-W), but also from the workplace back to university (W-U). The selection of these three cases was, consequently, one of the major tasks within the research design and its process is further explained in the next section.

4.2.3 Selection of participants

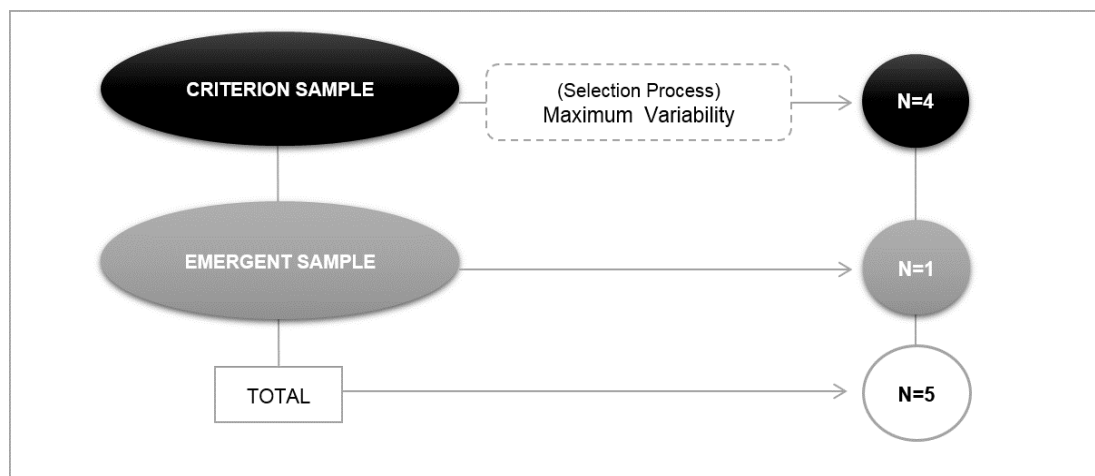
The sampling process and the sampling outcome has a decisive impact on the research's conclusions because it is intricately related with the quality of the data collected (Bazeley, 2013). Good practice for case studies requires researchers to think about samples in a conceptual and purposeful manner (Denzin and Lincoln, 1994; Miles et al., 2014), aiming at the selection of "information-rich cases for study in depth" (Patton, 2002, p.230).

Therefore, bearing in mind the aim of understanding how students experience the transition between higher education and the workplace within one-year work-placements and the need to select rich cases (Patton, 2002), the main strategy used was a criterion sampling (Patton, 2002) where every student that met the decided criteria would be invited to collaborate. The criteria were: (1) to be a student at the University of Leeds, (2) to have a one-year work-placement in the academic year of 2013/2014, and (3) to agree to participate in the study. Students from the several faculties and from the placement module at the Career Centre within the University of Leeds were invited to

participate in the research. Following the invitation, participants would be chosen based on maximum variation (Patton, 2002), according to their school, degree and work-placement type. The aim was to achieve a heterogeneous sample against which the study's theoretical model could be tested, thus allowing for a more critical testing. The strategy used to reach the participants was by e-mail, sent to each school's placement tutor and forwarded by them to the students. Direct access to the students' e-mails could not be granted by the university due to confidentiality constraints. The e-mail invited students to participate, provided basic information about the research and stated the researcher's details. An information sheet and a consent form were also attached to the e-mail (Appendix A).

The outcome of this strategy is demonstrated in Figure 4.2. Only four students responded to the e-mail request and, consequently, the selection process based on maximum variability was not used, as all students that responded were accepted as participants. However, the number of participants only became complete with the addition of one more student that was selected through an emergent sample (Patton, 2002). During the piloting process for observation I applied to job shadow a worker in the Student's Union. The person I shadowed fitted the criteria for my study and therefore I invited her during that day. She requested to see the documentation, which I forwarded to her by e-mail and she accepted to participate. The final sample was, then, formed by 5 students.

Figure 4.2 – Summary of sampling strategy



A brief description of each student that agreed to participate in the research is presented in Table 4.1, but their names have been changed to allow for anonymity. The students represent five different degrees and varied types of placements, ranging from a factory environment (Daniel) to an office environment (Maggie). Four participants are female and one is a male, who is also the oldest of the participants, at 23 years old. Because of his age, Daniel was considered a mature student by the University of Leeds, meaning that he was 21 years old when he started his degree.

Table 4.1 – Description of participants

	MAGGIE	JULIE	DANIEL	LAURA	EMILY
GENDER	Female	Female	Male	Female	Female
AGE	20	20	23	20	20
FACULTY/ SCHOOL	School of English	Business School	School of Mechanical Engineering	School of Philosophy, Religion and the History of Science	School of Biology
DEGREE	English Language and Literature	Management	Mechanical Engineering	Theology and Religious Studies	Biology
PLACEMENT	Student's Union Employability Office	Research Department in the Business School	Sugar Factory	University Sustainability Team	Government Water Treatment Laboratory

A final note concerning the participants' selection process relevant at this point is that Laura and Emily dropped out of the study for personal reasons before Interview 2. This means that the final sample for the study was formed of three students, Maggie, Julie and Daniel, who form the three instrumental cases presented earlier in Figure 4.1. Accordingly, the data examined in this research only includes data collected from these three cases, in addition to the secondary data also presented earlier (e.g. Daniel's placement handbook and Julie's placement reflections).

So, as a summary of the participants' selection process explanation, but more importantly, as starting point to know the three instrumental cases, the following paragraphs provide a brief description of each participant:

- 1) **Julie** was a Management student from the University of Leeds. She was 20 years old at the time of our first interview and in between her second and third year at university. She was doing a placement year in a Research Centre at her own university, which she referred to as being a PhD student for a year. She later learned, due to the placement experience, that the PhD path was not a career she wanted to pursue. Julie was not very tall, had dark light brown eyes and pale skin. I saw her as shy and discreet, she had a low and subtle voice tone, gentle gestures and I often described her in my notes as the most challenging participant regarding getting elaborated answers and detailed descriptions of her experiences. I also learned she was from Pakistan, a country she visited often to meet with her family for the holidays and for celebrations, like her cousin's wedding. Family was often present in our interviews, either by Julie referring back to her brother and sister who had also been management students, or to the overall support she got from her parents, financial and otherwise. Until she started the placement and had to go to a conference, Julie had never travelled without her family, which presented a challenging situation for her. Julie always described family and friends as an important part of her life and daily interactions. University was also very important for Julie, she was very dedicated to her studies and to getting a good grade, a first, she said. On that account, she did not have any previous work experience, nor did she want to have a placement "*if it was far away*" (Julie, Interview 1). She decided to have a placement year because it was in Leeds, it was still in a university environment and, mostly, because she wanted a "*first-time experience with a job and being independent, before going into a real*" (Julie, Interview 2) workplace.
- 2) **Maggie** was in between her second and third year of an English Literature and Language degree at the University of Leeds. She was 20 years old at the time of our first interview, and with a clear career path to follow, publishing. She was doing a one year work placement at the University Students' Union, working on the topic of employability. Maggie was British, blonde with pale skin and light coloured eyes. She portrayed herself as mature and responsible and was very articulate,

easily providing detailed accounts of her experiences, feelings and thoughts. She had a passion for reading and writing and engaged in multiple activities related to this passion. She vlogged book reviews, participated in poetry festivals and writing competitions. She also told me that she had worked part-time since she was 17 and that she liked this idea of working. During her degree she had already had a part-time job at a bar in the university and worked for the careers centre at the university editing their website. The placement was a natural decision for Maggie, but she had multiple reasons for doing it, from the financial gains of a remunerated working position, to the possibility of taking a year out of studying. The opportunity to have a break was really important for Maggie as she wanted to have done it before entering university. However, she was unable due to the desire to avoid the policy that implemented the raise in tuition fees from 2012³. Another relevant aspect of the placement for Maggie was the possibility to get some experience in project management, which she anticipated was necessary in her desired profession. She took her placement and her other experiences as stepping stones into her desired future.

- 3) **Daniel** was a student of Mechanical Engineering at the University of Leeds. He was in between his second and third year and, at 23 years old at the time of our first interview, was classified as a mature student. He had some working experiences before attending university but not related to engineering. He had worked mostly as a shop assistant and he described this job as something to do while he figured out what he wanted to do in the future. At the time, Daniel was doing a one-year work-placement –“Year in Industry”- at a sugar factory. Daniel was British, tall and thin, with light coloured hair and eyes and pale skin. He described himself as shy at first but I always saw him as friendly, helpful and attentive. During the interviews he always provided detailed

³ For the academic year of 2012/2013, the government allowed universities in England to charge up to £9,000 per year for undergraduate courses, thus raising the cap of £3,375 set in place until 2011/12. (Information taken from: <https://www.gov.uk/government/news/changes-to-tuition-fees-and-higher-education>).

accounts of his experience and would identify moments where he thought the technical details were not relevant by stating “*without going in too much depth*” (Daniel, Interview 2). However, whenever I asked him about the specifics he would always provide the relevant information in a manner that I, a non-specialist in engineering, would understand. At university Daniel was always able to balance his study and social life, achieving a first in both years. University was not that difficult for him, specifically in the first year where the knowledge covered was similar to what he learnt in college. The placement was a last minute decision, spurred by realising most of his friends were having a placement year or a year abroad. For him, it was just the case of anticipating getting some practical experience.

- 4) **Extra Participants:** At a later stage in the study an additional request was forwarded to students that had to write any kind of reflective pieces for their one-year work-placement. Three students responded positively and accepted to share their reflections in the study. They were: Martha and Lena, both students from the School of Education. Martha’s placement was in China, working as a teacher for children of different age groups. Lena’s placement was in Uganda, working as a teacher assistant in a special needs school. Finally, John was a student from the School of Philosophy, Religion and History of Science and his work-placement was as a coordinator of the arts fundraising fellowships programme in a theatre.

4.3 Data collection

4.3.1 Conducting interviews

Semi-structured interviews were conducted during this study to provide, on the one hand, the necessary structure to compare between interviews and to find patterns (Flick, 2009), and on the other hand, the necessary flexibility to allow for exploring emergent topics in depth (Kvale and Brinkman, 2009). The use of semi-structured interviews requested the preparation of an interview guide (see Appendix B for an exemplar for Interview 1), for which I followed Wolcott’s (1995) guidelines, aiming at short and direct questions that focused

on large issues. Following those guidelines, questions were designed to be open-ended (Seidman, 2006), by introducing a topic to the participants, but allowing them the freedom to decide what was important to include. Some examples of open-ended question used were:

R (Researcher): Ok, and how's it been that experience in higher education so far? (Interview 1, Daniel).

R: And, what did you expect to gain from a placement? (Interview 1, Julie).

R: So, could you take me through what you did today? (Interview 2, Maggie).

The interview questions were also aimed at “locating the meanings” (Miles et al., 2014, p. 11) the students attributed to their experiences, as the aim was to focus on their subjective experiences (Seidman, 2006) in order to get what they saw and how they interpreted it (Weiss, 1994). Consequently, the questions often focused on their views of the issues and on what they thought and felt. Some illustrative questions used were:

R: Why do you think it's intimidating? (Interview 1, Maggie).

R: And, overall, how are you dealing with this responsibility that you're getting? (Interview 3, Daniel).

R: And how was it for you to do your questions for the third time? Was there anything different? (Interview 4, Julie).

The overall decision about how many interviews and the times in which they were to be conducted rested on the goal of looking at the process of learning transfer. My understanding was that this required a “sustained period” of data collection rather than “snapshots” (Miles et al., 2014, p.11) of the phenomenon. Additionally, being aware that participants often offer “secret, sacred and cover stories” (Clandinin and Connelly, 1995), building trust over several months and interviews was necessary to access what in one single interview might have remained secret.

Therefore, and as shown in Table 4.2, interviews were conducted over a period of 16 months, with a duration of approximately an hour and in different locations. The location was always decided by the participants, with the

purpose of providing a friendly environment and they were always conducted in private (Wolcott, 1995). Additionally, all the interviews were recorded, either by a portable recorder, used in face-to-face interviews, or by a windows' recorder device, used during skype interviews. Consent for recording was collected from participants and, based on good practice advised by supervisors and Wolcott (1995), the recorder was kept on even after my questions ended, in order to capture the participants' additional comments.

Table 4.2 – Interview schedule

	1	2	3	4	5	6
MAGGIE						
Date	12/12/2013	11/03/2014	08/05/2014	13/05/2014	05/06/2014	03/03/2015
Duration	1h03m	1h14m	48m06s	55m	54min	57m
Location	Union's room	Researcher's house	Researcher's house	Union's room	Union's room	Skype
JULIE						
Date	19/12/2013	26/03/2014	21/05/2014	01/07/2014	24/09/2014	30/01/2015
Duration	1h14m	53m43s	1h07m	1h10m	1h31m	56m
Location	Skype	Islamic Society Prayer Room	Islamic Society Prayer Room	Skype	Skype	Skype
DANIEL						
Date	19/02/2014	12/03/2014	28/04/2014	18/06/2014	23/07/2014	29/01/2015
Duration	1h02m	1h03m	1h09m	1h04m	1h12m	1h18m
Location	Skype	Skype	Skype	Skype	Skype	Skype

The interviews were designed to meet different purposes. The first (Interview 1) aimed at knowing the participant, collecting some information about his or her life at university and getting their reasons for having a placement. Ideally, these interviews would have taken place before the placement started, but, issues with gaining access and other restraints⁴ did not allow for this to happen. The first interviews were, therefore, conducted around December 2013 and January 2014.

The following interviews (Interview 2, 3, 4 and 5), occurred either during the placement or immediately after the placement (e.g. Interview 5, Julie). The

⁴ Some placements started in August/September 2013, at which time I had not received ethical approval for the study, nor had I completed the upgrade process. Gaining access to participants and receiving their responses took additional time, which meant that only in late November early December 2013 I got the first participants. The interviews followed immediately.

goal was to understand the students' experiences of the placements, look at their lived worlds of work and collect the details of those worlds. Each participant was interviewed four times bearing this goal in mind and questions focused on the students' tasks, social interactions and development in the placement.

The last interview (Interview 6) occurred a couple of months after the placement, when the students were already back at university for their final year. The aim was to collect students' reflections on the placement experience as a whole, as well as to understand any references to intercontextuality (Engle, 2006; 2012; Engle et al., 2010) between the placement experience and higher education. The purposes underlying the interviews followed Seidman's (2006) structure of an in-depth phenomenological interview, which allows for the understanding of the participant's "lived experiences" within its relevant context, which were further improved by the placement observations and field notes.

4.3.2 Conducting observations

The focus on participants' lived worlds and on context made observation a necessary source of data. Observations were conducted in order to improve my understanding of the placements' setting, environment, people, and of the participant's engagement and interactions with the workplace activities (Eraut and Hirsh, 2007). They also provided a "discourse of description" (Eraut, 2007, p.405) that not only enabled an improved understanding of the interviewees words but contributed to the definition of topics for the following interviews (Eraut, 2007; Lundsteen, 2011). Therefore, the observations were a useful tool to the focusing of inquiry, as part of the research's emergent design (Schwandt, 2007).

The observation schedule, described in Table 4.3 was defined only for Maggie and Julie because access to Daniel's placement was not possible due to issues of confidentiality and health and safety⁵. I observed each of the two

⁵ Following my e-mail to the Faculty of Biological Sciences requesting participants, the person responsible for Industrial Placements within the Faculty's Undergraduate School wrote back informing me that they could not allow my methodology, due to issues related with confidentiality and health and safety. The problem was about getting access to placements for the observation and I had to decide, either to not

participant's three times for a total of 18 hours. Julie's placement observation was always shorter in duration because she usually worked from home and came for a limited time to the "office". The duration of those observations account for the totality of time she worked on campus on those days, although they do not account for her full working day. Implications of this for both Julie's placement experience (Chapter 5) and for the research (Chapter 7) are further discussed in following chapters.

Table 4.3 – Observations schedule

	1	2	3
MAGGIE			
Date	11/03/2014	07/05/2014	13/03/2014
Duration	Morning: 1h10m	All Day: 5h15m	All Day: 5h
JULIE			
Date	24/03/2014	09/05/2014	27/05/2014
Duration	Morning: 1h25m	Morning: 3h30m	Morning: 2h30m

During the observations my aim was to be as unobtrusive as possible and to record the relevant interactions without participating directly in what was happening (Angrosino and Rosenberg, 2011). In the words of one of Julie's supervisors at a time I was observing their meeting, my goal was to "disappear into the wallpaper" (Observation 1, Julie). Therefore, at the beginning of the observation I told the participants that I would not ask questions and all I would do was to observe them and take some notes. However, there were situations where the participants felt compelled to talk to me and/or explain something. There were two other situations where the supervisors asked me what I was observing "exactly". My response at the time was short and clear, I was observing what the participants, Maggie or Julie, usually did in the placement, who they talked to, and about what. No more questions were asked.

Usually, I sat by the participant, close enough to see what they saw and record every interaction, but distant enough to be considered another co-worker. I

include any student from that faculty in the research or to adapt the methodology. After reflection and discussing the consequences of both with supervisors, I decided to adapt the methodology. If any student from the faculty accepted to collaborate, there would be no observation of the placement. This became a precedent to Daniel's situation within the sugar factory which posed the same issues.

took notes all throughout the observations because the office setting made that a normal task for everyone involved. In my observation notes I tried to capture as much detail as possible from the setting and the people in it. The next sentences present some examples of notes about the setting:

When we get to the main supervisor's office, we get in, the office is small and there are a lot of books on the floor and on the chairs. (About main supervisor office, Observation 1, Julie).

It has 11 desks grouped by the different departments, 4 for the (name) team, 4 for (name of team) and 3 for (name of team). When we got in there, there were 4 girls and 1 boy working at their computers. (About the office, Observation 1, Maggie)

I was looking for descriptions of the placement but also hints about the environment as the next examples show:

People are focused on their work and the only sound in the room is of people typing (About the office, Observation 1, Maggie).

The environment is friendly, a student environment. There is a group of students preparing a presentation, other students are working alone at the computer. It is definitely an informal environment. (At a Postgraduate Cluster, Observation 2, Julie)

Overall, I focused on the setting and on the interactions between the participants and tasks, artefacts and other people, which included colleagues, students and managers or supervisors. When possible, I tried to capture dialogue. The observations were always followed by the typing of the notes into a more complete and "readable" account of my experience.

4.3.3 Writing field notes

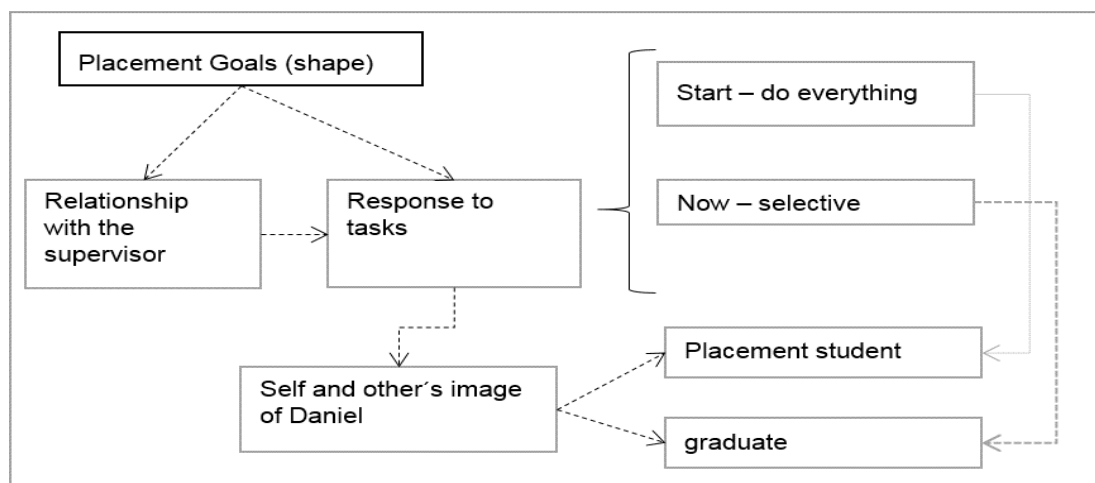
Field notes were part of my research "daily routine" (Wolcott, 1995, p.113), and were taken both in interviews and observations with two purposes: first, to capture the events as they were unfolding; second, to add my reflections to the events after they happened (Tessier, 2012).

The process of taking notes during the events was most useful during observations as a way to capture, in chronological order, the events unfolding in the work-placements. Since I was observing both participants in an office

setting I felt comfortable to take long notes on what I saw, heard and thought at the time. My aim was always to portray a “vivid picture” (Cohen et al., 2007, p.260) of the events, so that it would be easier to reflect on them during the analysis. During the interviews, taking field notes allowed me to keep focus on the participants’ words and remember the parts I would follow up later on in the interview. The aim here was not the same as in observations, but to use the brief notes taken while the participants talked to assist in the development of the interview itself.

Taking notes after the interviews and the observations took more the form of a summary and interpretation of the events (Teisser, 2012). I wrote down my initial connections between that interview and observation with the conceptual framework or previous interviews and observations. Consequently, often the notes taken after interviews and observations took the form of maps or pictures, rather than words. Figure 4.3 is an illustrative example of notes taken after an interview with Daniel in which I started to think about the way students’ initial goals about the placement could shape their experiences. These initial thoughts were then explored further during analysis and tested against the other sources of data and other participants’ experiences.

Figure 4.3 – Example of end of interview notes (Interview 2, Daniel)



4.3.4 Secondary Data

In addition to the interviews and observations, I collected some secondary data from reflective pieces and a placement handbook provided by the sugar factory to all placement students, including Daniel. These secondary data were used to inform my thinking and to test and validate my conclusions.

4.3.4.1 Reflective Pieces

The reflective pieces are blog entries the placement students have to post on the VLE in order for their module tutors to monitor their progress. For Julie, these were weekly posts in which she had to choose one of six skills to reflect on and post it on the VLE. The six skills were: communicating clearly, managing tasks, applying initiative in work problems, applying knowledge, working with and relating to others, and self-management and development. Throughout the placement, Julie had to reflect on each of these skills six times and on a different one every week. For the other three students, the posts were monthly reflections, or one single, final reflection about the placement. Only students and tutors had access to these reflections and they were used to monitor the students' development and provide feedback.

These reflections are imposed on the students as a requirement of their placement modules, but not every placement module included such reflections in their design, which is why no reflections were collected from Daniel. As impositions, with a word limit and a pre-selected topic, I did not assume these data were a reflection of what the students considered most relevant, most important, most demanding or most rewarding about their placements. However, within that set framework, they provided useful insight into the students' experiences and meaning-making of the placement. Furthermore, there is some evidence regarding the relevance of reflections as a tool for professional self-development within placements, despite the acknowledgment that, especially for beginners a systematic reflection is hard to achieve (Sutherland et al., 2010).

4.3.4.2 Placement Handbook

The placement handbook was provided to Daniel before he started his placement. It had some general information about the company, the factory itself, the location of the factory and some relevant people on the site. The handbook also provided some information about what to expect from the placement and what to expect on the first day.

The information on the handbook was not highly detailed but had some pictures and images that portrayed the factory and provided some insights about how things were organized. This was particularly relevant since I did not

go on site for observation of Daniel's placement. The handbook was, therefore, included as secondary data, and I read through it to take relevant information about context and language used on site. It was a relevant document to improve my understanding of Daniel's words and also to understand his frustration when what the handbook portrayed about the placement was not an accurate description of what happened.

4.4 Data analysis

Analysis was a difficult stage of the research, because as Wolcott (1994, p.9) suggested, "the greater problem for first-time qualitative researchers is not how to get data but how to figure out what to do with the data they get". My data corpus (Braun and Clarke, 2006) comprised of 20 interviews, 6 observation days' field notes, 19 weekly reflection entries from Julie, monthly reflections from Lena and Martha, final placement reflections from John and one placement handbook from Daniel. The interviews themselves amounted to 386 pages and 200 397 words.

In this section I provide a detailed account of how I made sense of all that data by following some steps inspired by Braun and Clarke's (2006; 2012) phases to develop a thematic analysis, Stake's (2006) strategies for multiple case study analysis, and Miles *et al.* (2014) strategies for cross-case analysis. Overall, the steps taken include: (1) familiarising myself with the data through the transcription process, reading and re-reading the transcripts and initial note-taking; (2) generating initial codes through the development of a codebook and re-coding; (3) identifying themes by exploring the data and the generated codes with a focus on each participant and then with a comparative focus, and (4) selecting the final themes for writing up.

4.4.1 Transcription process

The transcription process is often invisible in research reports (Lapadat and Lindsay, 1999) and transcripts text considered "unproblematic" (Poland, 1995, p.292). However, I found transcription to be more than a mechanical step between conducting interviews and data analysis, and with great impact on data quality. It was during the transcription process that my analysis began,

due to a process of decision-making that ultimately influenced how I coded and interpreted the data.

For this study I conducted 20 interviews, which were all fully transcribed into word documents (see Appendix C for an excerpt of a transcript). The transcription itself was aided by the use of Express Scribe, a piece of free software that enabled me to reduce the speed of the speech and, using keyboard shortcuts, move back and forward in the audio file faster.

At this point, my goal was to transcribe faster and improve my skill. In terms of research quality, my concern was with the trustworthiness of the transcripts by ensuring a “faithful reproduction of the aural record” (Poland, 1995, p.291). In order to achieve this I transcribed only for short periods of time, of one to two hours, and I performed periodic checks of previous transcriptions. In addition to these strategies, I also sent the transcripts to the participants and asked for their revision concerning words or small phrases, mostly technical, that I was not sure I captured correctly. In brief, members’ checks were used to increase the credibility of the data (Guba and Lincoln, 1989) by improving its accuracy (Miles et al., 2014).

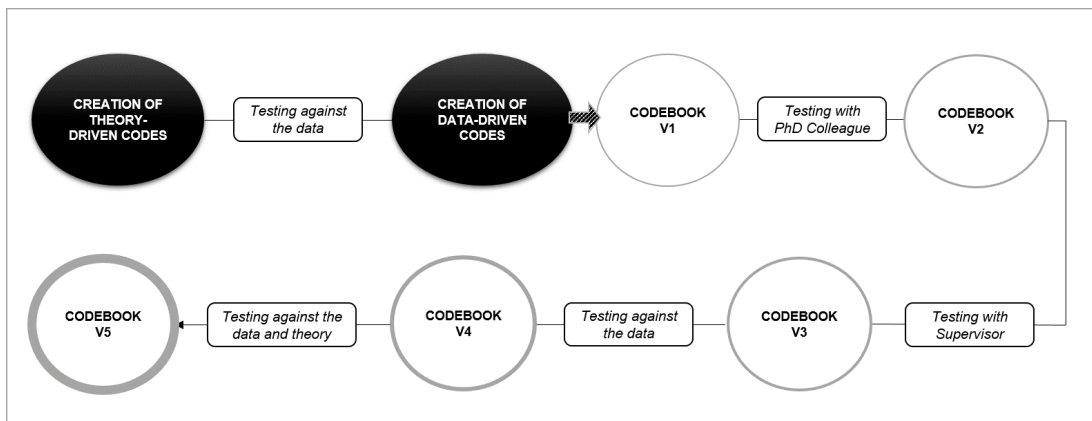
During the transcription process my awareness of what constituted a good transcript started to change from the idea of accuracy as concerns with meaning arose. Interviews are more than words and it is necessary to understand that audio recorders will not portray fully the “lived experience” (Poland, 1995, p.291) of the interview, along with its physical and emotional context and non-verbal communication (Poland, 1995). Additionally, from the audio recordings to the transcripts, meanings of irony or sarcasm might be further lost. My strategy to overcome these issues was twofold: writing field notes after every interview and annotating transcripts when relevant to capture the “real meaning” of the participants’ words. Regarding the field notes, those were written as soon as possible after every interview and reflected my interpretation of that shared lived experience, both in terms of my skill and flow of the interview, and of emergent themes. Consequently, my notes offered the necessary context for later transcription, coding and interpretation of data.

In the end, my understanding of transcription was broader and intertwined with decisions about analysis and reporting and, most of all, research quality. The apparently simple decision of what constitutes a sentence within participants' words (Poland, 1995) or where to place a comma became a concern that had implications for the subsequent coding and analysis. My concern with consistency in those decisions further expanded into the coding process and provided the basis for engaging in the development of a codebook.

4.4.2 Codebook Development

A major concern in dealing with a large amount of data is consistency in its treatment. For this study, that implied the development of a codebook. A codebook is a tool, used mostly in studies working with teams to ensure consistency in the data coding process, assessed through intercoder agreement measures (McQueen et al., 1998). The codebook itself is used by the researchers as a guide on how to code the data (DeCuir et al., 2011) and interpret it (Fereday and Muir-Cochrane, 2006). Therefore, it usually includes a set of codes, their definition and examples of coded material (McQueen et al., 1998; DeCuir et al., 2011).

Figure 4.4 – Codebook development process



The process used for developing the codebook for this study is presented in Figure 4.4 and started by writing a provisional list of codes taken from the literature review and the study's conceptual framework (Miles et al., 2014). By a code I mean a "short phrase (or word) that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language" (Saldaña, 2013, p.3). Since these were all taken from theory,

DeCuir *et al.* (2011) call them theory-driven codes. Some examples of the theory-driven codes created were:

Mediational Means - Artefacts - References to any artefact, physical or conceptual that mediates students' actions and/or learning. (Based on Wartofsky, 1979. Taken from Codebook V5).

Knowing-What - References to factual, content-based knowledge. (Based on Lundvall *et al.*, 1996. Taken from Codebook V5).

Once all the relevant areas of the conceptual framework were represented in the 10 theory-driven codes created, they were tested against the data. From this application of the codes to the interview transcripts, 68 additional codes emerged. These are considered data-driven codes because they are "grounded empirically" (Miles *et al.*, 2014, p.81), as they were created from the data (DeCuir *et al.*, 2011) every time the theory-driven codes could not be applied to meaningful bits of data. Some examples of the data-driven codes created were:

Fear of Forgetting - Reference to the fear of forgetting academic knowledge during the placement due to not using it. (First appeared on Maggie, Interview 1. Taken for Codebook V5).

Higher Education Experiences – Academic Experiences - References to higher education, including the degree, assessment, relationship with teachers and peers. (First appeared on Laura⁶, Interview 1. Taken for Codebook V5).

Once the list of codes was completed, it was necessary to reduce it to a manageable number of codes (Saldaña, 2013). During this phase some codes were deleted, others were merged and re-labelled and others were expanded. From the 79 theory and data-driven codes only 26 made it into the Codebook V1.

⁶ Laura was one of the participants that dropped out of the study at the time of the second interview. However, since it had been the first of all, I used it in the first testing of the codebook. Some of the examples of the codes used in the codebook are also from her Interview 1.

The Codebook V1 included general guidelines about segmentation, multicoding and a list of codes, including a label and few examples. In order to test its usefulness to consistently code the data, I sent it to a PhD colleague along with one of the interview transcripts and the guideline to use the codebook to code two pages of that transcript. I did the same and following that we got together and looked for consistency in text segmentation, code application and multicoding (McQueen et al., 1998). The main differences found at this point were about code application and after writing a report (Appendix D) about the issues discussed and further reflecting on them I made some changes to create the Codebook V2. In this version there were 28 codes and a new tree of codes. The tree of codes was included to assist in the coding process and to make visible the relationship and dependence between the codes (Miles et al., 2014).

The same process was followed, by me and a supervisor, for the Codebook V2 and the main outcomes of this iteration were reflections about how the codes were reflecting the participants' experiences, the research questions and the tensions between the conceptual framework and the experiences. The outcome of this reflection led to further changes to the codebook and, in Codebook V3 there were 29 codes and an improved diagram of the tree of codes. One of the most important changes was turning "employability" into a main code, rather than a sub-code of the "link between higher education and the workplace".

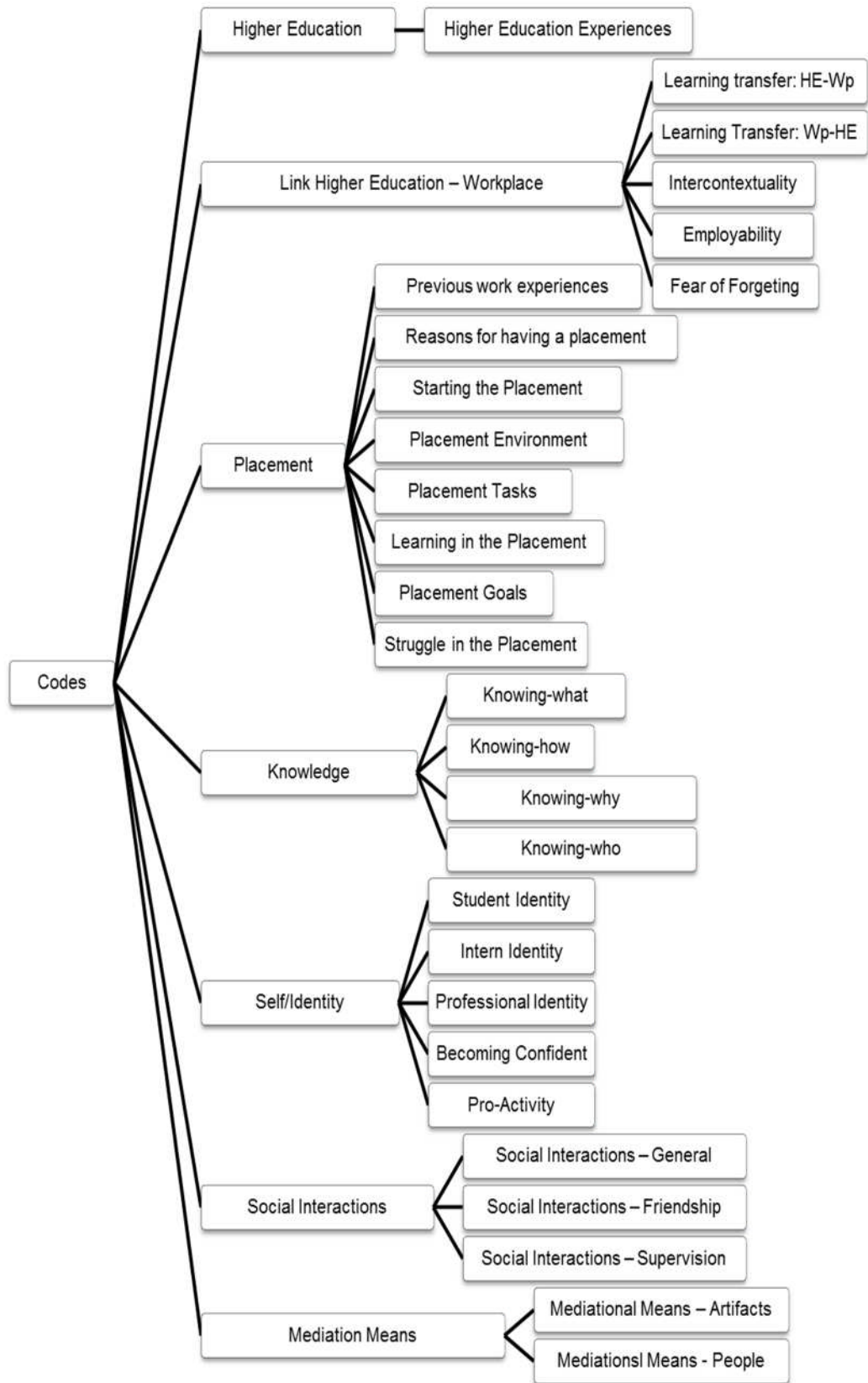
The last update to the Codebook occurred after all the transcripts were coded using Codebook V3 and V4 and subsequent recoding. During this process I read and re-read all coded data under each code and assessed if they should be part of that code. This meant that some references were un-coded on that particular code, or re-coded into another code, or left as they were. Overall, my code structure was fine-tuned, some codes were expanded into sub-codes and others were collapsed. One example of code expansion was "employability", which was divided into four sub-codes, "employability as positional", "employability as possession", "instrumental views and actions towards employability" and "awareness towards employability". Data previously included in the code "employability" was, then, re-coded into one of the sub-codes.

Apart from the re-coding process of the existing codes I also created three new codes, one for each participant and named as the participants, namely, Julie, Maggie and Daniel. In these codes I included all the biographical data I collected through the interviews and observations, as well as the participants' references to themselves, which included references to their personalities, thoughts and behaviours.

By the end of the re-coding process there were 38 codes and a new code tree. All these changes were updated to the word document called Codebook V5, the final version of the Codebook (Appendix E). In order to illustrate the outcome of the iterative process of developing the codebook, Figures 4.5 and 4.6 represent the code trees of Codebook V2 and Codebook V5.

Overall, the iterative process of the codebook development turned it into more than a data management strategy (McQueen et al., 1998; DeCuir et al., 2011) and became a way to implement a systematic approach to coding with the advised audit trail (Wolcott, 1995), which is "an accurate, comprehensive record of the approaches and activities employed" (White et al., 2012, p.247) during the data coding phase. Consequently it contributed to the consistency and transparency of the coding process.

Figure 4.5 – Code tree from codebook V2



4.4.2.1 Coding

As previously stated, the codebook was created to assist in the process of coding the data. Coding is the “assigning of codes to raw data” (DeCuir et al., 2011, p.138), and to revise, codes are the “labels that assign symbolic meaning to the descriptive or inferential information compiled during a study” (Miles et al., 2014, p.71).

Coding is a form of “reduction and simplification” (DeCuir et al., 2011, p.138) of data that many criticize as an oversimplification and decontextualisation of the data (Saldaña, 2013). The criticisms Saldaña (2013) summarizes focus on the idea that codes are used mainly as a tentative objective method for categorizing and retrieving data. However, my experience has fallen more into Miles *et al.* (2014, p.72) interpretation that “coding is analysis” and it requires deep reflection and multiple iterations. DeCuir *et al.* (2011) further explain this view by explaining how coding is also data expansion by enabling the creation of new links between the data; data transformation by giving voice to participants and therefore making data meaningful; and data reconceptualization by enabling the revision of established conceptual connections. I will add that coding is mostly a way to start mapping the connections between the conceptual framework and the participants’ experiences because every time a bit of data is coded it is immediately compared with all the other bits that were coded with the same code and with all that were not.

Taking coding as a reflexive process enabled me to understand the codes as connections that create new meanings and provided the basis for comparisons between the data and between the data and the theory. This was, nonetheless, a huge task and although it is possible to do it manually I used a management software to assist in the coding of the transcripts.

4.4.2.2 Management Software

Coding the data can be a time-consuming task, especially when considering the iterative nature of data analysis (Fereday and Muir-Cochrane, 2006). Today, there are multiple software programmes that can assist in the management of data. In this study, the coding process and data analysis was assisted by NVivo (in version 10).

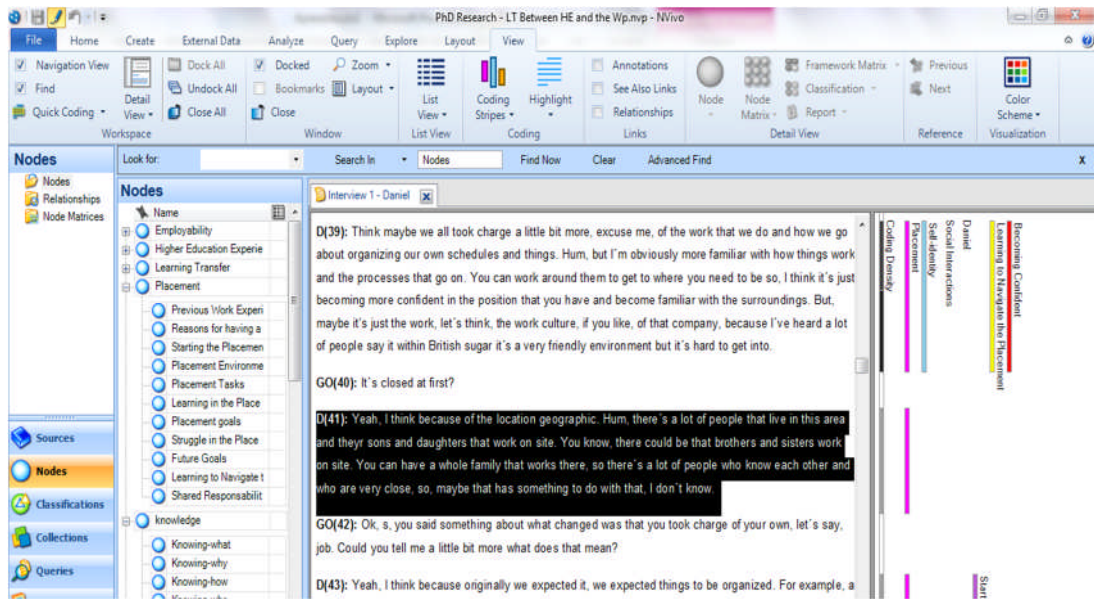
The decision about using NVivo came from its increased capacity for “sorting, matching and linking” (Bazeley and Jackson, 2013, p.2) data and for the flexibility it provides by the ease to create and change a coding scheme (Ryan, 2009). NVivo was used to manage data, query data, visualize data (Bazeley and Jackson, 2013), but most of the thinking process about initial codes (codes defined throughout the codebook development) were made before using NVivo. My concern at this point was to start using NVivo when a more stable set of codes was established so as to not make my software learning skills interfere with the reasoning process of code definition. Therefore, once all the transcripts and other data was uploaded to the software I created the codes (which in NVivo are called Nodes) and started to code them. Figure 4.7 shows how the codes were presented on the software. The presented codes relate to Codebook V3, therefore, before the recoding process was developed.

Figure 4.7 – Coding structure in NVivo (before recoding)

Name	Sources	References	Created On	Created By	Modified On	Modified By
Higher Education Experiences	18	150	04-05-2015 18:31	GO	19-08-2015 12:35	GO
Higher Education - Academic Related Experiences	17	117	04-05-2015 18:15	GO	19-08-2015 12:35	GO
Higher Education - Other Experiences	12	29	04-05-2015 18:15	GO	14-08-2015 11:32	GO
Learning Transfer	28	205	04-05-2015 18:32	GO	26-08-2015 18:55	GO
Learning Transfer - From HE to Placement	25	100	04-05-2015 18:15	GO	26-08-2015 18:55	GO
Learning Transfer - From Placement to HE	20	92	04-05-2015 18:16	GO	26-08-2015 19:02	GO
Intercontextuality	5	5	04-05-2015 18:16	GO	22-07-2015 16:47	GO
Fear of Forgetting	4	7	04-05-2015 18:17	GO	19-08-2015 12:35	GO
Placement	49	917	04-05-2015 18:34	GO	26-08-2015 18:51	GO
Previous Work Experiences	6	18	04-05-2015 18:18	GO	14-08-2015 11:26	GO
Reasons for having a placement	13	39	04-05-2015 18:18	GO	26-08-2015 18:50	GO
Starting the Placement	20	75	04-05-2015 18:18	GO	26-08-2015 18:51	GO
Placement Environment	30	150	04-05-2015 18:19	GO	19-08-2015 12:35	GO

The coding process was developed by opening each transcript, side by side with the codes and each relevant reference selected and dragged into the specific code it referred to. In order to make sure the “select and dragging” was being done correctly, I opened on the right side of the transcripts the option to see all the codes recently coded. Figure 4.8 illustrates the selection of a reference as it was coded. On the right side, it is possible to see different colour stripes representing other codes that have been applied to the same transcript. This visualisation was particularly useful in instances of multiple coding of a same reference.

Figure 4.8 – Coding process



NVivo was also useful for theme development as it aggregated all the information coded under each code, with three different tabs offering distinct information. The tab called summary (Figure 4.9) showed all the sources that had references coded to that specific code and provided some quantitative information, like how many references were coded in that source and to what coverage of the whole source. Such information was important to see, following the chosen example of the code knowing-what, that it was present in most of the data corpus and that Julie's data items were the ones with the most coded references.

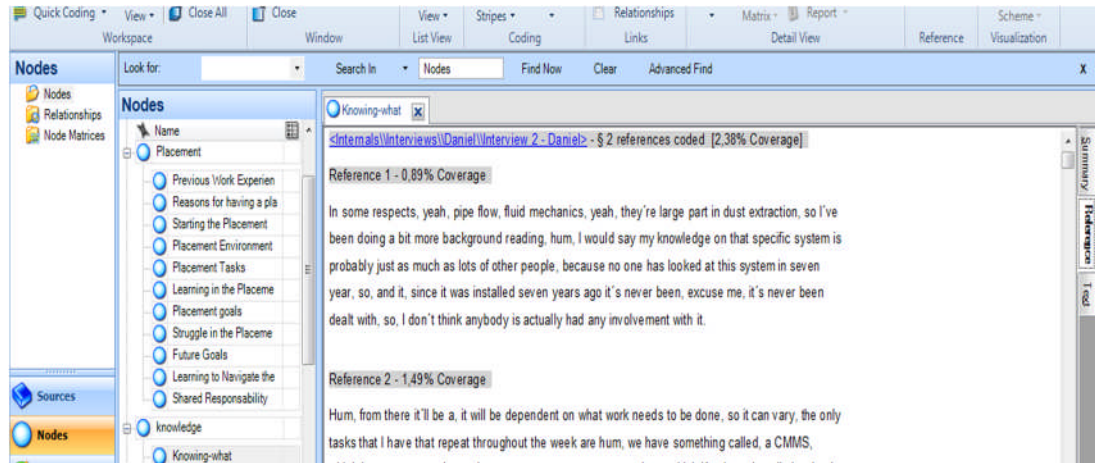
Figure 4.9 – Tab summary for code knowing-what

Name	In Folder	References	Coverage
Interview 1 - Emily	Internals\Interviews	2	0.89%
Interview 1 - Julie	Internals\Interviews\Julie	2	2.13%
Interview 1 - Maggie	Internals\Interviews\Maggie	1	1.02%
Interview 2 - Daniel	Internals\Interviews\Daniel	2	2.38%
Interview 2 - Julie	Internals\Interviews\Julie	6	3.80%
Interview 2 - Maggie	Internals\Interviews\Maggie	2	1.07%
Interview 3 - Daniel	Internals\Interviews\Daniel	5	5.39%
Interview 3 - Julie	Internals\Interviews\Julie	9	3.74%
Interview 4 - Daniel	Internals\Interviews\Daniel	8	5.14%
Interview 4 - Julie	Internals\Interviews\Julie	11	6.73%
Interview 4 - Maggie	Internals\Interviews\Maggie	2	1.35%
Interview 5 - Julie	Internals\Interviews\Julie	3	1.08%
Interview 5 - Maggie	Internals\Interviews\Maggie	2	1.19%
Interview 6 - Daniel	Internals\Interviews\Daniel	2	2.48%
Interview 6 - Julie	Internals\Interviews\Julie	3	1.83%
Learning in the Placement (Implicit + Explicit)	Memos	1	9.55%
Monthly Reflective Pieces_Lena_School of Educati	Internals\Reflections	9	5.73%
Observation 1 - Julie	Internals\Observations\Julie	1	2.62%
Observation 2 - Maggie	Internals\Observations\Maggie	1	0.96%
Reflection 19 - Julie	Internals\Reflections\Julie	1	8.80%

In the tab called references (Figure 4.10) it was possible to see every reference coded under each specific code and, for example, by clicking twice on a particular reference, would open the source it referred to. All of these

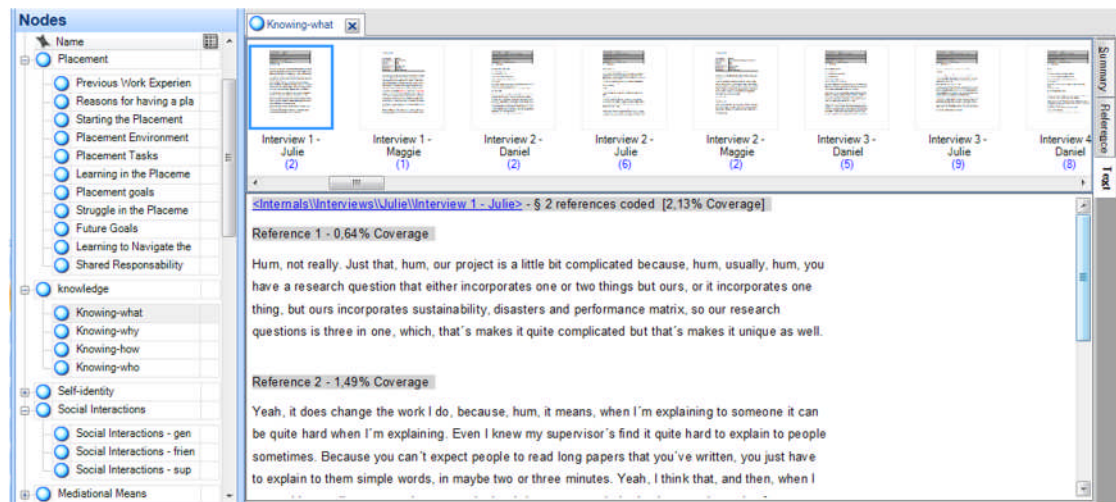
shortcuts made it easier to navigate through the data and check for context. One other aspect is that the fact that data was easily aggregated and printed, or copied into other documents, like, for examples, excel files, made it easier to progress to compare and test ideas.

Figure 4.10 – Tab references for code knowing-what



The final tab, called Text (Figure 4.11) allowed access to the references along with the visual aspect of each data item next to it. This tab was the closest way possible to see coded data in terms of each source. This is, in my experience, one of the particular areas in which NVivo presents some limitations, as it does not allow the researcher to see a complete set of coding for a particular participant or to get any summary data on that regard. In order to achieve that view of the data, the possibility is, and was the one I used, to check the text tab of each code for a specific participant.

Figure 4.11 – Tab text for code knowing-what



Overall, I aimed to use NVivo in a way that I could easily navigate my data, but at the same time avoid criticisms about the software making the coding process more mechanical and less reflective (Bazeley and Jackson, 2013), by establishing that all the coding decisions and code development was independent from the software and dependent on the researcher (Ryan, 2009).

4.4.3 Thematic and Cross-case Analysis

Qualitative data tends to be, by nature, “voluminous, unstructured and unwieldy” (Bryman and Burgess, 2002, p.216), making it a difficult task to explore it in order to make sense of it. The task at hand with this exploration is to begin “sorting out the structures of signification” (Geertz, 1973, p. 9) present in the data.

On this topic, literature offers several tactics for generating meaning in qualitative data. For example, Miles *et al.* (2014) listed 13 possibilities, some more descriptive, others more explanatory, from noting patterns and counting to building a chain of evidence or factoring.

Due to the nature of this study, not all 13 tactics were used, however a couple of them were really useful to explore the data. The most used ones were “noting patterns” and “making contrast/comparisons”, which is related to the process of coding the data. In this process there was also some use of the “counting” tactic in order to decide if a certain code was relevant. Frequency of the codes throughout the data set and within each participant data item was taken into consideration.

As the exploration of the data moved forward other tactics became more prevalent. Bryman and Burgess (2002, p.219) alerted me to the difficulty in “attaining a higher order of abstraction without compromising the authenticity of the data”. One tactic that became relevant to overcome it was “clustering” (Miles *et al.*, 2014) and the process of thinking, as Braun and Clarke (2012) proposed, “around what topics/issues do my codes cluster?”.

Thematic analysis was, then, used in this study as “a method for identifying, analysing and reporting patterns (themes) within data” (Braun and Clarke, 2006, p. 79), which in my case had already been coded into several theory

and data-driven codes, thus providing a starting point and some structure to that analysis.

As a process, it required an initial rich description of the data and its following interpretation (Boyatzis, 1998), in order to “build a comprehensive, contextualised, and integrated understanding or theoretical model of what has been found” (Bazeley, 2013, p.191). The process was, therefore, a movement from identifying and describing codes into organising them into higher-level, more abstract ideas, thus becoming a process of theorising the data with regards to the research questions.

Accordingly, searching for themes was an active process (Braun and Clarke, 2012) and required a shift in my viewpoint from codes, to a more conceptual idea regarding the data. Themes are, as Braun and Clarke (2006, p. 82) describe them, “something important about the data in relation to the research question, and represents some level of patterned response or meaning within the data set”. Therefore, themes are more than a mere description of the data (codes), as they represent some areas of similarity within the data and overlapping between the codes (Braun and Clarke, 2006; 2012). Understanding the difference between codes and themes was key for moving forward, and the best explanation came from Rossman and Rallis (2011, p. 277), that explain it as: “think of a category as a word or phrase describing some segment of your data that is explicit, whereas a theme is a phrase or sentence describing more subtle and tacit process”. Following this, it became clear that a code is not a theme, and a theme might represent a cluster of codes.

The search for themes was also a tentative one. Some of them emerged during the interviews, others while I was writing field notes or even while coding, and included, for example, “learning vs doing”, “narrow understanding of learning transfer”, or, “the development of a figured world is a slow, step by step process”, among many others. The next step was then to carefully review the suitability of those themes within each of the individual cases and then, across the cases.

The cross-case analysis was the next appropriate step of data analysis, and it was developed following some suggestions made by Stake (2006) regarding

multiple case studies analysis and Miles *et al.* (2014) suggestions, specifically regarding the data display around descriptive and/or interpretative matrices.

The cross-case analysis was implemented as a strategy for “deepen(ing) understanding and explanation” (Miles et al., 2014, p.101), by looking at the individual cases and apply their findings of situated experience to the study of the learning transfer process (Stake, 2006). The purpose here was to understand the local conditions that might affect it but also to develop more sophisticated descriptions and explanations of the process (Miles et al., 2014).

In terms of process, the systematic comparisons between the cases’ individual findings were variable oriented (Miles et al., 2014), meaning that I was focusing on the themes that existed across the cases rather than on the cases themselves. Then I moved into the interpretative processes (Stake, 2006) of looking at those themes and their main findings in order to develop cross-case propositions.

The next chapter presents the outcomes of these processes, namely, regarding the individual development of the cases in Chapter 5, and the cross-case comparison of the cases against the study’s main research questions in Chapter 6. Finally, the outcome of the interpretation of the findings and their contextualisation within existing research and debates is addressed in Chapter 7.

4.5 Research Quality

The detailed description of the research design, data collection methods and data analysis strategies aim to set the case for a credible and trustworthy research. Therefore, here I discuss the implemented “strategies for reducing systematic bias” (Patton, 2002, p.563) and ensuring credible conclusions in this study.

According to Miles *et al.* (2013), tackling research quality in a study requires the solution to three problems, namely, the “one-person research machine” (p. 293), the lack of explanation of the research process and analytic bias. Other researchers have provided different areas of focus, like Patton’s (2002, p.552) concerns about “rigorous methods” in field work, researcher’s “credibility” and the “belief in the value of qualitative inquiry” (p.553), or

Beazley's (2013) questions about the quality of data, process, product and outcome. No matter how each author frames and phrases quality concerns they all seem to underline that "all (educational) researchers must protect the integrity and reputation of (educational) research by ensuring they conduct their research to the highest standards" (BERA, 2011, p.9). Researchers must aim to be credible in the field (Hitchcock and Hughes, 1995), in analysis and in reports and, therefore, these were the areas in which research quality became a concern in this study: triangulation and researcher bias.

4.5.1 Triangulation

Triangulation is a "near-obligatory method for confirming findings" (Miles et al., 2013, p. 299) described in the Sage Encyclopaedia of Qualitative Research Methods (Given, 2008, p.892) as a "multimethod approach to data collection and data analysis". The basic idea with triangulation is that any given phenomenon is better understood if looked at by different people, through different lenses and/or using different ways of seeing. It is used to achieve a "repeated verification" (Miles et al., 2013, p. 299) in the findings, which does not necessarily mean that researchers use it only for corroboration. Triangulation is a strategy to discover and pursue inconsistencies and conflicting ideas (Miles et al., 2013) that the researcher must explain. It is this very process of corroborating the findings and explaining the inconsistencies and conflicting findings that allows triangulation to increase the credibility of a study.

There are four main types of triangulation, which include data source triangulation, investigator triangulation, theory triangulation and methodological triangulation (Denzin, 1970; Patton, 2002; Given, 2008). Briefly, data source triangulation refers to the collection of data from different times, spaces and people (Denzin, 1970). Tables 4.2 (Interview Schedule) and 4.3 (Observations Schedule) presented earlier also serve the purpose of demonstrating this type of triangulation, with both interviews and observations occurring at different times along the placement year and after the placement ended, occurring in different places and with different people. This strategy aimed to enable the construction of a more detailed and substantiated picture

of the learning transfer processes within students' transitions between university and the workplace.

Investigator triangulation (Denzin, 1970), which can also be called researcher (Miles et al., 2013) or analyst triangulation (Patton, 2002), refers to the use of multiple observers during field work and/or multiple analysts during data analysis. The aim here is to fight against the idea of a lone researcher's bias and assess the consistency in data collection and analysis (Patton, 2002). This form of triangulation is particularly hard to achieve within a PhD study, but it is also key to prevent what Miles *et al.* (2013) refer to the main cause of faulty research, the "incompetence (...) when lone researchers fail to seek help" (p.59). Therefore, some strategies were implemented in this study that can be considered investigator triangulation, like the use of supervisors, colleagues and the development of a codebook. The details of these strategies are explained in the following section focusing on "researcher bias".

The third type introduced by Denzin (1970) is theory triangulation and this requires the use of multiple theories that provide different lenses to look at the data and interpret it. Within this research, this is the least prominent type of triangulation since the conceptual framework was developed prior to the data collection and analysis. However, since this research follows an emergent design, with multiple iterations between data collection, data analysis and its interpretation, conceptual tools were used in a flexible way to explain the data, which became evident in the evolution of the conceptual framework and its features.

The last type of triangulation, methods triangulation, requires the use of different methods of data collection to study the same phenomenon (Denzin, 1970). The aim here, as explained by Hammersley and Atkinson (2007, p.184) "is not the combination of different kinds of data per se, but rather an attempt to relate different sorts of data in such a way as to counteract various possible threats to the validity of our analysis", a way to counteract the possible error of each method. Denzin (1970) argues that this would provide a better understanding of the phenomenon, however, more than a better understanding in itself, method triangulation was used to achieve a more detailed, fuller picture (Flick, 1992), since the research question required me

to understand how students experience the transition between higher education and the workplace in their placements (research question 1).

On top of these four types, Miles *et al.* (2013) introduced data triangulation, which refers to collecting data from texts, recordings, audio or video. Following this idea, the data used in this research comes, mostly from the interviews and observations but there is also the use of reflective pieces and the placement handbook that provide the different focus the authors advised in order to complement the main data sources.

To summarize, within this research, triangulation aimed to contribute to the credibility of the study (Flick, 1992; Miles *et al.*, 2013) and solve some of the analytic bias that could emerge from an improper research design or faulty methodological choices. However, triangulation by itself will not solve every aspect of concern in terms of research quality and that is why the researcher, as the main source of research work was another point of focus.

4.5.2 Researcher Bias

The credibility of the researcher is one of the main concerns if research is to be developed to the “highest standards” (BERA, 2011, p.9). It can vary depending on the researcher’s experience, training, status or presentation (Patton, 2002). Being a novice researcher and negotiating my own development within an academic community of practice (Wenger, 1998), I was concerned with my skill as an interviewer, an observer, a thinker and a writer.

During interviews, issues about voice and power became relevant to think about the quality of the data I was collecting. I decided to listen to my interview recordings and count the amount of time either I or the participant spoke and, once I had the transcripts I counted the words. It was a tedious but reassuring task. Time and word count favoured my participants although, less so with Julie. I learnt her speaking style to be less detailed and straighter to the point, which required more questions on my part to get the same level of elaboration on the answers that the other participants provided. However, even with this interviewer adaptation style, her voice was clear in the transcripts.

On top of that, I was also concerned with my interview questions. Hearing the audio recordings and transcribing was a learning activity on my own skill.

Initially, I was constrained by silence and was quick to elaborate a question, often offering alternatives to my participant. This was well intended but could mean I was leading my participants to one of two possible answers. As soon as I became aware of this, I forced myself to stop talking and give silence its space. As I had read before (Weiss, 1994; Kvale, 2008; Kvale and Brinkmann, 2009), participants started to fill in that silence by themselves and I became less concerned with leading questions.

The concern about the participants' voice, however, was not circumscribed to interviews and learning that transcripts were a reconstruction as much as an attempt to accurately portray the participant's words (Poland, 1995; Lapadat and Lindsay, 1999), I implemented member-checks from the participants. These were the verification of interview transcripts by the participants to account for misrepresentation of their words, intentions, thoughts or actions. My aim was not only to get verification of words or phrases I had captured incorrectly but to allow for a discussion with the participants about the meaning of their words. What I wanted most of all was a trustworthy representation of their experiences which meant I needed to be sure my interpretations were being built on accurate descriptions of the events.

This concern was ever present during the research process and ultimately emerged during the writing. Aiming for the authenticity in the report required an integration of concerns with audit trail, context-rich and meaningful data, systematic analysis and an active search for alternative explanations (Miles et al., 2013). The underlying thought in presenting the findings was the understanding and disclosure of the study's delimitations (Wolcott, 2008). The solutions adopted for reporting fell on detailed accounts of processes (Wolcott, 1994), thick descriptions (Geertz, 1973) and the inclusion of primary data (Wolcott, 1994), which allows for a better understanding on the reader part of what is the participant's voice and what is the researcher's voice.

Ultimately, being a lone researcher can be a source of bias (Patton, 2002; Miles et al., 2013) that should be overcome by looking for the possibility of peer and expert reviews. In this study some strategies were implemented as a way to reduce the lone researcher bias. For instance, the codebook was a strategy to ensure the coding process and the reasoning process behind the

definition of codes was not based on one interpretation of the data, but agreed upon by several researchers. This included one PhD colleague and one supervisor looking at the codebook, using it and then discussing with me about their coding process. This strategy will hopefully reassure readers that if another researcher used the same codebook, on the same data set the study's conclusions would be similar. Also, as a way to put my methodology and initial conclusions to the test of other researchers, some presentations and posters were developed and presented at conferences. This was a source of initial thinking about reporting as well as a validation strategy about the development of the research at certain times or about certain topics. It was also this reasoning process about research quality that led me to consider quality and ethical responsibilities to be intertwined.

4.6 Ethical Considerations

Within this study, ethical considerations were regarded as the researcher's responsibility towards the research, the participants and the audience (Hitchcock and Hughes, 1995; Cohen et al., 2007; BERA, 2011). I followed the ethical guidelines from the University of Leeds and submitted one application to the University of Leeds Research Ethics Committee and two amendments. All were approved without further request for explanation and they portrayed the concern with and thoughtful reflection on the values and dilemmas (Kvale and Brinkman, 2009) that pervaded the research from start to finish (Cohen et al., 2007; Oliver, 2010). Consequently, the main aspects this research was "ethically sensitive" (Cohen et al., 2007, p.58) to were: informed consent, anonymity and confidentiality, and finally, building trust.

4.6.1 Informed Consent

Signed informed consent was requested and collected from all the participants. Informed consent, the "bedrock of ethical procedure" (Cohen et al., 2007, p.52), is described by Bell (2005) as the consultation of participants before data collection starts, which requires a thoughtful preparation of information that explains the research process. For this study, an information sheet (Appendix A.1) delivered all the relevant details from the purpose of the study to whom will have access to the data and how it will be divulged.

The participants received the information sheet along with a consent form through e-mail and, following guidelines for proper consent (Cohen et al., 2007), were given time to go through it, contacts of the researcher for further information or explanation and the choice to collaborate or not. Following BERA's (2011) guidelines, the information sheet stressed that participation was voluntary, the risks and benefits of collaboration as well as participant's right to withdraw at any time, without any consequence.

Getting consent for the observations was discussed further in the first interview and participants requested their placement supervisors to read the information sheet and to sign the consent form. As with the participants, my contacts were available for further explanations and, although supervisors never contacted me, they took advantage of the observation time to talk to me and ask things like the purpose of my research (Julie's supervisors) or what exactly I was observing (Maggie's supervisor). Julie's supervisors, maybe because of their role as researchers, teachers and supervisors also provided some advice (how it would have been preferable to start collecting data earlier) and comments to my role as a researcher (how I would "disappear into the wallpaper" as they conducted the meeting).

One important part of the informed consent for the interviews and observation was the explanation about confidentiality and anonymity that is further explained in the next topic.

4.6.2 Anonymity and Confidentiality

The participant's right to privacy has to be one of the major concerns for a researcher (Hammersley, 1998; Cohen et al., 2007), mainly when working with interviews and observations. The decision about what is public and private in the research might be problematic when opposing the research aims to the participants' rights. However, in this study there was no aspect of deceit and the participants were informed about anonymity and confidentiality.

Anonymity was achieved by the attribution of "fictional names" (Oliver, 2010, p.79) that account only for the participant's gender, thus providing a mean to not use the participant's real name but maintaining the human dimension of their reports that could be lost by using letters or numbers (Oliver, 2010). The specific names of the students' placements were also changed when possible

to account only for the type of work or sector and names of the people interacting with the participants were changed to report to their relation towards the participant. Throughout the report you will read “sugar factory”, “research unit”, “students union”, “supervisor”, “colleague” or “friend” and never the workplace, project or person’s real name.

The confidentiality of the data was another promise made to the participants and it encompassed issues about who had access to data and how data was going to be collected, stored and disseminated (Oliver, 2010). Therefore, participants were informed about the use of recording devices during interviews and about the transcription process in which the data would be made anonymous. They were reassured that all the raw data would be properly stored within the university server which means that only I would have access to it and it was protected by password. About the dissemination of the data, the participants were informed that only the researcher would have access to their real name but that the transcripts would be seen by supervisors and colleague researchers that assisted in the data analysis process and that analysed data would be included in reports, journal articles and presentations.

4.6.3 Building Trust

After getting access to the participants and getting their written consent to collect data, it was necessary to maintain that consent and develop a relationship with them that was based on trust and confidence (Hitchcock and Hughes, 1995). Therefore, rapport was built by ensuring participants understood their relevance to the research (Wolcott, 1995) and always thanking them for their time and reflections. I tried to keep a close contact throughout the research by e-mailing participants to decide the schedule for the interviews and observations, to send transcripts and, or to address other relevant topics, like getting the placement handbook (with Daniel), or requesting the reflective pieces.

I decided from the start that participants would have access to the interviews’ transcripts and the opportunity to discuss anything within them that they felt was not clear, needed elaboration, or did not reflect their actual viewpoint. This is controversial and, for example, Oliver (2010) argues that participants should not have such editorial rights. However, my point in doing so was to

first develop a relationship of trust in which the participants knew that their voice would be accurately portrayed and that no sensitive material that they didn't want disclosed would be used in the reports. The second purpose has to do with my responsibility towards the research and the audience regarding the veracity of the data and, in this case, the member-checks allowed for the validation of the data collected through the interviews, by the participants. Ethically, one of my main concerns was the respect for my participants' accounts and themselves.

Respect for the participants' time was made clear during the scheduling of interviews and observations, since they were decided based on the participant's availability. Often, interviews and observations were re-scheduled based on the participant's personal constraints and the duration of the interview was adapted based on their time and motivation. For example, Interview 3 with Maggie lasted only 48 minutes because it was clear she was tired at that time and not engaging with the questions as usual. My goal was to make sure that, when the interviews happened, the participants had the time and the desire to talk to me, rather than force them to follow my interview guide at the expense of their well-being and the quality of the data. Both, interviews and observations always happened in a non-threatening, safe environment and without any judgement from my part (Oliver, 2010).

Within observations, "respect (for) the site" (Creswell, 2012, p.23) was broader than the participant, and included all the other people present, respect for the rules of the site and the work being developed. I saw myself as a "guest" (Creswell, 2012, p.23) and was always polite to everyone and respectful of their workplaces. My aim was to be the least disruptive possible within each placements' environment (Oliver, 2010) and even the interviews were, as much as possible, scheduled after working hours, not to disturb the students during work nor creating the idea that they were taking time off their work to collaborate with the research.

Also, while in the placements, I never engaged in any conversation with the people while they were working but I was available to respond and interact with people that addressed me, as happened with the supervisors and the

participants at some points. The following note taken after an observation illustrates some of these concerns:

I didn't speak to anyone, but I made sure I smiled at everyone that looked at me. It was just a way to look friendly and make people at ease. I also don't think the people in the office cared that much about who I was, because a lot of people constantly came in to the office, either to talk to the people working there or to use the copy machine. (Note taken after Observation 1 with Maggie).

Taking such notes and using a research diary to write down detailed descriptions of data collection, methodological choices and emerging ideas about themes or data analysis (Burgess, 1981) was instrumental to now being able to report the what and why of my decisions. Such reflexive practice, I believe, is also related to my ethical responsibility towards conducting research to the "highest standards" (BERA, 2011, p.9).

4.7 Summary

This chapter presented the research design of the study as a longitudinal case study with three instrumental cases. It also provided the rationale for each methodological decision, starting from the selection of participants to the overarching concerns with the research's quality and ethical considerations.

Great detail was provided regarding the development of a codebook, because this became a relevant tool, not only for coding the data, but also for initial theorisation and analysis. Consequently, the whole process from developing codes to the coding process in itself was presented resorting to examples taken from the study.

This chapter also presented a summary for each participant, regarding who they were, what they studied, and where they had their placements. Furthermore, it explained how the data was collected and how, firstly, it was analysed with regards to the participants' individual journeys and, secondly, across their individual trajectories. The outcomes of this analysis will be now presented and discussed in Chapters 5 and 6.

Chapter 5 – The Placement Experience

5.1 Introduction

This chapter presents the one-year work-placement experiences of Julie, Maggie and Daniel, while drawing on the theoretical concepts presented in Chapters 2 and 3 to contextualise and make sense of their transitions between university and the workplace. It commences by describing each of their individual placement trajectories by focusing first on the elements of space, people, tasks and role within the placement. Second, on the students' identity development during the transition, and third, on their return to university. At the end of each of the participants' journey there is a case summary providing the most significant findings for that case.

As previously explained in Chapter 4, aiming for maximum variation (Patton, 2002) in the selection of the participants was key to understand and enable the discussion of the students' transitions between university and the workplace, with regards to the research questions, which are explored in Chapter 6. Consequently, what the three sections presented here illustrate is three different students, three different placements, three different journeys, and consequently, three possibly contrasting cases of learning transfer between university and their one-year work-placements.

Throughout this chapter the focus is on how the participants constructed their experiences and therefore, attention is placed on their sense-making of the placement and agency within the transition between university and the placement, rather than on the placement features themselves. The reason for this individual focus follows Stake's (2006, p. 31) view that "the what the interviewee sees (...) is essential knowledge, and the researcher needs to find out a little about the interviewee to understand his or her interpretations". Accordingly, the participants' own words were valued and quotes gathered from the interviews are the most used data source and presentation form. In addition, when necessary, these are complemented with data from observations and other secondary data.

5.2 Julie

At the time of data collection, during the academic year of 2013/14, Julie was a 20 years old student of Management at the University of Leeds, who undertook a one-year work-placement at a Research Centre in the Business School, also at the University of Leeds. This placement was Julie's first working experience. Before it, she had never engaged in any part-time work or summer placements and, even the possibility of a placement in industry was not appealing to her. However, when this "*research project came by*" (Julie, Interview 2), she thought it could be a good opportunity to experience being in a workplace.

In the placement, her work consisted of collaborating with the research team on ongoing research projects, but specifically on one project looking at sustainability practices in industry. Her tasks during the placement included, among others, writing a literature review for the project, preparing and conducting visits to companies, analysing data, preparing reports for companies and presenting the project in meetings, within the research group and at conferences.

Julie's colleagues in the placement included the overall Business School and university staff, but, on a daily basis, she interacted mostly with her placement supervisors and the research team. In order to develop her tasks Julie was assigned an office, not at the Business School but in a close by building that she shared with some PhD students also from the Business School, although from different areas. In the placement, they were her office peers, even though they were not working on the same research project.

In the following sections Julie's approach and experiences of the placement are described, looking at how she adapted to the transition between university and the work-placement in terms of her identity, how she experienced the return to university after the placement experience; but firstly, looking at how she made sense of a figured world of work that included the placement's setting, the people in it and their tasks.

5.2.1 Understanding the figured world of the work-placement

The first task of any placement student, as he or she enters the workplace is, arguably, to make sense of the new environment (Louis, 1980). For Julie, however, the placement setting was not entirely new and her initial experiences of it as a placement student might have been shaped by her previous knowledge of the university in general, and of the Business School in particular. Indeed, when Julie started her placement she had already navigated the Business School's corridors, she had already interacted with some of the people working there, including general staff and teachers, and even the tasks she was going to perform were somehow similar to the tasks she developed in her student life.

Looking at all these initial similarities from the perspective of early transfer theories described previously (section 3.2), Julie was likely to experience a smooth transition between university and the work-placement, because those similarities could afford her the interpretation of the placement experience as an overall case of near transfer (Mayer, 1975; Royer, 1978). However, data only supports this claim up to a certain extent and even some contradictory evidence is presented in following sections.

Nonetheless, one aspect of the placement experience, in which the similarities seem to have afforded Julie an easier adaptation to the placement, was the physical setting. The argument is that, having been a Management student in the Business School for two years before starting the placement, attending classes, having a drink at the bar in the lobby, meeting with teachers or simply walking the corridors with fellow students, could mean that, to Julie, the Business School was not the new physical environment that students are expected to encounter in their placements. The possibility was then, that from the outset of the placement, Julie already had the knowledge of what she could find in the placement building and how to navigate it, at least regarding the physical aspects of knowing where the rooms, and the toilets, and the stairs and the elevators were.

“Well, I’ve already been there for two years so I think I know everywhere to go.”

(Julie, Interview 2)

There was then a suggestion that from the outset of the placement Julie was able to navigate the physical setting of her placement without the need for “much conscious thinking or deliberation” (Eraut, 1993, p. 228), or asking, or of having to develop other strategies to find out where she had to go. This effortlessness in her physical navigation of the placement can be defined by Eraut’s (1993, p. 228) notion of “skilled behaviour”, which, according to the author, is the consequence of practice and experience and contributes to the development of the individual’s professional performance. Such skilled behaviour, within Julie’s placement experience seems to have, at least in part, been made possible due to its near transfer nature (Royer, 1978), as it was almost the exact same physical setting that she navigated as a student, for two years, that she was now navigating as an employee.

Clearly, for Julie, there were affordances in knowing where to go. One moment she described to me was when she was having trouble contacting the person that dealt with her travel expenses. Their contacts thus far had been through e-mail and Julie needed a response regarding an expenses form, and her contact was not replying. Julie’s decision on how to solve that problem was to go to the finance office.

“I went to the finance office and realised that the person I was e-mailing was on holiday. That’s why she wasn’t replying. (...) And, you know, if it was someone that didn’t know about the university, they might not know about the finance office, and where it is.”

(Julie, Interview 4)

By deciding to go to the finance office Julie solved her problem. Quite possibly, Julie could have solved that problem using other strategies, maybe by looking up online who else worked there, or calling by phone, but, physically going there, because she knew where it was, was her chosen strategy. Additionally, by using this strategy she got to know personally the other three people working in the finance office, thus expanding her network of contacts in the placement. In this situation, Julie’s previous knowledge of the physical setting not only facilitated her resolution of the problem it also allowed her to expand her social connections in the placement.

Overall, Julie's development of a network of contacts in the placement also did not start from scratch. Much like with the physical setting of the placement, she had some previous knowledge to build on.

"During my academic life, I have communicated via e-mail with many lecturers and university administration staff (...)."

(Julie, Excerpt from Placement Reflections)

This was important for her placement experience in the sense that, according to Eraut (2000, p.122) the "knowledge of contexts and organizations is often acquired through a process of socialization" that is slow, incremental and based on the newcomer's access and interactions with other people in the setting, which is why the relevance of social interactions are described at a later stage. However, for now, the key argument was that, for Julie, starting the placement with previous knowledge of her work colleagues and of the people that she had to interact with, possibly facilitated her understanding of the placement and improved her process of socialization.

"This year I've had to do a lot of stuff like, ask this person that, and ask if you wanna know this. Then, ask this person and ask that, and you have to ask certain people just one thing, and I knew where to go. I knew where to go because I was already a student there. I knew the people for most of the things, but for some people, they wouldn't really know that, so it would be quite hard for them."

(Julie, Interview 4)

From Julie's perspective, her previous knowledge of the who's who in the placement allowed her to better navigate the social aspects of her tasks, like knowing who to contact for any specific issue. Moreover, even some of the key people in Julie's placement, like her work-supervisors, were already familiar to her before starting the placement. Thus, despite the fact that she was now interacting with them in a different capacity than in their previous interactions, when she started the placement, she had already met them, interacted with them, and formed an opinion of them

"My supervisor taught me in my second year. She's taught me a maths module, so I knew she was quite friendly to begin with. But, I expected

it to be more formal with my supervisor, whereas they, you know, treat you like you're a colleague."

(Julie, Interview 1)

Overall, Julie's prior knowledge of some of the people in her placement, including key people like the placement supervisors, could have created the affordances for another instance of near transfer (Royer, 1978), due to the similarities between her interactions in both student and worker life. That happened not to be the case, as it is argued later (sections 5.2.2 and 5.2.3), when looking closer at how she positioned herself in the social interactions occurring in the placement, specifically regarding her supervisors and PhD colleagues. However, it still contributes to the argument that Julie started the placement with important prior knowledge that facilitated her knowledge and navigation of the who's who in the placement.

One last aspect to consider in characterizing Julie's placement as a case of near transfer (Mayer, 1975), this time, regarding content, was that, on top of her previous knowledge of the buildings and the people she had to work with, the tasks she was performing as a research assistant were not very far from what she did as a student, as reading and writing were the same tasks she was spending most of her time on anyway as a student. Julie was even able to draw a parallel between some of the classes she had in her degree and the type of tasks she was performing now as a researcher.

"Hum, with some stuff, like, literature review, I obviously, I've written assignments and everything. So, I knew how to search for papers and, you know, order of, introduction, how the part of the paragraph should be structured. I knew all that kind of stuff. And then, with data collection tools, I had to make a survey and a semi-structured interview, which in my second year, we had a module called research methods. So, in that we got taught, you know, not to ask ambiguous questions and, when you ask questions, how you should put the answers on in a survey and everything. So I was quite prepared for that as well."

(Julie, interview 5)

Even on her day-to-day tasks Julie was finding a great similarity between what she did as a student and was now doing as a researcher, or between what

she had learned in classes and her placement activities, even if it was in a more practical manner. As a result, and despite the expectation that entering a placement constitutes entering a new and different environment (Arnold, 1985; Louis, 1980) and, the further issue that Universities and workplaces are characterized, culturally, and learning wise, as two very different settings (Resnick, 1987; Candy and Crebert, 1991; Tangaard, 2008), what Julie found in her placement was not a Pandora box of unexpectedness.

Instead, she encountered the same physical setting in which she was a student for two years, some of the same people she interacted with as a student and a great similarity in tasks and knowledge. All of these provided that, in the continuum between near and far transfer, her experience of the placement regarding these particular aspects was more towards a case of near transfer (Mayer, 1975; Royer, 1978), both in terms of structure and knowledge.

Theoretically, this meant that the similarities between the learning environment (university) and the transfer environment (work-placement) offered several affordances for direct application of knowledge (Bransford and Schwartz, 1999), which arguably made for a smoother transition between university and the placement.

In practice it meant that, in Julie's experience of the placement, there were fewer surprises (Arnold, 1985) caused by the unexpectedness of entering a new environment to resolve or overcome, which allowed her to develop an emotional response of comfort towards the placement.

"I really like Leeds University Business School, and I felt quite comfortable in the environment, because, you know, there were some familiar faces."

(Julie, interview 4)

In summary, up to this stage, Julie's account of the placement experience was characterized as being more towards the near end of the near-far continuum, which seems to support the claim made by classical theories of transfer that identical elements (Woodworth and Thorndike, 1901; Thorndike, 1906) and similarities (Mayer, 1975; Royer, 1978) between learning and transfer situations enable transfer of learning. However, and as it was hinted

throughout this section, Julie's placement experience is not fully represented by this explanation and it is possible to paint a broader and more complex picture when looking at other aspects of the learning transfer process, namely regarding social interactions and identity development in the placement.

5.2.2 The importance of social interactions

In their work about alcoholics anonymous, Lave and Wenger (1991) claimed that when newcomers enter a community of practice for the first time they are not told explicitly what to do. Instead, they have to learn it through social interactions and sustained participation in the practices of that community. Van Maanen (1976) and Eraut (2000) would describe this as the process of socialization that is key for the individuals to acquire information about the new community or organization that they are entering.

Looking back at the previous section, in it I argued that when Julie entered the placement she was not entirely a newcomer (Lave and Wenger, 1991), due to the previous knowledge she had regarding, amongst other aspects, the who's who in the placement and her previous interactions with them. I also argued that such knowledge, promoted by the fact that her placement was characterized more as a classic case of near transfer (Mayer, 1975; Royer, 1978), possibly facilitated firstly, her participation in the social activities of the placement and, secondly, her belonging to that particular community of practice (Wenger, 1998).

However, Julie's transition between university and the workplace was not so easily characterised as a case of near transfer (Mayer, 1975; Royer, 1978) and direct application of knowledge (Bransford and Schwartz, 1999) regarding social interactions, because there were some aspects of her work in the placement that contrasted with her experience as a student, which required her to adapt to the new situation. One of those contrasting aspects was Julie's changing understanding of the concept of deadlines. In her student life a deadline was a fixed date regarding an exam she had to take, or a paper that she had to submit. These dates were set by her teachers or the university and her role in that context was that of a complier. During the placement this understanding changed.

“No they are quite different deadlines. I would see a deadline (in the placement) as a meeting with my supervisor. So when I’m presenting my work to her, that’s a deadline. But I wouldn’t say that’s a strict deadline, because in university you have a strict deadline, whereas in this, if I forgot something, I’ll say to my supervisor, ‘I haven’t been able to do this, I’ll do it for you by tomorrow’. If I give a good enough reason, obviously I can’t always say I haven’t been able to do something.”

(Julie, Interview 1)

In Julie’s understanding of the figured world of work deadlines were reconfigured as a flexible date, set between herself and the rest of the research team and it could include any work that had to be done or, even, a meeting. Thus, in the placement, the notion of deadline acquired a broader sense and, most importantly, allowed a shift in Julie’s role. Where before her role as a student was to comply to externally set deadlines, now she could negotiate them with her colleagues. Therefore, this was one instance in which an apparently case of near transfer of setting (Royer, 1978) and content (Mayer, 1975) did not afford a direct application of knowledge (Bransford and Schwartz, 1999), because of the socially constructed meaning of the concept in both situations.

Looking at Julie’s experiences of the placement, it was the interaction with her supervisors that gave her access to this new meaning and allowed her to master it. Theoretically, the process of negotiating meanings (Wenger, 1998) is a well-established constituent of learning as legitimate peripheral participation (Lave and Wenger, 1991), which reinforces the relevance of contextual aspects and of social interactions in learning transfer situations. I argue, however, that both of them become even more important in situations of far transfer (Mayer, 1975; Royer, 1978) that require the student in transition to adapt to the new situation.

Another aspect that changed for Julie was her perception of work. In the placement she developed a sense of shared responsibility about her tasks and activities that transformed her previous view of working as an individual activity towards a more social one. The main difference to her previous view

was, then, that she felt responsible towards others. She felt that the quality of her work was not just important for her, but for the team.

“I feel like in the workplace you’re responsible to other people as well, and you’re answerable to other people. Whereas, on your study, you’re not really answerable to anyone else. It’s your own work. If you get a bad grade it’s your own fault and then we can say to you, ‘why haven’t you done the work?’, but then you’re guilty yourself if you get a bad grade.”

(Julie, Interview 3)

In her transition from being a student at university to working in university as a researcher she encountered a major difference in how she had to relate to others while developing her work. Those were two different figured worlds and, while at university she felt accountable only to herself, with her experiences of working in teams in university further supporting this view of students as individualistic and maybe even a little irresponsible towards others. In the workplace, the shared responsibility was, in my interpretation of the data, a consequence of starting to belong (Lave and Wenger, 1991) and of feeling like she was *“working with them now (...) towards the same goals”* (Julie, Interview 5). Hence, as with the previous situation, what started as a possible near transfer situation in terms of setting (Royer, 1978) and content (Mayer, 1975), actually required Julie to adapt to new processes and understandings of a similar task, due to the presence and action of relevant others in the placement.

Apart from introducing evidence that not every situation that Julie encountered in the placement was of near transfer (Mayer, 1975; Royer, 1978), both instances, the new meaning of deadlines and the new understanding of working in a team also introduce a new point, which relates to Eraut’s (2000) claim that working with others is one of the most important features of the workplace.

Actually, it seems that these particular instances might have been prompted by specific social interactions in the placement, like collaborative teamwork (Eraut, 2012), a workplace learning strategy in which the newcomer participates in group processes in order to learn, through practice, how to

become a full participant. In Julie's placement experience she was involved in collaborative teamwork (Eraut, 2012), by participating in the research team's meetings and activities, like going on company visits and doing data collection, but also by being included in the relevant e-mail conversations, and by developing research tools and outputs in collaboration.

Reviewing the presentation with my colleagues enabled me to understand the different language and style that has to be used when addressing different audiences, for example, there are key words that I used which possibly make the project attractive to organisations such as 'participating in this project could provide business continuity'.

(Julie, Excerpt from Placement Reflections)

The argument was that social interactions, through collaborative teamwork, but also through other workplace learning strategies, such as ongoing mutual consultation and support, and observing others in action (Eraut, 2012) allowed and contributed to Julie's learning of her new community's "body of common knowledge, practice, and approaches" (Wenger et al., 2002, p. 5). For example, in Julie's experience, ongoing mutual consultation and support (Eraut, 2012) was an important way of learning how to develop her tasks according to the job's requirements. More specifically, feedback, a form of support, was a constant part of Julie's interactions with her work-supervisors since the beginning of the placement. It was one of the main ways for Julie to improve her skills on writing, presenting, developing tools for research, communicating with others, and any other relevant activities that she had to perform.

"When I submitted my literature review to my supervisors, they put the paper to my supervisor and the senior lecturer and they both read it and then we came together at the meeting and they went through it, nearly line by line, actually, telling me what they think is good, what they think is bad, what I need to improve on and everything."

(Julie, Interview 1)

This feedback was mostly delivered one-on-one, face-to-face, and with a great level of detail. With the writing work Julie often also got written feedback that she could reflect upon. One interesting aspect was that, despite being used

to getting feedback from teachers in her student life, the frequency and nature of the feedback she got in her placement was not an exact correspondence to her student experiences and, sometimes, she could get frustrated by it.

“No, I was always annoyed, I was like, ‘why can’t they just do the changes for me?’ (laughing), cause it was extra work for me, and I used to get annoyed. ‘Why do they do this?’. But then, when I was editing my blogs right at the end, I just realised that, you know, I’ve learned a lot since, from what they told me.”

(Julie, Interview 5)

Julie was not always aware of the relevance of those learning situations or strategies for her progress while they were occurring, but she was able to identify the interactions with the placement supervisors and specifically the main supervisor, who was also the person she interacted the most with, both in presence and through e-mail, as key sources of learning in the placement. Julie learned from her in more explicit manners, like with the feedback situation or through tutoring, and in more implicit manners, like, for example through observation.

“She just showed me more. She didn’t tell me, but she just showed me more how to interact with people and, also, when I had to do a presentation, she let me practise in front of her and everything, so. Hum, and she kind of raised my confidence.”

(Julie, Interview 4)

From Julie’s reports, the observation of her placement supervisors was a way of “*learning through seeing*” (Julie, Interview 4), which as Eraut (2012) highlighted in his own research, is only made available to newcomers by allowing them to take part in the placement’s social activities. One key aspect, however, was that in Julie’s experience the use of observation as a learning tool was not just a strategy of self-learning employed by Julie, since it was also prompted by her main placement supervisor. For example, Julie’s supervisor would include her in the e-mails she sent companies after their meetings in order to show her how to interact with them. This can be seen, in light of Lave and Wenger’s (1991) theory, as Julie’s placement supervisor, an old-timer in that community and thus more experienced, assuming a near-

peer role to promote Julie's development of knowledge, practices and identity. Succinctly, there were two key ideas developed in this section related to Julie's experience of the placement. The first is that social interactions in the placement raised concerns about the characterization of Julie's placement as an overall case of near transfer (Mayer, 1975; Royer, 1978) and presented evidence of changing meanings in her practice that do not support the idea of the transition between university and the placement as a mere case of direct application of knowledge (Bransford and Schwartz, 1999).

The second idea was that social interactions are relevant features of the placement experience regarding the individual's learning and movement towards becoming a full participant. The same argument, proposed by Beach (1999; 2003), Eraut (2000) and Lave and Wenger (1991), was that learning in the workplace is mediated by people. Relevant others in the placement allow the newcomer access to the community, provide opportunities for participation and become role-models of what a full participant can be. Following this view, the learning transfer process was, then, not just based on knowledge and content, and extended the newcomer's transition into becoming something different, maybe into developing a professional identity.

5.2.3 Identity development in the placement

Becoming a full participant in a community of practice implies that once the newcomer has learned how to navigate the physical and social dimensions of that community and to continuously participate and contribute to its activities. Within Julie's placement experience, for instance, both the navigation of the physical setting and participation in the placement's activities were facilitated by instances of near transfer (Mayer, 1975; Royer, 1978) that Julie successfully implemented. Regarding these aspects Julie was able to develop the skilled behaviour and routines (Eraut, 1993) that emerge from practice and experience.

However, navigating the social dimension of the placement was not so straightforward and required of Julie some negotiation of meanings (Wenger, 1998) and the adoption of new learning strategies. Nonetheless, regarding these levels of analysis of Julie's transition between university and the workplace, which included Julie's navigation of the physical and social

dimension of the placement at the level of participation, there was a positive outlook on her journey towards becoming a full participant (Lave and Wenger, 1991).

However, in this study, full participation in the placement was not interpreted only as taking part in the placement's activities, but it also implied that the newcomer identified himself or herself, and was identified by others, as part of that community, thus following Holland *et al.* (1998) view that within figured worlds, interactions become roles, as people understand who they are in relation to their activities, and within interactions with others, while performing those activities (Urrieta, 2007). Therefore, full participation was then understood as "becoming someone or something new" (Beach, 1999, p. 102), while adopting a new role and, maybe a new identity.

The investigation of Julie's transition between university and the placement, regarding her identity development, started with taking into consideration her motives for having a placement. The reason for this approach was that Julie's reasoning for having a placement may have contributed to her adopting a particular stance towards the overall placement experience with important implications to her identity development.

Indeed, Julie was not motivated to have an industrial placement and she did not apply to any other placement opportunities, except the "Year in Research". Her interest was, then, in this particular placement, at the same university and same school where she studied, developing academic work.

"I've preferred the one year in research, to industry, because, rather than have that complete going out into the corporate world, I think this is like a mix. I am working with industrialists, but I'm also working with researchers and I am in my university environment and that's why I really wanted to do this, because I didn't actually wanted to do a year in industry before, but when this research project came by, I thought it would be a good balance between work and research. That's why."

(Julie, Interview 2)

Overall, Julie was not considering doing a placement before this "Year in Research" became available. Actually, I learned during the search for participants that this was the first year the Business School offered such

placement opportunities to the students, which might explain why Julie had not considered it before it “came by”. However, the main question at this point was to understand what was different about this placement that was appealing to Julie, when other types of placements were not.

In the data, what Julie reported was that she liked the “Year in Research” placement because it was in Leeds and at the university. She saw it as a good transition between university and the workplace, and not a “*full work life*” (Julie, Interview 1) experience or as a “*proper working environment*” (Julie, Interview 1), which, she never fully described, rather than by opposing her idea of a workplace to her experience of university. More specifically, she described the university and the workplace as somewhat antagonist. Accordingly, while in her view university focused mainly on theoretical knowledge and was quite informal, the workplace was more formal and focused on practical knowledge. Such description seems to relate to other authors’ views (Resnick, 1987; Candy and Crebert, 1991; Tanggaard, 2008) that schools and workplaces can be perceived as intrinsically different. In Julie’s experience, it was a view that she maintained throughout the placement, further reinforced with her own experience, and with the information coming from her colleagues’ industrial placement experiences.

“(...) we had this meeting with all the other placement students and someone said, ‘oh, I had to do this business to business transaction, and this and that, I had to go meet this customer’, and it’s like, I didn’t do much of that. But, then, you know, like I said before, I am still glad that I did a year in research because it was just a perfect balance between university and work.”

(Julie, Interview 6)

In this sense, from Julie’s perspective, the university as a work-placement was somewhere in between the casual environment of university as her place of study and the more corporate environment of industrial workplaces. While it is possible to interpret her decision as a deliberate limitation of her horizons of expectation regarding her future professional life and of the possible benefits a “Year in Industry” scheme would have to that future, her decision was rather explained by her prioritisation of obtaining a good grade at the end of her

studies, over other employability enhancing strategies. For her, the “Year in research” scheme was a good compromise between obtaining working experience, while still developing her academic knowledge and skills.

My interpretation, drawing from Julie’s account was that she perceived the “Year in Research” as a mediational transition (Beach, 1999; 2003) and was interested in it precisely because of that “in between” nature. According to Beach (1999, p. 118), a mediational transition occurs “within educational activities that project or simulate involvement in an activity yet to be fully experienced”, meaning that the participants enter an “as if” realm where they can, in this particular instance, role play being in a “real workplace”. The argument unfolding here was that university as a work-placement was appealing to Julie because it allowed her, to some extent, to maintain some focus on her academic life and student identity. The negative implication of this perception of the placement, I argue at a later stage, was that it possibly interfered with her transition towards becoming a “master practitioner” (Lave and Wenger, 1991, p. 111).

“In industry you have to do other work which I don’t think is academic focused, but this is academic focused. I like that because it means that, it is a good transition from university to work life, because I don’t think it’s a full work life as in office working, that kind of stuff. But it kind of gives you a taste of that life (...).”

(Julie, Interview 1)

Consequently, on the one hand, interpreting the placement as a mediational transition (Beach 2003; 1999) might have provided a safe framework for Julie to engage with professional activities and in this way, contributed to one of the overall stated benefits of placements as facilitating the entry into the workplace (Wilton, 2012; Jackson, 2014a). But, on the other hand, I argue that this interpretation might have also relegated Julie to a peripheral (Urrieta, 2007) or marginal (Tanggaard, 2008) position in the placement by hindering her identity development. In support of this view, for example, Van Maanen (1976, p. 83) states that placements or internship experiences “cannot fully account for the behaviour of individuals in organizational settings” because of their “as if” nature in which the participants maintain their student identity.

Departing from this position that Julie perceived her placement as a mediational transition (Beach, 2003; 1999) and that such outlook implied the maintenance of a student status, I argue that it motivated Julie's interpretation of her experiences not from the perspective of a student in transition, learning how to become a professional, but as a student struggling with the tension created by wanting to maintain a student identity and further develop within that role, while having to learn how to be a professional and meet the placement's expectations. For example, it was possible to acknowledge this tension in Julie's experience of attending some classes on research methods as part of her placement activities. In principle, being in a classroom and learning new material was something that Julie had done before and was good at. Furthermore, her own work-supervisor was the teacher of the module. Thus, Julie was presented with the opportunity of very near transfer (Mayer, 1975; Royer, 1978) and she had, in it, the possibility to excel. This was also, in principle, a situation in which her student identity should not be very far from what was expected of her in the placement situation.

However, her experience of attending these classes was not translated into a smooth transition, motivated by direct application of knowledge (Bransford and Schwartz, 1999), or in this case, direct application of role and identity. These specific classes that Julie had to attend were not designed for undergraduate students, as the ones she had experienced before. Instead, they were developed for PhD and MBA students as part of their postgraduate studies and, for Julie, they were, regarding her role in them, distinct from what she was used to.

“And it was really different being in those kind of classes, because, when you're an undergraduate, you don't really participate in classes that much, you just really listen to the teacher. With this, we had full-on discussions. So, that was quite different, because at undergraduate level we don't really have that many discussions with the teacher, unless we're forced to (laughing). Sometimes teachers have to force us to have discussions with them (laughing).”

(Julie, Interview 4)

She observed her peers behaving in a way that was not familiar to her and to her understanding of what being a student meant. That contrast possibly created in Julie the experience of what Tanggaard (2007) described as an identity confrontation. This meant that Julie was possibly confronted with two different ways of behaving in class, and confused by the lack of direct transfer, particularly in a situation that was so close to her student experience. The dissimilarity she experienced resided in the comparison between her view of being a student in undergraduate studies, more passive, quieter, and listening more and how her peers, the PhD students were behaving, more active, more question makers, more participatory. In the end, Julie was not comfortable in that setting, she struggled to make sense of it and felt like she did not belong. Eventually she stopped going to the classes, telling me that they were not so useful for her.

“(...) after a few classes I didn’t go to some of them, because they weren’t really helpful at all to my project. Or me in general, for like, they wouldn’t be helpful for my university as well.”

(Julie, Interview 4)

Looking closely at her words, it was also interesting to note how she talked about “those kind of classes”, almost distancing herself from them and, contrastingly, talked about undergraduate level in the present tense, despite the fact that, at the time of our fourth interview (July, 2014) she had been in the placement for almost a year. Following Tanggaard’s (2007) view, in this situation Julie failed to disengage with her prior identity and became more of a “marginal stranger(s) (...) - people who sort of belong and sort of do not” (Tanggaard, 2007, p. 460). Due to her desire to maintain close to her student identity and the behaviour that was part of it, as expected within a mediational transition (Beach, 2003; 1999), Julie drove herself out of the placement activity and moved towards not full participation (Lave and Wenger, 1991), but peripheral participation (Urrieta, 2007).

There were also other instances in which Julie’s desire to maintain her student identity drove her physically to the periphery of the community of practice’s (Wenger, 1998) spaces and interactions. One good example was related to Julie’s choice of workstations. It was stated before (section 5.2) that in order

for Julie to develop her tasks, she was assigned a desk, in a room that she shared with other research students. However, throughout the placement, Julie would not use her assigned office often, since, after the first couple of weeks into the placement she got permission from her supervisors to work from home. She justified this decision to her supervisors and in our interviews with the time she lost on the daily commute and the possibility to better manage her time.

“There was just no need to come in because, you know, when I’m doing stuff, like, a literature review. Even if I was in university, and I had to write a literature review, I’d usually just go to the Library to do reading and stuff like that. I don’t like doing all this writing at university, I don’t know why, I just prefer doing it at home. So, with that kind of stuff, it was just easier for me to concentrate at home. I like being alone when I’m working on that kind of stuff.”

(Julie, Interview 4)

However, the consequence was the further separation from her placement peers and maintenance of that peripheral engagement with the placement (Urrieta, 2007), rather than moving towards full participation (Lave and Wenger, 1991). Moreover, since Julie started to work from home, she would only come to the university once or twice a week, mostly when she had meetings with the supervisors or when she had to use a specific software that she did not have in her personal computer (e.g. NVivo). Whenever she came to the university she would also not go to the office. Instead, Julie chose to work from a students’ computer cluster in the Business School. Regarding data collection, for example, a consequence of this decision was that every observation of Julie’s placement took place in the cluster. Consequently, I was able to testify to the cluster’s friendly environment that arguably attracted her to work there.

The environment in the cluster is friendly. It is a student environment. There is a group of students preparing a presentation, other students are working alone at the computer. It is definitely an informal environment, like any IT cluster around campus.

(Notes from Observation 2, Julie)

Such observations on top of Julie's recurrent decision to distance herself from the physical and social arenas of her placement drove me to an alternative explanation for her choice of workstation, one that would not focus on time efficiency, but on identity. Accordingly, Julie's identity as a student might have influenced her interpretation of her new work setting and, ultimately created a barrier for her integration as it was not a work-setting that she recognised from her student experiences.

"I don't really know exactly what the world of work is like, cos I have the support of my supervisors and I'm in my university environment, you know. Like I said, I go to the post-graduate cluster, so that's probably why I feel like a student, I'm around students (...)."

(Julie, Interview 2)

Moreover, in the office Julie shared the space with the PhD students, her peers in the placement, but with whom she had difficulty in identifying and interacting with.

"The PhD students that were there (in the office), they were really nice, I really think, but I just didn't really have that much (in common), cos they were all, like, in their 30s and things like that. So, they were nice people, but I just didn't always wanna be around people like that, I wanted to be around my own friends, so."

(Julie, Interview 5)

From Julie's perspective, she and her PhD colleagues had little in common, both in terms of their identity, including age and lifestyle and in terms of their work, as they were from Marketing and she was from Management. My interpretation was, then, that Julie assessed her position towards them from the standpoint of her student identity and not from the continuum of a newcomer to full participant (Lave and Wenger, 1991), which could be more useful for a student in transition, regarding identity development. In doing so I believe Julie possibly missed some opportunities to identify helpful others in her office (Eraut, 2007), which are people in the placement, apart from the designated mentors, that could act as learning mediators and possible role models into the type of professional she could become.

Regarding interactions in the placement, Julie also struggled to act her role around her supervisors. She would acknowledge the gap of experience and knowledge between her and them, but instead of viewing herself as a student in transition between newcomer and full participant, surrounded by more experienced peers, she was, almost, self-trapped in her position as a student.

“(...) but I did still feel like I was their student throughout the year, just because, you know, they’re so experienced and... (Laughing). Even though they used to treat me like a colleague, I think it’s just myself, because I did feel like, you know, I’m still their student.”

(Julie, Interview 4)

In my interpretation of Julie’s experience the perception of being *almost* self-trapped in her student role is an important aspect, because Julie did feel more like a professional or like a colleague when she went into industries to collect data. It was only when she was in the university, around her supervisors, the PhD students and the other students that she would not move from her perception of herself as student to a researcher.

In conclusion, Julie’s outlook on the placement can be understood as a limitation towards her assessment of opportunities for development as I believe that she interacted with the placement from a particular position, that of a student, which limited her belonging. The argument developed in this section was then, that her outlook on the placement, facilitated by instances of near transfer (Mayer, 1975; Royer, 1978) and the interpretation of the placement as a mediational transition required of her the maintenance of a peripheral participation in the placement (Urrieta, 2007). Ultimately, this self-positioning limited her ability to become a full participant (Lave and Wenger, 1991), because *“(...) the whole year, it was like, I just saw myself as student”* (Julie, Interview 5). Hence, while placements are supposed to expose students to “possible futures” (Wenger, 2000, p. 241), Julie’s focus on being a student prevented her to make this identity leap.

The implications of this argument were that, in practice, Julie’s prior knowledge might have acted as a barrier to her ability to present herself as a researcher and, theoretically, that Julie’s struggle with identity development in the placement opened a space for critiquing frameworks supporting transfer

based on identical elements and similarities, and on the characterisation of placements as simulations in which students strongly position themselves as being in between their studies.

5.2.4 Going back to University

The previous section identified Julie's struggle in positioning herself as a researcher in her work-placement and argued that such struggle might have been the result of interpreting the placement experience as a simulation of a real workplace, in which her efforts were dedicated to maintaining and further developing her student identity, instead of learning to belong to that new professional community of practice (Wenger, 1998).

One aspect that contributed to this understanding of Julie's placement being experienced as a simulation was her focus on the transitory nature of the placement, evident in her frequent reports during the interviews of being aware and concerned with the return to university for the final year of her degree.

"I think it's just because, (...) I know that I'm going back next year to be a student again. So, it's not like I feel, 'oh, I'm really in the workplace' that much. It is still in between and I'm really a student."

(Julie, Interview 4)

From this quote, it is possible to argue that Julie did not perceive herself as a student in transition, learning to develop a professional identity, but as student in between her studies, role-playing a professional identity. One implication of this perspective is that it became difficult for Julie to manage her transition in terms her identity development. A second implication, however, was that Julie more easily perceived the connection between both contexts, which according to some transfer theories and expansive framing theory (Engle, 2006; 2012), could have some positive implications as well. The most obvious one is that assuming one is a student "*in between studies*" (Julie, Interview 2) provides a link between the context of learning and the context for transfer that according to some learning transfer theories might promote learning transfer. That is the case for Thorndike's (1906; Woodworth and Thorndike, 1901) identical elements theory or Bransford and Schwartz's (1999) preparation for future learning theory.

Following this argument, Julie's perception of the placement as a mediational transition (Beach, 1999; 2003) may have enabled her to develop a sense of connectedness between the settings that within Engle's (2006; 2012) expansive framing theory is the basis for an increased focus on the moment of learning (Engle et al., 2010) and for increased expectations of future learning transfer. Furthermore, it is also arguable that Julie's perception of both settings being connected promoted her view of the transition from university to the workplace and back as a near transfer situation (Mayer, 1975; Royer, 1978). According to classical transfer theories, that perception would then improve her abilities to transfer learning on the grounds that similarities between the learning and transfer context are expected to facilitate transfer (Thorndike, 1906; 1923; 1924), as it becomes easier for the individual to identify the common stimuli between them (Lobato, 2006). Looking at Julie's experience of the placement and of the return to university, there is evidence that she experienced them as connected settings and that she perceived the learning occurring between them as being transferable.

"A lot of the things that I was using in university, I was also using in my research. So, I think it'll be easier for me to go back to university."

(Julie, Interview 5)

For Julie, seeing her placement and its tasks as being connected to her university experience created the expectation that her new or improved ability to perform them could be transferred back into her last year of university. To some extent, this meant that Julie could adopt a strategic approach regarding learning in the placement that she anticipated as useful for her last year.

"Yeah, really relevant, especially since I wrote the literature review and next year my dissertation's literature review is going to be worth 20% of my whole dissertation. So that's gonna really help, because all my friends this year were like, 'what's a literature review?', because they just went straight from second year to third year and they didn't have this experience. Whereas I took a whole month writing a literature review, or even more, and I had actual professors helping me, so that will make it easier for me."

(Julie, Interview 3)

According to Engle *et al.* (2010), this perception of the future usefulness of that particular learning provides an important message to the learner regarding transfer. The message is that the students “are allowed, encouraged, and even responsible for transferring what they know from one context to all others linked with it” (Engle *et al.*, 2010, p. 605). For Julie, this view of the connectedness between the placement and university meant the expectation of transfer of learning regarding her ability to write a literature review and her overall improved academic writing, but also on more specific aspects of her placement tasks, like data collection processes, which at the time she could not be sure if they would be relevant or not, but that, nonetheless, could be.

“Because you know you have to do some data collection while writing your dissertation, you have to do some research. If I decide to maybe do some semi-structured interviews, or if I decide to go out with surveys, then I’ll know a bit more of this style to write, what to include. Because, even if it’s a different project, you still have that thing of, what type of questions to ask, and the relevance and not to make it too long. You just have that background experience.”

(Julie, Interview 3)

This reporting focusing on her current tasks and linking them with future transfer was present not only during my data collection processes (e.g. interviews), but also on her own reflections about the placement, as the following excerpt from one of her written blog entries shows.

Upon reflection of this task, I think this task has helped for future writing because it has shown me how to be more critical of my own work and to provide backing evidence for every point that I make. (...) I believe by reading other people’s work which I had to do in this task, it demonstrated to me the different writing styles that people can have and provided me with ideas for future writing.

(Julie, Excerpt from Monthly Reflections)

The argument put forward by Engle (2012), but also previously addressed by Bransford and Schwartz’s (1999) in their preparation for future learning theory, is that if students anticipate that a certain piece of knowledge or skill is relevant

for their future, they are more likely to focus on it while learning it and transfer it to a new situation. In returning to university, what Julie reported was in line with the outcome of this argument.

“I think it’s going quite well in terms of, because my industrial placement was actually a year in research. So I had lots of work to do with writing literature reviews and just general academic writing. So I think that helped me quite a lot, because when I’ve been writing my essays, I have been getting firsts, because I have been able to find better general articles, cos now I know how to search them properly. And then, just generally being more critical of my work.”

(Julie, Interview 6)

Indeed, within the areas that she had anticipated the placement learning being useful for her last year of university (e.g. academic writing, smaller tasks like searching for papers, preparing a critical argument or even referencing) Julie reported an increase in her ability with good outcomes to her grades. Obviously, as presented before in Julie’s overall description (sections 4.2.3 and 5.2), she was already a good student with good grades before the placement. Nonetheless, in her reports of returning to university Julie stated she felt different and had a different approach regarding some tasks that she performed in the placement, when compared to before the placement experience.

“I wasn’t at all late at doing my assignments. Maybe I’d finish two days in advance, or maybe even just a day in advance. But now, all suddenly, in terms of the reference list, which usually has all the support references, then I used to leave that to the last day and that then takes the entire day to do, because it’s just finding the source again and everything if I haven’t saved them. And now, I also do the referencing as I go along. So, I don’t have to spend a day on that as well.”

(Julie, Interview 6)

It appears as if, for Julie, framing (Engle et al., 2010; Engle, 2012) certain aspects of her placement, namely those that bore a close resemblance with her university work and were instances of near transfer regarding content (Mayer, 1975), as relevant for the last year of her studies (temporal framing),

in her classes, assignments and for her thesis (spatial framing), within her capacity as a student with, for example, the same supervisor (social framing), and working on the same topics (content framing) might have proved a successful strategy for Julie's learning transfer. Indeed, Julie also transferred this strategy into her last year, for example, in regards to the content in her classes in relation to her future desired job.

"I'm applying more for operations jobs and I have an operations management module, so I think, ok, concentrate on what they're saying because you might need it in your job."

(Julie, Interview 6)

I believe this ability of framing expansively her learning regarding when, where, who, what and how a specific learning might be important in the future (Engle 2006; 2012) that Julie developed in the placement, or because of the placement, was mostly implicit for Julie and one that she did not express directly in our interviews. Indeed, Julie's explicit reports of learning transfer, specifically in the transition from university to the placement, always fell under the classification of near transfer instances (Mayer, 1975; Royer, 1978). This means that Julie was able to identify and perceive transfer of learning, but mostly on tasks that were very closely related and hence characterised as near. Following this perspective, Julie reported anticipating transfer from the placement back to university on searching for academic papers, academic writing and some other research skills, such as data analysis and the use of a specific software. These were all areas that Julie improved during the placement and whose transfer back to university was near (Mayer, 1975; Royer, 1978).

However, on returning to university Julie also became aware that the placement had been, despite her difficulties during the placement with identity confrontation (Tanggaard, 2008) and her desire to maintain a student identity, a transformative and developmental experience (Beach, 1999; 2003).

"Last week I went into Uni and there were all these, I think it was a week done for internationals and some other people. So I just felt like, you know, these are students and I just felt a bit like, 'oh, I'm so much older than them and I worked here and everything'. So that felt a bit more

professional then. Because I think I felt more like a student because I was working with professors who're in their forties and had so much experience. That's why I felt so much like a student. But then, actually, actually being around students, I don't feel like a student that much (laughing)."

(Julie, Interview 5)

The idea coming across in this quote is that for Julie her development in the placement was to some extent an unconscious process in which the physical setting and the social interactions with her immediate peers played a big part. She compared herself to the others with whom she interacted and, in the placement such comparison led her to never really feeling like a full participant (Lave and Wenger, 1998). However, on her return to university, while comparing herself to other students, she realised that something had changed and that she no longer so clearly identified herself as a student. Consequently, it was only on her return to her previous role that Julie became aware of her movement away from being a newcomer (Lave and Wenger, 1991) and fully understood her placement experience as a consequential transition (Beach, 1999; 2003) that "changes one's sense of self and positioning" (Beach, 1999, p. 114).

Supporting the argument of Julie's placement being transformative and developmental there were other areas of learning that Julie reported from her placement. For example, her ability to work for longer periods of time, of being "*able to do more (...), less distracted*" (Julie, Interview 5), but also being "*more resilient (...) and quite inventive*" (Julie, Interview 5). All of these focused on her self-view and personal development in the placement.

"I think I'm probably more confident and I'm more confident to ask for help, and I'm more confident to do some tasks that have been assigned to me, rather than being scared, 'oh, can I do it, can I not?'. And I think I'm less shy to also ask people for help as well."

(Julie, Interview 5)

I believe that this focus on her own personal development during the placement as a standpoint to assess her readjustment to the university life reinforces the notion that learning transfer processes are as much social as

individual and that the outcome of the transition between contexts lays at the intersection, or even better, within the dialogic relation between them. Additionally, it is important to note that Julie had university support from a tutor and the obligation to reflect on her experience during the placement, but that she had to manage the transition back to university by herself. This fact is important because research has demonstrated that reflecting about learning is difficult for students (Eraut, 2000), so having to manage such transition without support might result in some key learning experiences persisting unconscious for the students.

Overall, Julie's return to the university reinforced her description of the placement as a valuable experience towards building her CV, providing her with opportunities and evidence of practical application of knowledge, as well as a better understanding of the type and amount of problems one might face in a real job, both of which she described as valuable for her job hunting after graduation. Also looking at the future, the placement experience might provide a frame of action for further incursions into the world of work, although for Julie, the possibilities to expand on her experiences will always be limited by her own characterisation of the placement as a mediational transition (Beach, 1999; 2003), built around several instances of near transfer (Mayer, 1975; Royer, 1978).

Progressing from the apparently safe opportunity that the placement provided for Julie to experience the workplace under her own conditions, the return to university, already very anticipated by her at the end of the placement, proved to be an important feature of her own perception of the personal value of the placement and of the requalification of her movement from newcomer towards a full(er) participant (Lave and Wenger, 1991).

5.2.5 Case Summary

This section described the placement experience of Julie, a 20 years-old Management student, working as a research assistant at the same Business School where she studied. In it I argued that because Julie was having a placement in the same setting where she was a student some aspects of her transition, including adapting to the setting, knowing who's who in the placement and how to develop certain tasks, were facilitated due to the many

similarities that afforded her transition to be, at least initially, interpreted as a case of near transfer.

However, despite the initial ease in her interaction with some of the placement's features, Julie struggled to engage with her new role and to become a full participant in her placement. The case was that the ease in her adaptation was not extended to the level of social interactions in the placement, where she had to develop new meanings of previously established concepts and develop new understandings of working. This transformation of Julie's understandings, I argued, was enabled by her social interactions with the supervisors through placement learning strategies such as collaborative team-work, ongoing mutual consultation and support and observing others in action. Furthermore, I argued that Julie experienced an identity confrontation in the placement, choosing to maintain her student identity and creating instances where her placement experience was similar to her student life, rather than engaging with her new condition as a student in transition. Consequently, Julie's trajectory in the placement was described as peripheral, since she maintained a marginal position throughout the placement experience. Lastly, her return to university is presented as having benefited from Julie's framing of the placement's new or improved learning as useful for her last year and to have also contributed to Julie's understanding of the placement as a developmental and transformative transition.

In conclusion, in this section I presented Julie's experience of the transition between university and the workplace and argued that, first, Julie's previous knowledge of the placement facilitated her engagement with the placement at the level of participation by presenting her with a near transfer situation; and, second, that the same aspects that facilitated her participation might have hindered her ability to engage with her new role, positioning her as a peripheral participant rather than a full participant in her placement experience.

5.3 Maggie

In the academic year of 2013/14 Maggie was a 20 years-old student of English Literature and Language at the University of Leeds. She was in between her

second and third academic years because she was undertaking a one-year work-placement at an employability office within the University of Leeds Students' Union. This placement was not Maggie's first working experience, in fact, it was not her first working experience within the University of Leeds and it was not even her first working experience in the Students' Union. As it was presented earlier (section 4.2.3), Maggie started working when she was only 17 years old and had several part-time experiences that she valued, much like the placement, as stepping stones into her professional life. Overall, these part-time experiences were not related to her degree, as she worked in a restaurant, a bakery and a bar. However, during her degree one of her part-time jobs was a six weeks position in copywriting at the Career Centre, which as Maggie explained, was an important step for her because it was the first time she had a job that involved writing professionally.

In the placement her work evolved mostly around project management, but she was also required to manage the "opportunities posting website" and provide direct support to both, students and employers, via students' CV checks and by answering phone and/or e-mail queries regarding employability. Consequently, her tasks were varied, including, designing, conducting and assessing activities, doing workshops for students, managing the vacancies posts on the website and writing reports.

Much like her diverse tasks, in the placement, Maggie interacted with different groups of people, including the overall Union staff composed of full-time employees, part-time students, volunteers and student executive officers of the Students' Union, but also employers, students and other university employees, working at the different Faculties or at the Careers Centre.

When conducting her tasks, Maggie was sharing an open-space office with colleagues from her department, but also with colleagues from two other departments. She was sitting next to her placement supervisor and, placed on her desk was the main phone for all three departments. Her office space was also often visited by students working in other departments of the Union.

In the following sections I provide an account of Maggie's placement journey, looking at her experience of the transition between university and the placement, in terms of her navigation of the figured world of work, including

her knowledge about the physical setting, the people in it and her tasks, but also on how she participated in the placement's social interactions and developed a professional identity. Finally, I analyse her return to university after the placement experience.

5.3.1 Understanding the figured world of the work-placement

Van Maanen's (1976) popular work on organizational socialization argued that entering an organization is a stressful period for the newcomer, in which becoming a member requires him or her to develop a mental map of the new setting to guide his or her navigation. However, if the newcomer already possessed some knowledge of that organization, early transfer theories would argue that the individual would experience a case of near transfer (Mayer, 1975; Royer, 1978) that would facilitate transfer of learning and the overall transition and integration into the new setting. Following this reasoning, in Maggie's transition between university and the placement some level of near transfer regarding the setting (Royer, 1978) could be expected on the grounds that, in her student life, and before starting the placement, she had already navigated the Union's building and she had interacted with the people and the services that inhabited it.

"I was introduced to the building, I was introduced to a lot of the people, even though I already kind of knew my way around (...)."

(Maggie, Interview 1)

Moreover, Maggie had also worked part-time in the Union's bar and interacted with people from the Union through another part-time as a web developer at the Careers Centre. This meant that Maggie would have even interacted with people working in the Union, as a worker, before her placement experience. Finally, she also knew the placement student she was replacing and, thus, had some knowledge of what her role would entail. Arguably, this previous knowledge about her placement provided her with some possibilities of experiencing near transfer regarding content as well (Mayer, 1975).

"I already knew what the role was about before I started it because the person who did the role previous to me was a friend of mine. So, I knew her working in another job, where we both worked, which is where I met

her. And I already knew some of the people who worked here from my work at a different job. So, I was quite aware of the demands of the job and what I would have to do.”

(Maggie, Interview 4)

From the perspective of Lave and Wenger's (1991) work on the process of legitimate peripheral participation, it was possible to argue that, even at the very beginning of her placement, Maggie was not at the first end of the newcomer to full participant continuum. She was somewhere in the middle. This positioning, along with the possibility of experiencing the placement as an overall case of near transfer (Mayer, 1975; Royer, 1978) made it plausible to anticipate that Maggie could experience a smooth transition into her placement by facing fewer surprises (Arnold, 1985) on her journey towards becoming a full participant (Lave and Wenger, 1991).

However, the data showed that her previous knowledge of the Union, its services and people, contrasted with how she was experiencing the Union during the work-placement. Ultimately, this required of Maggie, not a direct application of her previous knowledge (Bransford and Schwartz, 1999), but an ongoing adjustment to the setting that was not entirely new to her, but that she was experiencing in a new manner.

Regarding the placement's setting, Maggie experienced some surprises (Arnold, 1985) related to how she understood the physical navigation of the placement and of her knowledge of the services provided in it. For example, on her first week Maggie had to go through several trainings and induction events that would prepare her for working in the Union. One of those sessions was the diverse orienteering workshop, which was designed to introduce new staff to the diverse range of student experiences in navigating the physical setting of the Union.

“So you have to go around the Union and you're not allowed to use the stairs, you have to use all the lifts. So imagine, basically, that you have to use a wheelchair or you can't walk down the stairs and things like that. You would try and navigate the building and realize the effect it has on the way you navigate the building. Hum, because the lifts are quite distant here, cause there's one set and there's one set all the way

over there and there's no real one system. So it's sort of to help you understand what other members of the students go through and things like that."

(Maggie, Interview 1)

Through this workshop Maggie was introduced to the idea that being a full participant in this community of practice (Wenger, 1998) was not just about knowing how to navigate the building, but being aware of the multiple ways that students navigated it, and also, understanding some of the difficulties they might experience. For Maggie, this meant that, even though she had navigated the physical setting of the Union before, which might have allowed her to experience this aspect of her placement as a near transfer situation (Royer, 1978), actually, because the requirement was not just to know how to move around, but to understand how others did as well, she had to re-learn how to navigate it. Such re-adaption possibly transformed an initial case of direct application of knowledge in a near transfer situation into a more complex integration of previous knowledge with the placement's requirements in what became, in Maggie's experience, a situation of far transfer.

Other induction workshops taught Maggie about financial procedures, health and safety, customer service awareness, the Union's values that she would have to embody in her work, and the different members of staff. The workshops even supplied detailed information, for example, on how the several services provided by the Union could be different and have specific approaches towards students, and, finally, how her job fitted in that mix.

"(...) the customer service is very different for different people, because the customer service side of the Union is like (store name) and (second store name) and everybody downstairs, and there's membership services, which is things like student activities, student advice and opportunities. The way we kind of have to deal with people is slightly different, whereas (store name) and the commercial services downstairs are trying to sell to people, we are trying to offer help and offer experiences to people so you have to go about it in different ways."

(Maggie, Interview 1)

All of this information provided in the workshops was new to Maggie and,

despite her previous interactions in the Union as a customer and a part-time worker, she had to learn them, practically from scratch, on the first week. Once more, what could have been understood by Maggie as a near transfer situation regarding the setting (Royer, 1978) due to her previous knowledge of the Union, did not allow her to experience it as direct application of knowledge (Bransford and Schwartz, 1999). The placement's requirements on their workers' understanding of the Union, its buildings, processes, values and interactions was broader and more detailed than Maggie's experience of it, up to that moment. Nonetheless, the induction events and workshops provided Maggie with the opportunity of acknowledging the unexpected facets of the placement and learn them together with other new staff. According to Wenger and Snyder (2000, p. 143), such strategies within a community of practice "made their (newcomers) work easier or more effective" on the short-term, and "helped build both their communities and their shared practices" on the long-term.

In addition to learning about the Union's physical setting through those workshops and through her everyday interactions in the placement, during the placement's first weeks, Maggie was also exposed to the majority of people working in the Union. Since Maggie had explained how she already knew some people in the placement from her previous part-time at the bar and at the Careers Centre, the assumption was that this previous knowledge would facilitate Maggie's participation, due to privileged access to the who's who in the placement, or to relevant others that could become near-peers (Lave and Wenger, 1991) and mediate her learning as a newcomer. Indeed, during her placement experience, there were some instances in which Maggie experienced some advantages because of her previous knowledge of the people working in the Union.

"Well, I worked with (colleague's name) on various different projects because one of his things, on his manifesto is employability. So we've done a lot of stuff together about that, but also, he is a friend of mine personally anyway, so, working with him is just like working with a friend. It's absolutely fine, we have a work relationship but, obviously, being friends, on top of that, makes it easier to work with each other, so, it's not a problem. But I'm very aware of the status that he has,

within the workplace, so it is always useful to have him on our side when we're doing something".

(Maggie, Interview 3)

In this instance, Maggie believed to have benefited in the placement from her previous relationship with this colleague. What she described was an improved working ability developed upon a previous personal knowledge of her colleague and their relationship. This previous knowledge might have facilitated Maggie's interactions in the placement in multiple ways. For example, it may have made her more aware of him and of his role because she already knew of him; but also, given his high status in the placement, their personal friendship may have facilitated her approach and request his contribution to her projects.

Despite not having come across the topic of friendship in the literature about transfer or regarding the transition between university and the workplace, according to Eraut (2007, p. 415), the students' ability to locate "resource people" in the placement is important for developing a growing network of helpful others (Eraut, 2007) that can offer access and/or support in the placement. Therefore, this focus on historical, interpersonal aspects can be a key aspect in the promotion of newcomers' development during placement experiences. In Maggie's experience, previous relationships certainly eased her integration into the placement's social practices.

However, despite these occasional privileged interactions with some colleagues due to her prior relationship with them, it would not be an accurate representation of Maggie's placement experience to say that her previous knowledge of people working in the Union prompted a case of near transfer (Royer, 1978) and a smooth transition into the placement. On the contrary, learning the who's who in the placement and how to interact with them was mostly understood by Maggie as a case of far transfer (Royer, 1978). Her learning process regarding the placement's social dimension was gradual and required continued participation. In some instances, Maggie's adaptation to the placement's social dimension actually required a reshaping of her framework for interacting with colleagues.

“It’s intimidating, I think, because you meet so many people, in such a short space of time and they just have to remember one name, whereas you’ve got to remember everybody, and, even now, there are some people I think I haven’t seen since that first day. In the other day, I was in one of the offices and a girl came in and I confused her with a different member of staff because their names are very similar and I wanted to speak to one of them and I got the wrong one and, having been here, like, 12 weeks, is really bad. It’s still quite embarrassing if you do something like that.”

(Maggie, Interview 1)

This aspect of Maggie’s experience is further explored in the next section, but, for now it is important just to clarify that the social dimension of Maggie’s placement experience was, like with regards to the physical setting, better characterised as closer to a far transfer situation (Royer, 1978) in which, more than just relying on her previous knowledge, Maggie had to adapt her previous knowledge to her new situation.

Regarding the placement’s tasks, Maggie expected a far transfer situation (Mayer, 1975) content-wise. She was specifically looking for a placement that would provide her with knowledge and experiences that, in her view, she would not get from her degree. This included, for example, the development of skills related to project management. Moreover, as explained previously (section 4.2.3), Maggie was feeling tired of her degree work and wanted the placement year to be a break from education. Indeed, in the placement, her routine was structured and included activities that would not be familiar to her student schedule.

“So, yes, yesterday it was quite, so, basic day to be fair. I spent a lot of time on my desk yesterday. I was organising to make sure everything was prepared for today for our workshops. So, making sure all the materials were ready and making sure that the PowerPoint, which we haven’t actually used was ready (...). It was also preparing for committee training, which was yesterday. Which is, each of the societies and the committees have a training session, a day session, once at the beginning of the year and once at the end of the year. (...)

And for that we always do a talk on employability and what skills you gain as part of your role as a committee member. So, it was just kind of introducing myself to the new committee, explaining that I won't actually be the person who they'll be talking to, because I'll be gone and making sure they're aware of the things that we can facilitate and what we could offer and how they could benefit from working with us, basically. And then, yesterday afternoon, I started to write my other reports and just kind of finish that through, and did some updates for some meeting that (supervisor) is going to have with one of our senior managers as, like, an overall update for the projects and the things we've been working on."

(Maggie, Interview 4)

Regarding her tasks and her daily routine, Maggie experienced more of a far transfer situation (Mayer, 1975). In the placement Maggie had to adapt to a 9 to 5 schedule, which, as she explained by saying: "*I'm really bad at waking up in the morning (laughing), I really don't like early mornings, I'm not a morning person*" (Maggie, Interview 1), was not similar to her student life nor her personal preference. She had to overcome her fear and inexperience of talking professionally on the phone, and overall she had to learn new things.

Nonetheless, looking at her placement experience from this classic view of transfer as near or far, there were some aspects of her tasks that were more towards the near transfer end (Mayer, 1975), including, for example students' CV checks, working with spreadsheets or even, more broadly, working around her computer skills.

"(...) one of the criteria for this job is that I can, I proofread CV's for international students so, a lot of that is based on my knowledge of English and the language itself. A lot of the courses that I have done, quite a lot of stuff to do with looking at grammar and spelling and, pronunciation and things like that. So, that kind of stuff does come in useful and it's also, sort of, hum, physical proof that I have got the skills to be able to do that as well, so."

(Maggie, Interview 1)

The argument developing at this point was, then, that it was difficult to classify Maggie's placement experience as a clear case of near transfer regarding the setting (Royer, 1978), because there were fewer opportunities for direct application of knowledge (Bransford and Schwartz, 1999) than initially expected. On the other hand, content-wise, where Maggie expected more surprises (Arnold, 1985), there were some opportunities for experiencing the placement as a case of near transfer (Mayer, 1975) and use her prior knowledge and skills to perform her placement's activities. A possible conclusion at this point was that, looking at near to far transitions as a continuum, rather than a dichotomy offered a better view of Maggie's intricate placement experience. Indeed, Maggie's reflections on her first weeks into the placement can hardly be understood as a smooth transition from university to the work-placement, as it was anticipated in the beginning of this section.

"So, that was, kind of like, a lot was happening all at once, and then, within two weeks I was in the job. So, it was very much, I spent the first couple of weeks just kind of being thrown into everything, which was, it wasn't a bad experience, the beginning, it was just very, it can be very overwhelming I think, at the beginning when you're not really sure what it is that you're supposed to be doing and you have really to pick it up quite quickly."

(Maggie, Interview 5)

Instead, she described a process of struggle to understand all that was going on in the placement and the desire to do it as quickly as possible because, as she understood, it was necessary for her process of becoming a full participant (Lave and Wenger, 1991). From Maggie's perspective, her role in the placement was, like Arnold (1985) posited, to make sense of the new environment before taking any part in its activities or interactions.

"It was all very new so it was like, a lot of absorption really, sitting there and being a sponge, because you just kind of had to take everything in and just let it sort of settle in the brain before you kind of go on and do anything else."

(Maggie, Interview 1)

In summary, up to this stage, Maggie's account of the placement experience, fell more towards the far end of the near-far continuum, however with some clear instances of near transfer regarding specific tasks (Mayer, 1975). This last aspect of her placement journey seemed to support classical transfer views regarding the relevance of identical elements (Woodworth and Thorndike, 1901; Thorndike, 1906) for the presence of transfer. However, in Maggie's experience the existence of some near transfer instances were not enough to provide a smooth transition into the placement. As it will be described in the next section, Maggie encountered some difficulties in developing social interactions in the placement and developed a rather personal approach to her identity development in the placement.

5.3.2 The importance of social interactions

Social interactions are an important feature of a placement experience if, as Eraut and Hirsh (2007) propose, they are perceived as being part of a dynamic relationship between the individual and the work setting, through which the newcomers enter a socialization process (Eraut, 2000) that will provide them with the necessary access and support to become full participants (Lave and Wenger, 1991).

In the previous section I presented the case that Maggie was experiencing an apparent case of overall near transfer (Mayer, 1975; Royer, 1978), in which her previous knowledge of the Union's physical setting, and her previous professional and personal relationships with people working at the Union could have afforded her a direct application of knowledge (Bransford and Schwartz, 1999) regarding social interactions and her positioning within that community of practice (Wenger, 1998), not as a newcomer (Lave and Wenger, 1991), but as someone who already had some insider knowledge. Drawing on traditional transfer theories that would mean that Maggie could experience an easier participation in the placement's social activities and could more easily navigate the placement's practices, processes and rules.

However, looking at Maggie's placement experience regarding social interactions, it did not corroborate the view of a smooth transition from university to the placement, or of a clear case of near transfer (Mayer, 1975; Royer, 1978). In contrast, data showed Maggie's need for adaptation to the

placement's shared practices and even some struggle in adapting to some aspects of her placement's social dimension.

Indeed, Maggie's first impression of her placement's social network was of surprise (Arnold, 1985) regarding the size of the Union's overall staff directory and anxiety regarding the difficulty of learning who's who, especially within her initially limited scope of interactions.

"In your first week your supervisor takes you around and introduces you to all of the departments. But, obviously they only have one name to learn, whereas you got all the names to learn so you don't remember everybody. I'm only six months in now and I'm still learning people. There are people that I just hardly ever see, so, it's easy to forget what they do or who they are or where they work."

(Maggie, Interview 2)

On top of the number of employees and voluntary workers already in the placement when Maggie started, she realised that there was also some turnover of workers, meaning that every other week there was someone new to meet. Consequently, despite her previous knowledge of some people in her office, in the bar, and the odd friend working in another department, when Maggie entered the placement she was a newcomer (Lave and Wenger, 1991) and occupied a peripheral position (Urrieta, 2007) in the placement's social network.

Moreover, initially, Maggie struggled to adapt to the placement's social interactions due to a somewhat failed strategy of direct application, not of knowledge per se, but of a socialization approach based on her experiences of the university and of working in the Union's bar. Indeed, when Maggie started the placement she approached all her colleagues as friends, which was not, as she would learn, the most appropriate mental map (Louis, 1980) for interpreting all of her placement's social interactions.

"I think the most challenging thing is learning how to work with people, because, I think you have to be very careful around certain people in the building, about what you talk about, because it's very easy to blur the lines between a professional relationship and a personal relationship. And, so, for instances, some of the people I work with in

my office, I have quite close personal relationship with, and they are my friends, as well as my colleagues. But, at the same time, the levels of hierarchies, you have to be aware of what you're saying in front of people who are, obviously, important people in the building. And I think that's something that I learned along the way, knowing what to say and when to say it, and who to say it in front of."

(Maggie, Interview 4)

In a way, this contrast (Louis, 1980) between social interactions in university and in the workplace, as it is unexpected to the student in transition might become a great source of struggle. For Maggie, the contrast was that, while she approached her colleagues in university as friends, in the workplace, the same approach was not always appropriate. So, in order to adapt to the placement and overcome this element of surprise (Arnold, 1985), Maggie had to develop new and context-specific approaches that suited the new situation and its possibly different requirements for participation. Moreover, in order to develop these new strategies, Maggie had to improve her knowledge of the placement's complex social network and how to interact with them.

"(...) there are two sets of senior staff, there's obviously the students' front, they're the exec, and they are six students, and then there are also senior leadership team and they kind of run the backend of everything.

(...) Knowing how to communicate differently with different people, that's another (important) thing as well because there are completely different ways you that you communicate with staff as you would with students, and then, as well, there are different ways that I would communicate with university staff as I would with union staff."

(Maggie, Interview 1)

In her journey towards full(er) participation (Lave and Wenger, 1991), Maggie learned that regarding the complex network of different types of staff and how to interact with them, her previous experiences were not something that she could directly apply in this new situation and thus, what she experienced was a far transfer situation (Mayer, 1975; Royer, 1978), both regarding its structure and type of interactions. Furthermore, Maggie's initial inability to select the

appropriate social repertoires (Wenger, 2000) for her new community of practice (Wenger, 1998), as evidenced, for example, in her initial desire to turn every colleague into a friend, made her feel “*the sort of pressure of being, like, the intern, the new person, of being very young in your profession*” (Maggie, Interview 1). This then revealed her status of peripheral participant (Urrieta, 2007) in the placement, and created a source of struggle in Maggie’s placement experience.

Moving away from her status as a newcomer was, on the one hand, a gradual process of getting to know, recognise and interact with the relevant people in the Union, and, on the other hand, the concomitant process of being recognizable as part of the community. Both of which went on for several months.

“I think my scope of who I work with has broadened, a lot. Hum, but I think as well, to an extent more people know who I am. Whereas, when I first started working there was somebody who I needed to speak to who I’d actually, I’ve been working there for like three months and still not met them. So, I didn’t actually know how they looked like, which was a bit embarrassing, obviously, because, they worked in quite a prominent department. So, not knowing them was a bit awkward, but at the same time, not a lot of people knew who I was to begin with. So, I think, my face, it is more known around the building now, and I know a lot more people. I probably know everybody who worked in the building and if somebody asked me, who that person was I could tell them where they worked, hum, which I couldn’t have obviously, definitely done at the beginning of my placement, so.”

(Maggie, Interview 3)

Maggie’s perspective of her own integration in the placement as being both a case of her recognizing the Union’s staff and of being recognised as one herself speaks to Van Maanen’s (1976) claim that organizational socialization is an interactive process, based on participation (Eraut, 2000) and on the newcomer gaining access to the community’s shared repertoire and using it accordingly (Wenger, 2000). For Maggie, this learning process often required

that she adjusted her previous views, experiences and knowledge to the new setting.

Regarding her approach to work, for example, Maggie struggled to adjust her personal expectations of success to the placement's expectations of success. She was coming from a very individualized work routine as a student, where she established her own targets and worked alone to achieve them. In the placement, she attempted to maintain her strategy, but interactions with her placement supervisor evidenced that her previous strategy of setting goals would have to change.

"I have regular meetings with my manager to sort of talk about where I'm at with things and a lot of the time I would feel I wasn't necessarily doing as good as I could be, but then my manager would say something like, 'but this is actually really good, the stuff that you're doing is really good'. But I wasn't necessarily meeting the targets I had set for myself. It was weird at first because, obviously, when you're at university there's a certain level of expectation, whereas here there is a certain level of expectation but my level of expectation is different to that of my manager's so it's kind of finding out what they want from me and making sure that's the kind of the first thing I go for."

(Maggie, Interview 1)

Unlike her individual approach to goal-setting, in the placement, setting goals was a group activity, based on projects or activities. Consequently, in Maggie's figured world of work, setting goals had to be reconfigured to acknowledge those aspects. For Maggie, to whom setting targets was also an identity issue based on her self-view as an "over-achiever, (...) top classes for things" (...) (and someone who) *always push towards*" (Maggie, Interview 4), negotiating the meaning (Wenger, 1998) of success in the placement was a difficult task.

"I think, because a lot of the time my personal targets didn't always matched the professional requirements, and, when I succeeded the professional requirements but didn't could necessarily meet my target, I wouldn't necessarily be happy about it. But, if it was a success overall, I kind of had to realize that, I might have been stretching myself too far

and, and what I expected to achieve. Or that what I expected to achieve wasn't realistic, I wasn't thinking enough about the overall view, if that makes sense, so."

(Maggie, Interview 4)

The negotiation of the meaning of a successful task, activity or project was an important aspect of Maggie's movement towards full(er) participation (Lave and Wenger, 1991), because it evidenced to Maggie the different nature of her role in the placement and in university. Negotiating meaning also clarified the importance of relevant others in Maggie's placement, namely as mediators for learning (Eraut, 2000). This was the case with Maggie's placement supervisor, through whom she learned what a suitable target for the placement was.

Furthermore, this aspect of Maggie's experience allowed her to position herself as part of the community of practice (Wenger, 1998), in which not just herself, but all the members were relevant towards the project's outcome. In practice, this meant that Maggie had to learn that meeting the targets was not just dependent on her work and that, in several occasions, there were other aspects to account for. These included, for example, insufficient marketing of the activities, communication problems between departments, or even, that students would just not turn up for the activities. Thus, becoming part of the community of practice (Wenger, 1998) implied acknowledging that she was part of a team, which ultimately meant the development of a sense of shared responsibility about her tasks and a feeling of responsibility over the overall outcome of the projects in which she participated.

"Having to work, even though you might be an intern and you are quite low down in the spectrum, there is that much more responsibility on you and a lot of it has to do with having to do all these things. Whereas, with university, you don't always have to go to your lectures, you don't have to put your best work into your essays and that's your choice. Whereas, when you're working, it's very much like you're part of a system and you have to put into that system for it to be able to function properly."

(Maggie, Interview 1)

However, it is important to note that Maggie's sense of shared responsibility was not something that translated well for the Union as a whole and was much more evident at a departmental level. The consequence for Maggie's placement experience was, possibly, the difficulty in understanding the Union as a whole as a community, and looking at her department as a separate community of practice (Wenger, 1998). This particular view of the Union would become clear in some instances of Maggie's interdepartmental social interactions and assuming the identity of her department as her own, and as different from other departments.

"It can be sometimes, a lot of the times that it is a priority, but it's a priority in that it's a priority for us and it's our responsibility to make sure that happens. So, if it's not a priority for other members of staff, it can be a bit difficult."

(Maggie, Interview 3)

My interpretation regarding this issue was that when Maggie started addressing herself as part of her department and, sometimes as being against other departments, or struggling to communicate, or to get support from other departments, she was already evidencing her movement away from a marginal position (Tanggaard, 2008), and more towards full(er) participation (Lave and Wenger, 1991). In this movement, possibly experiencing what Tanggaard (2008) called an enculturation process, Maggie was reproducing her community's behaviour and beliefs. In other words, Maggie was becoming a member.

Overall, it is possible to argue that others were a relevant part of Maggie's placement experience in terms of learning and positioning. Her placement supervisor was, in the first instance, the main source of ongoing mutual consultation and support, and collaborative teamwork (Eraut, 2012) in their weekly meetings, in their personal conversations and relationship as friends and, mostly in allowing Maggie access to the placement's shared repertoires (Wenger, 2000) and meanings (Wenger, 1998).

"I think it all fits in pretty well, to be honest, because, it's like I say, I am quite happy to go in and do something on my own, and, my supervisor is very aware of that and she's quite happy for me to do that, and, in

the sense that, if I need her help, she will help me. But if she feels that she can offer something, she will offer it as well, so, it's very much, I'll take two steps and she'll follow me in those steps, but it's more of a passive role and, sometimes she will be ahead of me, and sometimes I will be ahead of her, it really just depends, cause we both learn together."

(Maggie, Interview 3)

Subsequently, Maggie's office and her colleagues were another important source of help, often assuming the role of helpful others (Eraut, 2007). This meant that they were not officially assigned to help her, but, provided her access to the informal learning that occurred naturally in daily interactions (Eraut, 2012), especially since Maggie's placement supervisor only worked 20 hours a week.

"Well, the Union is very clear on their five key values that they want staff to portray. Hum, and that's, oh god no, I can't remember them. (laughing) Creative and innovative, friendly and fun, hum, trust and respect. Oh, what are the other two? Hum, oh gosh, this is the true test (laughing), hum, I don't know. (...) and the idea is that you, in everything you do, you kind of try and embody these different things. And in our office, we have quite a positive environment, so, we have a system where we will actually, sort of tell each other, when we are being particularly, let's say, helpful and supportive, or, hum, friendly and fun, and things like that. But it's also a way for us to make sure that when we're talking to students and when we're talking to people outside of the office, that we portray those, hum, values as well."

(Maggie, Interview 4)

In a sense, Maggie's colleagues became the everyday source of help, and feedback that allowed Maggie to develop her tasks even when her placement supervisor was not available. Moreover, they also provided the important role models for Maggie since the beginning of the placement and provided her with helpful instances of observing others in action, which is another workplace learning strategy identified by Eraut (2012) that may help newcomers develop into full participants (Lave and Wenger, 1991).

“So, when I first started we did freshers’ week, so, that was like my third week on the job. So, was helpful for being able to work with people who, knew very much about their department and, like, we were talking to students who were prospective students or first year students, or students who had been here for two or three years, and we had to make sure that what we were talking about was concise and made sense and was relevant. And I think that was useful because I was working alongside someone all the time, hum, to make sure that I, you know, that the information I was giving people was correct and, the more I did it, the more I was able to, kind of, gain that confidence and do it on my own.”

(Maggie, Interview 4)

Overall, these informal strategies of socialization (Eraut, 2007) of Maggie’s placement, concomitantly accounted for her development and contribution and were good examples of the dynamic relationship that Eraut and Hirsh (2007) consider to be relevant for social interactions to become meaningful in the participants’ transitions between university and the workplace. Moreover, in Maggie’s experience, these socialisation strategies were as much relevant for her participation in the placement’s practices, as for providing Maggie with examples of role models (Wenger, 1998) of the behaviours, attitudes and beliefs that she wanted to learn. In this sense, Maggie’s journey into the placement was not just about belonging, but becoming, which is why the next section addresses Maggie’s particular approach to identity development during the placement experience.

5.3.3 Identity development in the placement

Since Maggie’s first day at the placement, until the moment that she started feeling and being recognised as part of the group, there was a long journey of learning how to navigate her physical setting in the placement’s appropriate manner, of learning who her colleagues were by recognising their faces and their names, of learning what they did and, the really important process of learning how to interact with them. Finally, there was the task of finding her own place within that community and, possibly, developing a professional identity.

“(...) the first few weeks, I guess are the most boring, because you kind of have to learn everything. Hum, like I say, not in the sense that they’re boring but in the sense that you have to, kind of, be a sponge and you have to sit and absorb everything and then, you’ve kind of absorbed everything and you kind of go out and you do your own thing, hum, in the workplace. And I think that people have to learn that, like, a lot of the time, at the beginning, everything feels very, very sort of like, ‘you have to learn, you have to do this, you have to do that’. Whereas, the more that you learn, the more you have the freedom to kind of progress in your own way. And I also think it’s a lot to do with the way that you are managed, as well. (...) So, I think, having someone who knows the way you work, as well, is really important.”

(Maggie, Interview 1)

Following this view of the process of entering a new workplace, it may be argued that competence (Wenger, 2000) or professional expertise emerges at the intersection between knowledge and experience (Eraut, 1993), which might explain why newcomers, like Maggie, struggle to feel competent when they enter a new community of practice (Wenger, 1998), regardless of the quantity and quality of their knowledge overall. For Maggie, that experience of getting to know and navigate the figured world of work with the appropriate mental maps (Van Maanen, 1976) was felt like the necessary step to become more independent, and to find her “own way” in the placement.

The other argument to be made is that, like Holland *et al.* (1998) argued, roles and identities are formed in practice, between the individual and the context. For Maggie, since the beginning of her placement, she experienced an overall “supportive office” (Maggie, Interview 4) that contributed to her socialisation (Eraut, 2000) into the placement’s values and behaviours. Furthermore, Maggie always described her placement supervisor as “very supportive” and “very verbal about her support” (Maggie, Interview 4), evidencing that her relationship with the placement supervisor was key for her developing the necessary confidence to act her role in the placement.

“I think I feel a lot more confident in myself, in making decisions, cause I’m quite an indecisive person. So, I feel like, I’m a lot more confident

in, sort of, knowing that I can make certain decisions and that, that decision is a good decision. Hum, whereas, before, at the beginning of the semester I couldn't. It's difficult as well because my boss only works 20 hours a week, whereas I work full-time. So, I would kind of be constantly sort of questioning myself and asking like, 'is this ok?, should I do this?, should I do that', and she would just be going back at me with questions like, 'I don't know, should you do that?', and it was forcing me to make decisions, so."

(Maggie, Interview 1)

In a way, this reflected the importance of social interactions in developing a new identity in Maggie's experience. Moreover, when entering a new community of practice (Wenger, 1998), newcomers like Maggie should be prepared to encounter different types of interactions, not all of them being supportive of their journey. Within Maggie's placement experience, for instance, learning that not all her colleagues were to become her friends was part of this learning journey, as much as learning how to deal with people that saw her mostly for her marginal positioning (Tinggaard, 2008) in the placement, like her placement manager.

"(...) I feel like at the beginning of my internship is like being a child again, like, sometimes I would feel like she (placement manager) was talking to me as if I was a child. (...) I'm not a child, I am 20 now, I work with you, we are colleagues, we're not, like, telling me off. Hum, so, that was a bit bizarre. I think that was the kind of moment when I realized how to manoeuvre around her, so."

(Maggie, Interview 2)

For Urrieta (2007), individuals make sense of who they are through the types of relationships they develop in the figured world's activities. For Maggie, this meant that being in an overall supportive environment that allowed her to find her own path enabled her to develop the identity that suited her placement experience. In practice, this meant that Maggie did not experience the expected "letting go" (Louis, 1980) of her old role as a student to become "someone or something new" (Beach, 1999, p. 102), but she did experience a confrontation of identities (Tinggaard, 2008), to which she developed her

own particular approach.

Throughout her placement journey, Maggie had to deal with a duality between her knowledge and experiences of the union, as a student and as a worker. So far, these have been presented as instances of expected near transfer (Mayer, 1975; Royer, 1978) that were unexpectedly experienced by Maggie as far transfer (Mayer, 1975; Royer, 1978). Some of the examples presented so far included Maggie's navigation of the physical spaces of the Union, the more complex social interactions in the placement, or even, the differences in Maggie's role and identity before the placement and in the placement. Such differences, particularly as they were surprises (Arnold, 1985) that required from Maggie a continuous adaptation of her previous views, strategies and identity, might have contributed to her experiencing a transition from student to professional, much like what Beach (2003, 1999) described in a lateral transition, unidirectional and progressive.

However, Maggie's approach to this dual knowledge and experience of the Union was to develop what she called a "*fluid*" (Maggie, Interview 2) identity, through which she was able to move between her identity as a student and her identity as staff as she felt necessary and/or useful for the task she was developing. Indeed, during one of the observations I was able to witness a moment in which Maggie took advantage of her fluid identity to better develop a particular task. In the afternoon of the third observation day Maggie went to one of the Faculties to conduct a workshop for school reps on stress management. She started the workshop by describing the biological aspects of stress and, during that initial explanation, Maggie adopted a formal posture and formal language, using mostly technical terms and, in some way, distancing herself from the students. Once that first, more expositive part of the workshop was done, she started asking questions to the students about situations in which they felt stressed and what they did about that. As soon as the workshop entered this conversational dimension, Maggie began using her personal experience as a student to relate with what the students told her, and to provide feedback on their comments. During the conversation with the participants the topic of having a dual perspective, as a student and as a school rep emerged. Maggie then shared with them her situation as a placement student, and explained to them how that dual aspect became

relevant for her, because she could understand what the student perspective was and feed that into her work.

For my own understanding of Maggie's self-called fluid identity, it was important to see how easily she moved from the professional providing technical information on the topic of stress management to the colleague sharing experiences regarding her own personal strategies to deal with stress to, actually, acknowledging during the workshop her dual capacity in the placement. In her experience, this knowledge was relevant for her daily tasks and continued to be nurtured by the fact that, besides continuing to describe herself as a student, she was also still living with students, spending time with students and immersed in the students' culture that she had to provide activities for.

“So, it's very much like, I'm aware of the students' side and I'm aware of the professional side and, in some respects, that has helped me a lot in my work, because I've been able to think, well, 'would I'd go to this?', and 'would I do this?' And, 'what would make me want to do these things?' Which, I think has been helpful for me and for the team, because my role, this is the third year that my role has been positioned in the Union, and the previous two students who did it were graduates, so, in comparison to that, me still being a current student, living with students, being very much immersed in the students' culture, is very much different for me, because, it's not something that I've had and happened, it's still very much me. So, I think that makes a lot of what I do, a lot more relevant to me.”

(Maggie, Interview 2)

For Maggie, that fluid movement between her identity as a student and as an employee was important because it gave her privileged, first-hand insights about students, what they want, what they do, and why they do it.

Additionally, Maggie was also recognised in the placement, by her colleagues, as still being a student. For example, during the interviews Maggie enumerated a number of activities, such as being asked about current students' needs, being interviewed, participating in a video, participating in several focus groups targeting students and being involved in several other

projects for other departments, because of her student identity in the placement. One other aspect that this enumeration presents is that Maggie was recognized in the placement as staff, but as staff in a special capacity. Every time she was requested by her colleagues to be involved in something because she was still a student, she was also being recognized as staff, as it meant they knew who she was, where she was working and that she had this dual capacity.

"I do often get asked to do a lot of 'studenty' things as well. Because I'm one of the very few people, it was only me and one other person who are still current students, who work here. Hum, some people have graduated or have been a graduate for a few years, so, I often get asked questions directly related to current students and what current students are, kind of what the crux of they want is."

(Maggie, Interview 4)

To some extent this closeness to her student life could mean that Maggie was experiencing her placement as a mediational transition (Beach; 1999, 2003), in which she understood the Union as a placement experience that was a projection of a workplace but, because it was so much around student culture, it could not be understood as a real workplace.

"It's like a combination of the best of both worlds, because I'm still very much immersed in the culture of my own age, but, at the same time, I am in a work environment. And I think that, this work environment is much more relaxed than a lot of working environments. So, if I'd have worked, like I say, for a, you know, business or corporation it would have been much more, sort of, like corporate, kind of 'businessy', formal...whereas here, everyone gets their work done but it's enjoyable environment as well."

(Maggie, Interview 4)

The argument under testing at this stage was that a mediational transition (Beach, 2003, 1999) might hinder the individual's ability to engage with the placement at the necessary level for developing a new identity. The same concern was raised by Van Maanen (1976) in arguing that "as if" experiences do not allow an accurate perception of how a student would experience the

transition into an actual workplace. Indeed, there were moments in which Maggie's student identity collided with the professional identity, or moments in which one had to prevail. For example, Maggie described the moment in which she had to represent the Union at a conference and had to voice opinions regarding student life that were not her personal views as a student.

"I was coming from a students' perspective and my professional perspective, so I had to push aside my student perspective a little bit, or I had to make people aware of the fact that I was coming from my perspective as a student when I was saying certain things. Hum, to, come away from saying, this is what we think as an Institution, rather than, this is what I think as a person. So, because a lot of my opinions as a student varied from what I thought as a professional."

(Maggie, Interview 2)

In this particular instance, her identity as a student was still useful and provided some increased relevance to the task, but it also implied a decision on which had to prevail. The fact was that, despite the relevance of her knowledge as a student and of the student life, within her work, when she was representing the Union, the Union's view had to prevail and Maggie had to be aware of that view and able to transmit it.

In conclusion, Maggie's identity development in the placement was shaped by her dual role, understanding and experiences of the Union, as a student and as a worker. Such particular outlook into the placement experience led Maggie to navigate through the placement's community of practice (Wenger, 1998) in a continuous movement from peripheral participation (Urrieta, 2007) to full(er) participation (Lave and Wenger, 1991). My argument, however, is that this continuous transition between the roles and identities, rather than being a manifestation of Maggie's marginal participation (Tinggaard, 2008), was the representation of Maggie's development of a unique role within the community of practice (Wenger, 1998), which ultimately contributed for her belonging and growing full participation.

5.3.4 Going back to University

Literature regarding supervised work experiences often enumerates the many benefits of having a placement experience (*inter alia* Auburn, 2007; Stanley,

2013; Jackson, 2014c), some of which even suggest that placements may contribute for better academic achievement on return to university (e.g. Mansfield, 2011). However, Auburn (2007) also argued that these results should be taken with caution as often students fail to see a connection between their academic and placement experiences, which would arguably hinder their ability to transfer. That is also the argument made by Engle (2006) when she states that transfer is more likely to occur when differences are framed as part of one continuous journey or narrative.

In the previous sections I argued that Maggie's placement experience was developed around an expectation of near transfer regarding the physical setting (Royer, 1978) and to some extent the placement's content (Mayer, 1975), due to Maggie's previous personal and professional knowledge of the Union's buildings, some of its workers, and more specifically, of the placement student she was replacing. Furthermore, I presented the case that Maggie's placement could be contextualised as a mediational transition (Beach, 1999; 2003), in which she was focused on the present experience as well as in her future return to university.

Indeed, there were several aspects in the data that contributed to the categorisation of Maggie's placement as a mediational transition (Beach, 1999; 2003). Some examples included Maggie's reports of being immersed in a student culture; her initial perception of her colleagues as friends, which she would learn later was more adequate for the university setting than the workplace setting; or even the maintenance of her student identity throughout the placement, reinforcing that, despite being in a workplace, she was a student as well.

"I quite like that because when I go home, obviously, I live with students, so, I'm very much still in that student culture, and when I'm at work, I work in a student's Union, I work at the university union that I go to, so. I'm very, I was always aware of the fact, like, even though I was working, I wasn't going to be completely separate from my original student life, which I kind of like, because, obviously I have to go back next year and do my final year. So, it makes me feel a lot bit more comfortable about doing that."

(Maggie, Interview 2)

Following Engle's (2006) argument, if two contexts are expansively framed, which means that they are linked in terms of time, space, content or social aspects (Engle et al., 2010), it becomes easier for the individual to identify present learning as relevant for the future and focus more on the learning process and expect its future transfer. Translating this argument to Maggie's placement experience, it might mean that perceiving the placement as a mediational transition (Beach, 1999; 2003) would facilitate its framing, at least regarding time and space. This would mean that Maggie would be able to perceive the learning occurring in the placement as relevant for the following year, regarding her university tasks. Consequently, there should be some evidence in the data regarding Maggie's expectations of transferring some learning from the placement towards her last year.

"I'm really glad that I did this placement, because, it makes me now want to go back to university to finish my degree, so that I can do the things that I want to do, and I've got a much more positive outlook to going back and doing my final year because, initially when I signed up for my modules, for my final year, when I was going to be starting September last year, I decided that I wasn't going to do a dissertation. One of the things that I've actually discovered having had to reapply to my course's modules, which I haven't done yet, is that it has actually gave me some time to think about what I might have wanted to do, if I've done a dissertation and I actually did come up with something that I have put in for that. (...) I'm quite looking forward to that now because it is a big chunk of my final year, but I'm quite looking forward to it and I've got quite a positive outlook of what I wanna do with it and, what I wanna research. So, having taken this year out has affected my emotional and sort of mental capacity towards my university degree, more than necessarily the actual learning while I was there. And I think that will affect the way that I learn in my third, well in my final year."

(Maggie, Interview 3)

Indeed, during the interviews Maggie talked about several aspects that she aimed to transfer back into her last year at university, starting from this positive outlook into going back to university that she described as a change in her

mental state and in her increased confidence in herself and in her ability to perform several tasks. More specifically, Maggie also expressed learning transfer expectations regarding her ability to work harder, to have a set day structure that would better divide her days into work and leisure, and to generally be more organised regarding her university work.

“I think it’s going to be nice as well, because, like I say, this office is really positive attitude, and because I’ve been working 9 to 5, so that’s like a 36,5 hour/week, overall, whereas my degree is 12 contact hours a week, even less so now, because I’ll be doing a dissertation, then I sort of have less hours. So, having to work 10 hours a week, will really push me to, structure how I organize my degree, as well. And it will make me really think about the amount of time I spend doing stuff. So, I think that’s the main thing that I’m gonna take away from this, in terms of what I’ll apply to next year, the structure and making sure I am organized. I’m quite organized person overall, but I’ve never really had a structure to how I did things, in the first and second year. And I really need to push myself that I do, because my grade is currently on the edge of two different classifications, so I need to really push for the higher one.”

(Maggie, Interview 5)

Overall, Maggie’s transfer expectations during the placement towards her last year focused on a mix of know-what and know-how (Lundvall and Johnson, 1994; Lundvall, 1996). Her expectations addressed the learning transfer of some formal aspects of her placement experience, such as the working hours from 9 to 5, or the “capability to do different kinds of things on a practical level” (Lundvall and Johnson, 1994, p.28). This last aspect would also be related to Eraut’s (2000) notion of personal knowledge, which can be described as a combination of theoretical or codified knowledge and experience, which enables individuals to think and act. Consequently, data thus far seems to corroborate the view that looking at the transition between university and the workplace as a mediational transition (Beach, 1999; 2003) can provide the students with the adequate framework to establish a number of connections that would facilitate transfer. Such argument would then reinforce the view

presented in Chapter 3, regarding classical perspectives of transfer that "learning is connecting" (Thorndike, 1923, p.173).

However, I would argue that within this complex transition between the university and the placement, students' experiences should be understood as going beyond the classical view of similarities supported by overall near transfer (Mayer, 1975; Royer, 1978) instances. Furthermore, I argue that Engle *et al.* (2012) description of intercontextuality and Beach's (1999; 2003) consequential transitions might provide a better account for a reciprocal experience, even if the individuals, as it will be argued for Maggie in the following paragraphs, are sometimes unaware of transfer beyond near transfer instances (Mayer, 1975; Royer, 1978).

"I think next year when I go back to university and do my third year and my final year, I think I'm more likely to stick to a 9 to 5 structure, cause am I used to it now. So, just have to wait and see (laughing). I think from this, there are many things that I can learn from my degree to put into my experience to work, as there are that I can put from my experience of work back into my degree when I go back next year."

(Maggie, Interview 1)

One aspect of Maggie's placement experience that does not corroborate the argument that she perceived the transition between university and the placement as a mediational transition (Beach, 1999; 2003) was the presence of a fear of forgetting the university academic knowledge during the placement.

"In that I'm very sort of, like, 'what if I've forgotten everything?', 'what if I don't know anything anymore?'. So, because I've had a year out, I'm just like, I haven't really had to think in academic mind-set for a very long time. So, it's gonna be a struggle over summer, cause I'm gonna have to start doing research for my dissertation. Hum, I think that's gonna help to an extent, because it's gonna get me back into the swing of it. But then again, I'm really going to be reading books over summer."

(Maggie, Interview 5)

This fear of forgetting the academic knowledge or mind-set was something that Maggie expressed to me in our first interview that continued during the whole placement, and that persisted all the way back to her first semester of her final year in university. Maggie's argument for that fear was the lack of contact with academic knowledge which may collide with the view of a mediational transition (Beach, 1999; 2003) between university and the workplace and, instead may contribute to the perception of university and workplace as two intrinsically different contexts (Candy and Crebert, 1991; Tanggaard, 2008). For transfer theories, Maggie's fear of forgetting also contributes to the view that students might find it harder to transfer knowledge when similarities between both contexts are harder to find or when they experience a far transfer situation (Mayer, 1975; Royer, 1978). However, to which point this is a matter of perception between what students are able to conceive as near or far transfer needs to be explored.

In this sense it becomes interesting to note that Maggie was able to reflect on her experience as a whole regarding transfer and found that returning to university and her last year was improved because of this experience.

"In relation to my degree, I think it added more to my degree, then my degree added to my placement. And I feel like, in that respect, and because of the fact that my degree, my placement year wasn't really related to my degree in any way. I didn't feel like a lot of what I took from my degree went in to my placement. But I think, having come back from my placement a lot of what I've had, what I, the experience that came from my placement, I've put forward into this year of my degree."

(Maggie, Interview 6)

Furthermore, Maggie provided in our interviews an overall assessment of her placement as a positive experience in which she was immersed in a learning activity and was able to enjoy her time, which was something she felt lacking at the end of her second year.

"I've done quite a lot, I think, in the short space of time that I've been in here, taken on quite a lot of different projects and learned a lot of various different things. So, it's been very different from being in the university environment, even though, I'm still pretty much immersed in

it, I'm not actually a part of it. So, I don't have to do the stress thing, like worry about exams, and have deadlines, even though I've got deadlines for work, they're not nearly as stressful as they are for university, so, it's quite nice. It's been quite a really relaxed year, and I've just enjoyed my time, out, really."

(Maggie, Interview 5)

Furthermore, on her return to university Maggie was to be able to identify several positive changes regarding her learning. Some of them are indeed related with the aspects that she expected to transfer, like the ability to better structure her working hours and better manage her ability to work, which might reinforce Engle's (2012) argument that framing learning situations might contribute for future transfer. In Maggie's case, there was a clear framing of these know-how abilities regarding time as she was thinking of their future usefulness, but also a framing of space as she was placing their usefulness in her final year activities. Lastly, there was also a framing of role, as she was framing herself as the author of those changes.

"Yeah, I think now I kind of have quite a weekly structure in terms of, I'll make a list of everything that I need to do that week and I make sure I get it done. (...) I think I'm a lot more organized this year and I'm not as stressed about everything. Hum, because I'm doing a dissertation, I've obviously had to sort of manage all that time myself. Hum, and I feel I wouldn't have done it as well, if I've done it a year ago. Having not had the 9 to 5 structure."

(Maggie, Interview 6)

Other aspects that Maggie reported as having changed in her return to university were more of a personal development nature and might reflect the overall developmental nature of placement experiences when they are lived as consequential transitions (Beach, 1999; 2003). For Maggie there was a clear identity confrontation (Tanggaard, 2008) during the placement experience and a movement towards full(er) participation that implied embodying the values and behaviours of that new community of practice (Wenger, 2008). One particular aspect that Maggie experienced in the placement was the development of confidence in herself and the autonomy to

develop several activities more independently. On return to university, these changes were still present and, somehow, might have changed the way she understood and performed old tasks.

“But I think this year I felt a little bit more confident in what I’m talking about, hum, whether or not it’s because I feel more comfortable with what I’m reading, or if I’m just enjoying the subject more. I wanna get right involved, I’m not really sure, but, I do think that, I do feel like I got a better grasp of what I’m doing. Hum, I feel like, cause, for me, mostly, my preparation is basically focused around whatever I’m reading that week. It’s just the case of making sure I’ve got opinions and things like that, and what I know I will want to talk about.”

(Maggie, Interview 6)

This focus on transfer of a positive outlook or an improved sense of how to do things, rather than supporting theoretical views of transfer as a straightforward application of knowledge supported by general or specific similarities provides some insights into a more complex process that is intertwined with the individual and his or her interactions within the figured world of work. For Maggie, what changed the most from her placement experience was not the facilitation of practical application to theoretical knowledge. Regarding this aspect she was very clear from the start. In her view, her degree was not that relevant for her work-placement. Such perception, I argue later, might be the manifestation of a narrow understanding of transfer that, in my perspective wrongly diminishes the intricate nature of the transition between university and the workplace to a direct application of knowledge. However, at this point, it serves the purpose of highlighting the developmental and transformative possibility of placement experiences as a mechanism for framing academic learning into future working experiences.

“Yeah, I think it’s more about my, yeah, it’s not a huge amount of difference in what I do, it’s more about how I feel. And I feel a lot better in what I do and how I’m doing it. (...)”I’m not really sure. I think it’s just the case of, I’ve kind of come back and I’ve kind of understand what it is that I’m supposed to be doing, or I kind of understand the process of

it better. Hum, or even, like I say, it's just because I had the break and I feel like I want to be more involved, whereas before I felt like I had to."
(Maggie, Interview 6)

Ultimately, Maggie describes her one-year work-placement as a valuable experience, "*both financially and mentally*" (Maggie, Interview 6). Her placement experience would then add to the overall research focusing on the benefits of supervised work experiences, although, not focusing only on knowledge application arguments. For Maggie, the placement was a developmental experience that provided her the space and opportunity to develop into a more confident student and also possibly into a better future professional. She contextualised her placement experience as a necessary building block to her future professional life, which, in her view, should not be reliant on securing a diploma.

5.3.5 Case Summary

This section described the placement experience of 20 year-old student of English Literature and Language, Maggie, as she undertook a one-year work-placement at the Students' Union of the same university that she attended and where, moreover, she had worked before, in a part-time job at the bar.

The argument developed from Maggie's placement experience was that what could have been initially interpreted as a case of near transfer based upon Maggie's previous experiences in the union, became a far transfer situation due to the particular expectations that Maggie faced by becoming a full-time employee. As a consequence, Maggie had to re-learn to navigate the union's building, adapt her social approach to interactions with colleagues and learn to align her personal interpretation of, for example, goals setting and success to the workplace's interpretation of goals setting and success. Through this process of negotiating shared meanings and practices in her placement, I argued, Maggie initiated her transition from belonging to becoming and, furthermore, developed a very personal approach to her identity in the placement.

Indeed, during the placement Maggie experienced a confrontation of identities. However, instead of letting go of her student identity towards

developing a professional one, Maggie developed a particular approach that she called a “fluid identity” (Maggie, Interview 2). In her view, this approach allowed her to move from a student perspective to a professional point of view based on the needs of the task that she was developing in that moment. Such view, I argued was fuelled by the near transfer instances in her placement; the construction of the placement as an in between moment of her studies; and the perpetuation of a student lifestyle during the placement. These, in turn, contributed to the possible characterisation of her placement as a mediational experience and, to some extent, facilitated her transition from university to the workplace. Returning to university was, for Maggie, the opportunity to implement several strategies regarding her approach to self-management and to tackle her last year with renewed interest and newly developed confidence in herself and in her abilities.

To summarise, in this section I presented the case that similarities between the two contexts of Maggie’s transition were not enough to evoke an overall direct application of knowledge and create a straightforward transition from university to the workplace. Instead, Maggie struggled to adjust to the workplace and adopted a fluid approach to her identity, which was interpreted as her ability to identify a particular need of the community of practice and, in that way, improve her movement towards full(er) participation.

5.4 Daniel

When the data collection started, in the academic year of 2013/14, Daniel was a 23 years old student of Mechanical Engineering at the University of Leeds who was having a one-year work-placement at a sugar factory. This placement was not Daniel’s first working experience since, as it was presented earlier (section 4.2.3), before starting university he had already worked full-time (e.g. as a shop assistant).

In the placement, his work consisted of taking part in the ongoing projects of the engineering team, but mostly he got involved in a couple of projects concerning the dust extraction system, the creation of a preventive maintenance plan and in the setting up of a new maintenance plan for one of the factory’s bagging areas. His tasks were evolving during the placement, but

overall he had to attend meetings, prepare paperwork, develop risk assessment plans and method statements, and work with the computer maintenance management system.

In order to conduct his tasks he shared an office with other colleagues from the engineering team, the administrative team and the production team. More specifically, he shared a round desk with three other colleagues from his engineering team. Despite having an office, Daniel often worked in other areas of the factory and had meetings in other rooms.

Daniel's placement was inhabited by people with very different tasks, however he would not interact with all of them during the placement. His most common interactions at work would be with his manager, the engineer planner and the technicians. Several of his projects also made him work with external (contracted) employees, such as a scaffolding team.

In the following sections I analyse how Daniel experienced the transition between university and the placement. In them I focus on Daniel's interactions in the placement and on how he learned to navigate a figured world of work that included the setting, the people and the tasks of his new environment. The following sections also address how Daniel developed a professional identity and how he managed the return to University for his third and final academic year.

5.4.1 Understanding the figured world of the work-placement

Louis (1980) argued that within transitions between organisations, the more distinct the organizations are, the more the newcomers potentially have to cope with. The author's argument was that upon entry to a new organisation the newcomer is "simultaneously inundated with many unfamiliar cues" (Louis, 1980, p.230), which might cause him or her to experience some level of a reality shock. Moreover, universities and the world of work have been described as two different settings, cultural and learning wise (Candy and Crebert, 1991; Tangaard, 2008). Regarding Daniel's transition between university and the work-placement, the expectation was that he would experience a far transfer situation (Royer, 1978) regarding the physical setting, its processes and rules, but also regarding people and social interactions within the placement. For Daniel, this would mean that he would

probably find a great disparity between university life and the placement, and consequently, experience some surprises during his journey (Arnold, 1985). Indeed, data on Daniel's placement experience does seem to support this claim.

When Daniel started the placement he had no previous personal knowledge of it. His first day at the sugar factory was also his first day working in a factory setting, and he had no previous knowledge of the people working there or of what his tasks would entail. In a retrospective reflection about those first weeks, Daniel explained how difficult it was for him to make sense of the new environment.

"(..) at first when you try to learn things by yourself and you haven't a clue of what's going on, it's not a very nice feeling. Initially, I seriously considered leaving the placement, which was because of, you know, I didn't seem to be getting anywhere. There was no, I didn't know what was going on basically."

(Daniel, Interview 5)

As he entered the placement he was confronted with the reality that, in that moment, he had to learn how to get from A to B, who to talk to about any specific question he might have, or what he was supposed to do, where and with whom. He had to learn how to navigate that new environment (Arnold, 1985) and that was, in itself, a massive task in Daniel's placement.

Regarding the physical setting, for example, the factory by itself was a completely new reality for Daniel. The factory is one of the largest sugar factories in the world, with more than 250 employees and several contracted workers, such as scaffolders, welders, cleaners, among others. All of them worked daily in the factory, dispersed through several buildings and structures across the site. Daniel's first task was to learn how to navigate that new, large and intricate physical setting.

"It was a tour I had the previous placement student take me around our department. You know, we have nine floors, which is a very slender tower with a series of machinery going through and various different areas. It was basically a tour of the areas and where they are. Very, very big, but it was more to get around, which took, I would say, at least

three to four months just to get used to where to go and where's the machinery, it's location. There's so much, it's a very large site."
(Daniel, Interview 1)

From that initial tour with the previous placement student Daniel developed his first impressions of the physical aspects of the placement. From his perspective it was big, very big, with plenty of machinery to learn about and nine floors to walk through on a daily basis. His task was to draw the mental maps (Van Maanen, 1976) that would allow him to develop a gradual routinisation (Eraut, 1993) of his physical navigation of the placement. Success in that task would allow him to develop a more skilled behaviour (Eraut, 1993) with regards to the navigation of the setting and closer to the role of a full participant in that community of practice (Lave and Wenger, 1991).

However, still regarding the setting, it was not just the buildings that Daniel had to learn how to navigate. Throughout the interviews Daniel repeated how the placement lacked the necessary structure and support for him and his fellow placement students to adapt to the new environment. The problem for Daniel was that he expected the placement to have the same visible and to some extent more predictable structure of the university (e.g. having a schedule of classes, set dates for exams and breaks) and its progressive organisation (e.g. moving from simpler to more complex knowledge), but it did not.

"I expected more of a structure. It's because when I first came from university and I've got six subjects over many modules and I know that I'm going to work through them progressively from a to b. And then, when I've turned up at work and there's just...stuff going on in all directions, and there's not a fixed structure. So, I don't know what I'm going to be doing in a month's time. I don't know what's after that, I don't know what this project is going to lead on to. (...) So, it's something that you can't prepare for. There's a lot of unknowns. So, you can't necessarily prepare for everything, as opposed to university where you can."

(Daniel, Interview 5)

A lack of structure in the placement was something Daniel found to be intrinsic to the setting. In the beginning, the projects were assigned to him not in a progressive manner regarding his increasing knowledge, learning or interest, but according to what was necessary to be done. The duration and complexity of the projects was also something that Daniel, and sometimes even his peers, could not foresee. Overall, that uncertainty in the placement structure contrasted with Daniel's experience of being in university. Regarding the setting Daniel was experiencing a far transfer situation (Royer, 1978), in which the lack of possibility for direct application of knowledge (Bransford and Schwartz, 1999) made it harder for him to adapt to the placement, and participate in its activities independently from the start.

Getting to know the who's who in the placement was another challenge for Daniel. He had no prior knowledge of the people working in the factory and from his navigation of the physical setting he realised the factory's structure and its employee list was nothing like he had experienced before in university, or in his previous jobs.

"I've had other jobs in the past, but obviously not on this sort of scale. So, I thought it'd be a much smaller circle of people. When basically I've been working with people from our site, other parts, other sites, other side of the country, suppliers internationally, you know, it just kind of got bigger and bigger. So, I thought it would be a lot less to learn, because I've been working in such a small, smaller groups."

(Daniel, Interview 5)

From Daniel's perspective he was dealing with a very far transfer experience (Royer, 1978) in terms of the scale of the number of people to know and the types of interactions, which might be what prompted a negative emotional reaction from Daniel towards the beginning of this placement.

"Hum, o I think at first there was quite a lot of just, 'here it is, get on with it', and not really knowing how things work, or not being in that environment before. There's this feeling (of being) quite lost and not really knowing who to ask, who to turn to. Hum, because we, I didn't have a designated, hum, apart from my manager I didn't have anybody designated to kind of talk to (...)."

(Daniel, Interview 3)

Beach (1999; 2003) would describe this emotional reaction as the natural struggle that comes with experiencing a consequential transition and, as the next section explores, its relevance relates to Wenger's (1998, p. 156) view that are the "members - by their very participation - who create the set of possibilities to which newcomers are exposed as they negotiate their own trajectories". Within Daniel's experience this meant that the lack of prior knowledge and the surprise (Arnold, 1985) caused by the magnitude of his placement, both in terms of the setting (including buildings, and processes and rules) and the people and social interactions, were a source of struggle and difficulty in his placement experience, specifically in the beginning.

Moreover, regarding the placement's tasks, which Daniel expected to be closely related to the contents of his degree, given that he was on a placement position for an engineering undergraduate, they were sometimes not in line with that expectation. Indeed, Daniel expected a direct transfer of his know-what from university to the workplace and, instead reported using only 10 to 20 per cent of his knowledge in the placement. It was only much later in the placement that Daniel felt this satisfaction regarding the application of his academic knowledge within a project he developed concerning pipe flow and fluid mechanics. This means, looking at early transfer theories that Daniel expected a smoother transition regarding content provided by a near transfer situation (Mayer, 1975) and, instead, encountered another instance of transfer that was more towards the far end of the near to far transfer continuum. For example, there was one area of his role that was completely new and unexpected to him. This was the placement's expectation that he would perform some administrative and management tasks as part of his role.

"I think because originally we (Daniel and other placement students at the factory) expected things to be organized. For example, a training course that we all went on, which was a couple of days, and nothing was organized or very little was organized with regards to accommodation, travel, etc. Which we thought at first was, this should be sorted, you know, we don't know how to organize these things."

(Daniel, Interview 1)

Daniel was surprised that his job required him to prepare, for himself, by himself, tasks like booking a room or preparing an external trip. But also, doing paperwork for projects and getting to know the right health and safety forms and fill them in. All of these tasks, taken for granted, or understood as “*second nature to everybody else*” (Daniel, Interview 4), were a real challenge for him. They were very far (Mayer, 1975), in terms of the content he was used to work with at university and, thus, he felt unprepared to conduct them alone at such an early stage of the placement.

During our fifth and sixth interviews, and looking back at those first weeks, Daniel described himself as naïve with regards to what entering a placement, a workplace, really meant. He was expecting a near transfer of learning regarding content (Mayer, 1975) and to apply his academic knowledge, develop big projects and further his engineering skills. Instead, in his experience, the overall understanding of the figured world of work, like learning where to go, or how to talk to people, was a slow and gradual process developed in his daily activities and interactions. Moreover, all of that learning had to happen before he could get involved in the activities he was really interested in.

“I mean the curve at first was very steep and I think that was more towards, just learning the layout of where I was, the management structure, who to talk to with regards to various topics: health and safety, engineering, all that sort of stuff. Once I got all the overall of that, and there was obviously a learning curve with regards to how that sort of industry runs, how it processes. That’s everything from maintenance through to standards, compliers, breakdowns, IRIs, all that sort of thing. And then, from there, it moved on to, how can I improve my work, which is where likes of planning, project plans, management of people, management of teams, that sort of thing, which is where I kind of am at the minute. If I look back to earlier, even earlier in this year, and how I was trying to get people to do different things as opposed to how I would do it now is very, very different.”

(Daniel, Interview 5)

Daniel described his integration in the placement almost like he was building blocks, one at a time, starting from the factory's layout and the factory's organigram, to its knowledge and working processes to, ultimately, Daniel's own position within the placement. He described his own movement from newcomer towards full(er) participant (Lave and Wenger, 1991), including all the aspects that were the most different from his previous experiences as a student, namely the setting and its processes, and the way he used his knowledge. From Daniel's experience of learning to navigate the figured world comes the image of peeling an onion layer by layer, each getting thicker towards the core. Daniel began by learning the more visible and superficial layers of the placement, which included knowing how to get to his office and where the different machines were and progressively learn the more implicit aspects of the placement, such as how to get access to information or how to plan a project.

Overall, it is possible to argue that Daniel experienced a classic case of far transfer (Mayer, 1975; Royer, 1978) in his transition from university to the placement, with many areas of struggle, but also with opportunities for development (Beach, 2003; 1999) through the help of others, but also from his own agency within the placement, both of which will be presented in the next sections.

5.4.2 The importance of social interactions

Describing the workplace as a community of practice implies that there is a social side to learning (Wenger, 1998; Wenger et al., 2002) that becomes relevant for understanding the participants' transitions between university and the workplace. It claims that knowledge and expertise are acquired by the individuals through ongoing interaction (Wenger et al., 2002) and, thus, others become key mediators for integration and learning (Lave and Wenger, 1991; Eraut, 2000; Beach, 2003). More specifically, according to Lave and Wenger (1991), knowing and interacting with others within a community of practice is the main way to move from newcomer to full participant. Consequently, the possible argument to be tested is that, the more the newcomer is aware and able to talk to, ask for help and work with the people in the placement, the easier the movement towards full participation should be.

Looking at Daniel's transitions between university and the placement, as it was briefly presented in the previous section, it is possible to argue that he struggled, at least initially, with social interactions within the placement. One aspect of it might have been that when he entered the placement he had no prior personal knowledge of the people working there, so he had to overcome its unexpectedness (Arnold, 1985) and discover the best way of knowing the who's who in the placement and how to interact with them.

"(...) you don't have their contact number, you don't have their e-mail address, you've got to ask around a bit, and you feel like you're asking people all the time."

(Daniel, Interview 1)

Thus, when Daniel entered the placement not only did he not know anyone, as he also lacked the knowledge about the placement's strategies for getting to know them. He did have, however, prior to his entry, a placement handbook with a couple of names and e-mail contacts, but it was mostly regarding the other placement students and their line managers. There was also the contact for the Head of Operation Services Personal Development and of the Placement Coordinator, but the latter role ceased soon after Daniel started his placement. Despite that short introductory list of people, the placement handbook was not so useful for his daily interactions, due to the limited number of contacts it provided. Less than 30 names and e-mail contacts in a site with more than 250 employees. It was also not so useful for helping Daniel understand the relevant others that could become near-peers (Lave and Wenger, 1991) in his adaptation to the placement, as most of those names were not working on the same areas as Daniel. Consequently, Daniel's unfamiliarity with the placement's social network and the lack of familiar structures to find them out set the case for him to experience the placement, once again, as a far transfer situation (Royer, 1978) from his university life.

Moreover, when Daniel actually entered the placement, he encountered a geographically isolated and tight community, in which, for example, multiple members from the same families worked. From his perspective, access, participation and belonging were difficult for newcomers because, even though the factory was *"a very friendly environment (...) it's hard to get into"*

(Daniel, Interview 1). Accordingly, he had to adapt to his new environment (Arnold, 1985) and find out how he could get access to the information he needed.

“Yeah, especially within the first couple of months, because I didn’t have a clue of who anybody was at first anyway. And, even now, if I need, if I need to speak to somebody I’ll have to ask because, there’s no way of knowing. A lot of the company relies on hum, just transfer of knowledge, just verbally, so they don’t have, you know, a facility to access.”

(Daniel, Interview 4)

Daniel was looking for strategies to initiate his socialization (Eraut, 2000) into the placement, possibly because, as described in the previous section he was surprised (Arnold, 1985) with the lack of perceived structure and support that would have allowed him a smoother transition into the placement. Instead, due to the difficulty in experiencing a direct application of knowledge (Bransford and Schwartz, 1999), and due to the implicit nature of information acquisition in the placement (Eraut, 2000; 2004; 2007), Daniel had to be resourceful in terms of identifying possible helpful others (Eraut, 2007), meaning, people in the placement, other than designated mentors, that could help him mediate his learning.

One of the first helpful others (Eraut, 2007) that Daniel found was the placement student he was replacing. She was his main source of support during the first six weeks of his placement in which she was still there. During this period, Daniel would resort to her as his gateway for access, as presented in the previous section when he asked her to take him on a walk around the placement, but also as his main source of information and help in moments where he had doubts about what he was meant to do or who to contact.

“At first, the other placement student was actually still working there, for about 6 weeks, so that was quite a good hand-over period to me. So I would kind of maybe hang, not hang around, I’d be doing some work and then maybe, waiting until it was a bit quieter and then, when the other student was there, you know, ‘can you give me a hand with this?’. Maybe, you know, when there’s not as many other people

around so it didn't look like I was really struggling with things like that. Maybe it's thinking, a bit cautious of what other people think, maybe is in case they were thinking, you know, 'he's been given this and he's not getting on with it sort of thing'."

(Daniel, Interview 3)

This particular aspect of Daniel's placement experience was relevant towards clarifying the importance of social interactions within the transition from university to the placement in Daniel's experience. Overall, social interactions serve the purpose of providing the newcomer access to the organization's shared understandings of their domain and approaches to practice (Wenger et al., 2002), including the implicit ones (Eraut, 2000; 2004; 2007). Indeed, in Daniel's placement experience there were several situations in which social interactions were key for his understanding, participation and development in the placement (e.g. contact with the placement student he was replacing).

From Eraut's (2012) research on workplace learning it is possible to identify several socialisation mechanisms, such as collaborative teamwork, ongoing mutual consultation and support, and observing others in action that take place in the workplace to support newcomers. The last two were the most relevant to Daniel's placement experience. They are further discussed in the next section as they were intimately related with Daniel's identity development in the placement. However, for now it is necessary to identify Daniel's placement supervisor as a key person in changing the initial structure of the placement's attribution of tasks to Daniel. Indeed, it was through Daniel's third supervisor's action and support that Daniel changed the flow of generic, small, non-challenging tasks, for bigger, more complex, interesting, engineering project-based tasks.

Additionally, it is also important to present at this point Daniel's use of shadowing colleagues as a way to improve his knowledge of the factory, its projects and, consequently, identify areas in which he and his knowledge could be useful. According to Eraut and Hirsh (2007, p. 27) shadowing can be used "for inducting new employees, for workers taking on new responsibilities and for improving cooperation between different sites". However, in Daniel's approach, it meant that he would ask to follow a colleague and observe him

performing a specific task. Every time Daniel's colleagues accepted his request for shadowing them, they were helping him develop a "wider understanding of projects, other work groups, suppliers and customers" (Eraut and Hirsh, 2007, p. 27), thus acting as mediators for Daniel's participation in the placement's activities. This approach to the placement taken by Daniel was an important event of agency promoting his adaptation and development. It was also a case of relational agency (Edwards, 2005; 2010) in which he acted in a purposeful manner (asking if he could join his colleagues in any specific task or activity), towards a specific goal (gaining access to the placement's activities).

More generically, participation in the placement's daily activities and interaction with his colleagues also changed Daniel's perceptions regarding, for example, the development of a sense of shared responsibility towards work. For Daniel, shared responsibility was associated with a feeling of responsibility towards the outcomes of any given task and accountability. He felt responsible in case anything went wrong, although he also understood that his role as a placement student meant that he would not be totally accountable if something went wrong.

"It's good in some respects, you know, it's good to have, to know that you're given that responsibility etcetera. But at the same time it can be a bit daunting at time, when you realize, if this goes wrong, this is gonna come down on my head. Hum, and normally it won't come down on my head, it will be whoever's given me permission to do the job. So, it'll have, it'll have a knock out effect throughout the business, our department anyway. So, it's good but it's a bit scary."

(Daniel, Interview 2)

Daniel's view of shared responsibility in the workplace and its association with responsibility clarifies his own perception as a newcomer (Lave and Wenger, 1991) in the placement, where he interacted with others that were more experienced. It also accounts for the relevance of those others in providing him access to the tasks and responsibilities that would allow him to learn and develop. However, when he compared that sense of shared responsibility as being part of a group with shared interests and objectives, it also adds to the

case that Daniel experienced an overall far transfer situation (Royer, 1978; Mayer, 1975) in his transition from university to the placement regarding his own approach to work.

“If you don’t want to go to a lecture, you can just miss it, you can catch up at a later stage and nobody relies on you to complete your work (...). So, if you don’t complete your work it doesn’t really matter to anybody else a part from, a part from the individual. If you’re at work and that is your work, in that scenario you realise, obviously other people rely on it. So, if you carry that on into the academic scenario, I think it just improves your discipline with going to lectures and doing the work at the right time and sticking to deadlines and things. Cos, it’s not uncommon for someone to miss a deadline, just to, you know, they lose 5%, it doesn’t matter.”

(Daniel, Interview 6)

This instance explains how Daniel had to adapt his previous knowledge and strategies to the new environment (Arnold, 1985) and how direct application of knowledge (Bransford and Schwartz, 1999) was sometimes problematic due to a far transfer situation (Mayer, 1975). Instead, his view of working in university was substituted for an improved understanding that interestingly he expected to translate back to university. On the one hand, this view reinforces the literature that characterises university and the workplace as two different settings, culturally and learning wise (Candy and Crebert, 1991; Tangaard, 2008). On the other hand, Daniel’s intentions to transfer something learned in the placement back to university hints at the possibility that learning transfer might not just be unidirectional, which is an important aspect of the transition between university and the workplace that is further explored in the following section.

In Daniel’s placement experience there were other instances regarding social interactions that seem to support this claim of looking at university and the workplace as two different figured worlds. An important one rests on people as the main sources of knowledge and informal learning in the placement and its contrast to the formal and structured manners of learning in university.

In Daniel's understanding of the placement, as it was presented earlier (section 5.4.1), the act of asking and providing information verbally was one of the main strategies set in place in the factory to get access to knowledge about people, machines, projects, or any problems that occurred recently. Essentially, it was the main way to learn about anything regarding the functioning of the factory. In university, most information came from lectures, research on books or online, or, even in the modules' documentation. From this brief comparison of the implemented learning modes in both contexts, it is possible to understand how in the transition between university and the workplace these might create dissonance, as they are a clear representation of an overall far transfer situation (Mayer, 1975; Royer, 1978). In Daniel's placement experience understanding that difference was, indeed, a huge learning point.

"(...) I can give you an example, there was a project to redesign a bearing and, this bearing had a specific name I've never heard of and rather than asking at the time, I searched online, I tried to find information, I looked through books that I had. I couldn't find anything on this bearing. It turns out in the end, it's just a name that they give it. (...) Eventually, I asked, but I asked maybe a week later. (...) Effectively a week of search for something that didn't exist. That was quite a big learning point, I think."

(Daniel, Interview 4)

This quote is the struggled outcome of a situation where direct application of knowledge (Bransford and Schwartz, 1999) was a failure. It might be that it was a failure because Daniel's learning strategies clashed with the specific culture of the placement that, at that time, Daniel still did not fully understand or belonged to. Until that moment his participation could be described mostly as a peripheral one (Urrieta, 2007), but, through those interactions he was involved in an "enculturation" process that, Tanggaard (2008, p. 233) describes as "picking up the jargon, behaviour, and norms of a new social group; adopting its belief systems to become a member of the culture". The same is to say that from that learning moment created within the social interactions of the placement Daniel moved closer to full participation (Lave and Wenger, 1991).

As a conclusion, Daniel's account of learning the name of that bearing is also a great representation of the ways in which social interactions are crucial for access to information, for participation in the placement's activities and for belonging to the new community of practice that Daniel was entering. Furthermore, social interactions also provide access to "living testimonies to what is possible, expected, desirable" (Wenger, 1998, p. 156) from newcomers, becoming guidelines or role models for the newcomers' own identity development in the placement.

5.4.3 Identity development in the placement

Becoming a full participant in a new community of practice is a complex process. According to Lave and Wenger (1991), it implies not only a commitment of time, effort and responsibilities from the newcomer towards the new community of practice (Wenger, 1998) that he or she is entering, but also an "increasing sense of identity as a master practitioner" (Lave and Wenger, 1991, p. 111). Beach (1999; 2003), looking at this process as experiencing a consequential transition talks about transformation of both knowledge and identity, highlighting how through this process the individuals change their positioning in the world. Consequently, and following these views, becoming a full participant should not be perceived and investigated only as participation in a community of practice (Wenger, 1998), but as a process of identity development.

Looking at Daniel's placement experience from the viewpoint of his identity development, it is possible to trace his journey from newcomer, starting as a nervous but enthusiastic placement student, towards increasingly becoming a full(er) participant, by developing into someone who could navigate the placement's physical and social arenas, acting his role and being able to contribute to the improvement of the placement's community of practice's overall project.

Indeed, in the beginning, the size, complexity and closed environment of the factory were somewhat overwhelming for Daniel, and as he first entered his placement there was the need to cope with the unexpectedness of it and make sense of that new environment (Arnold, 1985). However, despite the flood of unfamiliar cues (Louis, 1980) that became the source of a struggle to

understand and participate in the placement, Daniel's personal approach was to dive in and act as if he already belonged there.

"If I thought myself as a student on site without having any other students working my department, I don't think I would know where to, really turn to. So, I kind of treat myself as just a normal full-time member of the staff."

(Daniel, Interview 1)

In the placement, Daniel experienced less of a confrontation of identities (Tanggaard, 2007) and more of an acceptance of "letting go" of his old role as a student, as an initial step into his socialization process into the placement (Louis, 1980). Adopting such view from the start of his placement did not mean that he would not struggle with this transition, or that there would not be moments where he felt unsupported or even lost. However, what it also did was provide him with the self-narrative of being a student in transition, from which I argue, becomes easier to accept the journey from newcomer to full participant (Lave and Wenger, 1991). Looking at it from Beach's (1999; 2003) classification of transitions it also implies that Daniel was constructing his placement experience as some kind of a lateral transition, in which he progressed from one role, position, identity to another role, position, identity.

From his perspective it meant that he had, much like Lave and Wenger (1991) anticipated anyone moving from newcomer to full participant would, "*(I'd made the commitment to say 'yeah, I'll do that work'*" (Daniel, Interview 6). However, one negative consequence of this commitment into the placement was that in the very beginning, while Daniel was still making sense of the new environment, he would stay in his office, sitting at his desk and passively accepting every task that he was given, even if they were not related to his job description, or if the request came from outside of his department, or even if he already had too many tasks for that day or week.

"Initially, when I first took over there was a lot of, 'Can you just place this order?', 'Can you find this?', and 'Can you get this printed off?', 'Can you?'. Just a lot of, for want of a better phrase, shitty tasks that people don't want to do, so they would just, 'get the placement student to do it'. I actually heard that being said a few times. Someone would

come in with an issue and it would be something like, 'we've got these orders that have come through, don't know where they're from, we need to look through these files, but I haven't got the time to do it'. Somebody would turn around and say, 'just get the placement student to do it' and kind of laughed at the same time. But, you know, it is a shitty job to do."

(Daniel, Interview 2)

His own understanding of why this was happening was related to his identity in the placement. Despite considering himself as staff in order to promote his own socialization (Louis, 1980; Eraut, 2000) into the placement, at that moment, he was still a newcomer (Lave and Wenger, 1991). Hence, he was perceived and treated in the placement as such, which meant being given smaller, but time consuming tasks that his more experienced peers did not want to do. According to Lave and Wenger (1991) this is a normal process of learning when entering a new community, through which newcomers start with "rather limited duties and advance to more complicated procedures as they gain experience" (p. 73). In that way they are gradually introduced to the activities, with growing difficulty, involvement and responsibility.

"I think at first maybe people gave me smaller tasks because I was obviously brand new, but a lot of the time it would be, you know, 'we've got this, can you have a look at this?', and I'd say, 'yeah, ok, no problem', and then maybe spend five, ten minutes going through something, and then they would be, 'yeah, ok, no problem, just if you have any problems, let me know'."

(Daniel, Interview 3)

On the one hand, that placement structure was reinforcing Daniel's positioning in the placement as an eternal newcomer, since the tasks he was being given were not directly related to his job description, or his academic knowledge. Instead of helping him progress towards full(er) participation (Lave and Wenger, 1991), they were having the opposite effect and relegating him to a marginal (Tinggaard, 2008) engagement with the placement's activities. On the other hand, it was also reinforcing the placement's own limitations in organising and supporting his development, as he was ready to take bigger

challenges and to use his knowledge to contribute to the placement's project and, instead Daniel felt like his time and learning opportunities were being wasted. As it was presented in the section discussing Daniel's overall trajectory into the placement (section 5.4.1), at this point Daniel almost left the placement, as he was not just struggling to make sense of the placement but of his role within it.

"(...) at first I was quite, I didn't really know what was going on and I was getting all these little jobs and I was thinking, this really isn't what I wanted to be doing. But, I was a bit, a bit concerned at that point, so."

(Daniel, Interview 3)

However, by the time of our second interview (March, 2014) something happened that would have a huge impact on Daniel's placement experience and, more so, in his identity development in the placement. Daniel's line manager changed, for the second time, and with his third line manager Daniel found a new support that would allow him to develop and engage more with the placement, and, eventually, creating his own place in it. For instance, the first thing that changed with his third supervisor was the process for task allocation, as his supervisor became aware of what was happening and was able to perceive the consequences of it, from Daniel's learning perspective and motivation.

"I think it was my manager picked it out before me. And he said, you know, 'I think you have too much on', because he would ask me 'what are you doing today?', and I, 'I need to do this', and 'I need to do that', and 'I need to do that', and there was no whole project. So it was just a little bit here, a little bit there, so I wasn't really getting fully involved in something, whereas now, I have a lot less projects, but they're a lot bigger, which is where the responsibility increases as well."

(Daniel, Interview 3)

Initially, this change meant that Daniel no longer had to accept all the tasks that were given to him, because all the tasks from that moment on had to go through his line manager first, and people in the placement were not so willing to give Daniel less important tasks when they had to ask his line manager first.

Eventually, Daniel himself learned how to say “no”, and distanced himself from the smaller tasks usually attributed to newcomers (Lave and Wenger, 1991).

“(...) it started to get to the point where people just get me petty things. ‘Can you just put an order in for this?’, ‘can you just maybe have a walk around see if there’s anything we need ordering?’. I started to turn around saying, ‘not really, no, it’s not really the sort of thing that I need to be doing’. It’s just a bit uncomfortable at first because you don’t really want to have to be turning people down, but that’s when, it was only at that point that people maybe started to see me, maybe a bit more seriously.”

(Daniel, Interview 3)

Because of that approach fewer people would come to Daniel asking for help on more generic things and his projects became more and more engineering related, which was more in line with his interests, but also with his identity.

Subsequently, the supervisor’s intervention meant that Daniel had the opportunity to choose the projects that would create more of a challenge to him, that interested him more and that, overall, allowed him to become more critical about the placement’s tasks and how to conduct his own projects.

“Initially I questioned why is that the case, etcetera. But without having as much knowledge as what some people do on site, I didn’t want to come across arrogant or, you know, trying, saying, no, I’m not doing it on your way, I’m just going to do it my way, so. Cos a lot of the time, taking other people’s suggestions only benefits me, so. I’d say 90% of the time it’s the best thing to do, but the odd situation where you have to, maybe, step back and think, it’s not, not the best way to do it. I probably wouldn’t have in the first couple of months, I would have just done anything, but getting a bit more independent and a bit more, not confrontational, but happy to questions other people’s actions.”

(Daniel, Interview 2)

Daniel’s increasing theoretical and tacit knowledge (Eraut, 1993) of the placement’s practices evolved into a new independence and confidence that would be key to achieve professional expertise to the level of being able to act his role with the expected level of professional work quality (Eraut, 1993). In

Lave and Wenger's (1991, p. 111) words, Daniel was becoming a "master practitioner".

"(...) at the minute, because I have a lot more knowledge on the plant, how things work, I can be independent, I can kind of see things from a different angle. So, rather than step by step doing it, I can see different ways of doing things, different routes around it. I think being more independent you can have a lot more, well, your own influence, so what was your own ideas. So from that perspective it seems like I'm having a lot more input because it's not just, just doing the work to somebody else's idea, I can have my own ideas and actually put them into the mix."

(Daniel, Interview 2)

Daniel's growing confidence and evolving skilled behaviour (Eraut, 1993) in the placement could be interpreted, as Eraut (2012) would argue, the outcome of Daniel's learning experience in the placement and a determinant of his good performance. Indeed, since Daniel became more confident he experienced, coming from his peers and managers, a level of praise and recognition that supported and acknowledged his movement from the periphery to full(er) participation (Lave and Wenger, 1991).

"Oh, yeah, yeah. Hum, if there's an issue with that project or if somebody is, you know, 'what's happening with the dust extraction?', for example. They will get sent my way, so somebody else will say, 'just speak to Daniel'. Or, 'Daniel has been dealing with it'. So then I'll explain from there. So, it's kind of, people will come to me to see what the problems are. Hum I think as well, recently I've had quite a bit of praise from the head of our department, because this is something that needs to be done and we've progressed with the job quite fast. There's been quite a bit of praise around that. So, just for somebody to come up and say, 'you know, good work', and things. It's, myself and another guy going to a meeting to discuss the work that we've done, although it just means we're effectively the representative of the project, hum, and my line manager said I should be there in every discussion

regarding this project, because I've kind of being heading the project from the start, so."

(Daniel, Interview 2)

Moreover, Daniel's confidence and the placement's recognition of the value of his contribution evolved into a feeling of ownership over his knowledge, tasks and projects.

"I kind of said to them, 'look, once I've done it, I'll pass it through you guys'. Basically with this project over the past 12 months I've been here, or 11 months whatever it is, it's always been this talk around the need to have this changed, need to have that changed, but nobody seems to have organized the meetings and get people together to do it. So I said, 'you know, look, can I push this and get everybody together and see where we are, what needs to be done, etcetera', because to me it's good. It's good for me to have this for my CV and the years to come. Say, I did, you know, X Y and Z. So, they said 'yeah', they're happy for me to go ahead and push it as much as I need it to. Because I've got a bit more ownership, I'm kind of really trying to drive it through to get completed as possible."

(Daniel, Interview 4)

It is, then, possible to argue that Daniel's development of ownership over his tasks were in line with Eraut's (1993) discussion on professional expertise, as the consequence of theoretical knowledge and experience. Some part of this experience, viewed as being developed through on the job learning (Eraut, 1993), I argue, must also be around the development of a professional identity which was formed through the process of becoming and being recognised as a full participant (Lave and Wenger, 1991).

According to Wenger (1998), newcomers also have to be proactive in finding their own unique identities in the communities that they enter and, indeed, the level of belonging experienced by Daniel in his placement was also, or to a great deal, the consequence of his own personal agency (Eraut, 2012). In the placement, Daniel actively looked for alternative ways of participating when he found himself at the periphery of events. For example, Daniel started to listen actively to conversations in order to find aspects in which he could

contribute. He started going on his own to meet people and discuss his projects and he started to shadow colleagues. He proposed the development of projects he found relevant, such as the dust extraction project that was initiated by him, with the support of his line manager, and he got involved in areas that poked his curiosity, even if they were not directly related to his projects.

“I’d ask somebody for these quotes. Somebody else on site got the quotes from the company and I said, you know, ‘can I have a look through them?’, just out of curiosity if nothing else. And when I’ve been reading through them, I’ve noticed actually what they’re going to be charging is for some things that we’ve already done, so it would be paying for things that have been completed already. So, obviously I just went through it to his office and, you know, asked for a few minutes and discussed what I thought.”

(Daniel, Interview 3)

According to Eraut (2000, p. 229), “to be competent is to understand the enterprise well enough to be able to contribute to it”, so, at this time Daniel was no longer a marginal participant (Tinggaard, 2008) or at the periphery (Urrieta, 2007) of the community of practice’s activities (Wenger, 1998). Instead, he was able to find new areas of action, building on his theoretical knowledge, which he developed in university, and on his insider knowledge of the factory, of its processes and social interactions, and develop new projects. At this time of his participation, Daniel was not just participating in the placement, he belonged to it and was able to contribute to its overall project. I believe that by this time Daniel had, in fact, become someone new (Beach, 1999; 2003).

Another strategy of personal agency (Eraut, 2012) introduced by Daniel that had a great impact on shaping his placement experience was shadowing. By shadowing, Daniel explained to me, he meant, asking his colleagues if he could follow them when they were out and about performing their own tasks in the factory. According to Eraut and Hirsh (2007), shadowing is a relevant strategy for learning in the placement, as it provides a wider understanding of what is going on regarding projects and relevant people. For Daniel, it was the

way into the professional conversations as they occurred in action, the access to multiple personal strategies in solving problems, and different approaches to a professional identity, from which he could develop his own strategy and identity. More interestingly, he also viewed this strategy as beneficial to his colleagues, meaning that even within the shadowing frame of action, he was not just merely following his colleagues, he was trying to increase his participation in relevant activities. With this strategy Daniel reached what can be called relational agency (Edwards 2005; 2010) through which he was able to build on the social interactions of the placement and on his know-who (Lundvall and Johnson, 1994; Lundvall, 1996) to reach his goals.

“What I’ll do is, I’ll not explicitly say ‘I would like to shadow you for a few hours’. I’ll say, ‘Can I come along?’ and while there’s anything that I can help with. I’m not just standing there doing nothing so, maybe I’ll get a few tasks that are made like a bit easier, maybe it could just be picking something up, or taking some bolts out or something like that, but I think at the same time, if they see me doing something for them, they’re more than happy to try and give any information I ask for. So, trying to give them a bit and they’ll give back. So, it’s kind of, kind of making it, not making an excuse to be there, but making myself useful in that situation.”

(Daniel, Interview 2)

Consequently, through shadowing Daniel increased his interactions in the placement, found access to helpful others that mediated his learning in the placement (Eraut, 2007), and started developing his professional identity within those interactions (Urrieta, 2007) with his unofficial mentors. Within Daniel’s placement experience, shadowing colleagues became a huge aspect of constructing the placement experience that he desired, as he was actively placing himself where it mattered to the knowledge he had and to his learning expectations. Furthermore, in our sixth interview (January, 2015) Daniel told me how he wondered about all the interesting and relevant things that could exist in his placement that he never encountered, just because he failed to shadow someone or he missed a conversation. In the beginning there was a lack of recognition of the placement towards Daniel’s possible contribution and a lack of understanding, from Daniel’s part on where his knowledge could be

relevant. When that bridge was crossed, by Daniel himself with this proactive strategies, and by the placement through the support of Daniel's third line manager, confidence, recognition, ownership and belonging made Daniel into full(er) participant (Lave and Wenger, 1991).

In conclusion, Daniel's lack of familiarity with the placement made his initial transition and integration in the placement harder. However, his perspective of the placement as a lateral transition (Beach, 1999; 2003) drove him to construct himself in the placement as a student in transition towards becoming a professional, an engineer and not a placement student. In order to achieve this, Daniel implemented several strategies that improved his access to activities and role models that facilitated his identity development and allowed him to tailor the placement more towards his expectations. Through his own agency, Daniel not only made sense of the figured world of work, but he developed an understanding that allowed him to identify a the type of projects he wanted and could develop.

5.4.4 Going back to University

Supervised work experiences are ultimately, learning opportunities in which students are exposed to "possible futures" (Wenger, 2000, p. 24) that they can engage with before actually entering the world of work. This means that they are often framed as "in between" experiences, or using Beach's (1999; 2003) terminology, mediational transitions. However, for Daniel the placement was the opportunity of diving into a real job. My interpretation is then, that Daniel departed from an understanding of the placement as a lateral transition (Beach, 1999, 2003), in which he expected a progression from his university life, but in which he also expected some continuity, for example as the application of theory into practice. In this sense, Daniel was expecting a degree of near transfer regarding knowledge (Mayer, 1975) that would enable him to use the contents he had previously learned in his university studies in the placement, in a somewhat direct manner.

However, looking at Daniel's placement experience, it is possible to argue that the expected near transfer of knowledge (Mayer, 1975) was not what he encountered. During the interviews Daniel often referred to being able to transfer only 10 to 20% of his knowledge into university. Furthermore, there

were some surprises (Arnold, 1985) that he did not anticipate and with which he struggled. One of these was, for example, the need to perform administrative tasks in his role as a mechanical engineer.

"I would describe my placement as, obviously, an engineering placement. Hum, what I would describe as more maintenance engineer, which is something that I've not been exposed to in great depth at university. So, a lot of the things I've done will be very new and not really the sort of things I would be expecting to be doing. So, when I say that, I mean a lot of documentation, a lot of meetings and the work that goes on, a lot of it is focused around strategy. Hum, and a lot of it isn't necessarily put on paper, written and kept somewhere, so it can put some time to see what work has been done, because it's a continual process of improving. It could be anything from a system to machinery or something like that. But as a whole, you know, it's been a great opportunity to improve, I suppose, like a core skill set, whether that's related to engineering or not. You know, your standards, or the problem solving, in the work relationships. Kind of more of a professional sort of outlook if you like. From my perspective it's been quite a large technical element missing, so that's related to anything, a lot of the things I've put on from university to, to the placement. Hum, but when I get back to university I might realise that a lot of the things I've learned at the placement haven't actually been taught yet. Because, obviously I still got two years left of university⁷, so."

(Daniel, Interview 5)

Overall, there is a sense coming from Daniel's transition that despite his expectations of continuity between university and the placement, he experienced them as two intrinsically different settings, which would support Candy and Crebert's (1991) view that these are commonly understood as being at the opposite ends of several learning dichotomies. In Daniel's experience, this polarity was felt most strongly regarding the different use of

⁷ In this instance Daniel was referring to the final year of his undergraduate degree, plus one year regarding a Master degree he was considering.

knowledge in both contexts, which he described as being 80% technical in university, versus only 20% technical in the workplace. However, this was not the only difference Daniel experienced and another aspect worth focusing on was the different way he looked at the overall process of developing a task.

“I think because at university you do what you think is correct and you get graded on it from there. You might get feedback, you know, like, you quite did this right, you didn’t do that right, which is fair enough. But, when I’ve been in the work scenario, it has to be right, it’s a continuous learning process. So it’s not just you do something, you get marked, it’s almost like day-to-day, you know, something’s not quite going right, you have to amend it straight away, in order for the project to flow correctly.”

(Daniel, Interview 5)

Daniel’s experience of the transition between university and the workplace regarding the process of developing a task included some of the commonly perceived dichotomies presented by Resnick (1987) and Candy and Crebert (1991), such as the more contextualised nature of knowledge and the focus on practical solutions in the workplace, versus the more abstract and decontextualized nature of knowledge in university and its focus on “elegant answers” (Candy and Crebert, 1991, p. 581). For Daniel, experiencing this difference resulted in developing a view of university and the workplace as two different figured worlds and such distinctness led him to a fear of forgetting previously learned knowledge and skills *“simply because I’m not using it”* (Daniel, Interview 3). The argument to be made here is that Daniel’s possible understanding of the transition between university and the workplace as a lateral transition (Beach, 2003; 1999) and further experiencing them as two ends of Candy and Crebert’s (1991) leaning dichotomies might have created a barrier for perceived transfer of learning, which was based on the idea of discontinuity between both contexts.

“Hum, it would just be with the case, a lot of things, hum, regards to maths side of it, software side it that I’ve not touched, hum, as new information comes in from work, the other information, some of it has

to go. So, I think, when I go back, just will be a case of relearning a lot of information, so.”

(Daniel, Interview 3)

This view expressed by Daniel was still present on return to university, as he explained to me that he had to spend some time at the library refreshing his knowledge in certain areas that he had forgotten during the placement year and, on a more practical level, that some tasks had become harder to develop due to the placement.

“I think it’s just certain, hum for example, writing a report has taken a lot longer because it’s something I haven’t done in over a year. Or an essay or something like that.”

(Daniel, Interview 6)

At this point, Daniel’s view of the lack of connectedness between university and the workplace seems to support, regarding transfer theories, the situated learning argument that there is no transfer between school and other settings of life, but rather, new learning occurring at every moment (see, for example, Lave and Wenger, 1991). However, despite the lack of evidence for direct application of knowledge or skills, on his return to university Daniel does report a different way of doing things. It might be that the lack of direct application of knowledge (Bransford and Schwartz, 1999) is not a lack of transfer, but that transfer of learning in his transition is present, for example, in a different approach to old tasks.

“I think, my reports are improving in the sense that they seem to be better worded, a bit more, they look a lot more professional. Maybe that’s because, obviously when I was at work, had to kind of be to that sort of standard, in the first place.”

(Daniel, Interview 6)

What Daniel reported was the development of a different method of working, through which he had become more organised and more aware of the process. Following the typification of knowledge presented in Chapter 3, it seems that Daniel was able to transfer back to his last year of university some learned know-how (Lundvall and Johnson, 1994; Lundvall, 1996) that is

typically developed through social interactions and practical experience.

“I’d say the process is also changed, just with regards to planning. So, I generally planned things a lot more in advance now. So, if I’m gonna write something out, I’ll have a structured framework that I’ll work around. As opposed to just, maybe, start and then the next section, the next section and the next section. I’ll have some sort of structure framework that I’ll work from throughout and then I’ll see, at the end, go through that and make sure I meet all the criteria and deliverables of whatever piece of work it is I’m trying to complete.”

(Daniel, Interview 6)

As much as this new way of developing a task could be seen as the development of personal knowledge (Eraut, 2000), which implies the intersection of Daniel’s theoretical knowledge with the opportunities for practice and experience that he developed in the placement, it becomes hard to understand why this particular aspect was transferred from the workplace to university, specifically under the context of Daniel’s sense making of the two contexts, the university and the workplace, as intrinsically different.

One possibility for interpretation falls under Engle’s idea of framing contexts as a strategy to improve transfer. According to her, it is possible to expansively frame contexts regarding time, place, participants and roles (Engle et al., 2012), which would enable the student to draw parallels between different contexts, thus improving the possibility of transfer. Furthermore, and in consonance with Bransford and Schwartz’s (1999) idea of improving transfer by reconceptualising it as preparation for future learning, framing contexts would facilitate students’ learning, by imposing this notion of the future usefulness of that particular learning. Regarding Daniel’s transfer of an improved strategy for writing, it is possible that within his placement experience, possibly because of his developing confidence and pro-active strategies towards the placement, he became able to frame himself as an actor, which refers to a type of “knowing that includes authorship, evaluation, and modification of concepts, methods, and materials in the domain” (Greeno, 2006, p. 539). In Daniel’s experience, it meant that he developed a view of himself as his own manager and, on top of attempting to maintain a 9 to 5

work schedule and the separation between work times and resting times, he implemented several other self-managing strategies.

“Maybe that’s just a student mentality, being a bit more lazy when I’m at university, as opposed to being at work. But I think I do have a better approach to organization in regards to work. Hum, note taking, trying to be more efficient with doing the work whilst in lectures, or whilst I’m in university. Like I say, managing the time so I can have evenings more free, rather than, you know, start working at eight, nine o’clock at night.”

(Daniel, Interview 6)

It seems that while Daniel was moving towards full participation in the placement (Lave and Wenger, 1991), becoming more confident in himself, and changing his identity towards feeling and being recognised as a professional. He was also changing his own perception of being a student, supporting Engle’s claim of intercontextuality (2006; Engle et al., 2010; Engle et al., 2012) between contexts that are connected through expansive framing. For Daniel, such changing in his self-view and further implementation of strategies was enabled by his own framing of the placement as relevant for his education and future working experiences. Indeed, on return to university Daniel was more aware of the possibility of future usefulness of his current learning and, when the topics, concepts or skills were not framed by his teachers he solicited that framing.

“There’s been a few times when I’ve approached lecturers after lectures to ask the relevance of the, you know, maybe the work that we’ve been doing, not in a negative way obviously. Trying to relate what we’ve done to real life scenarios, you know, ‘where would that be useful in the industry, for example?’ And I would say, probably, it’s, probable been more relevant in my individual project. So, when I’ve been meeting with my project supervisor I’ll question the deliverables more. So, “in what way exactly does this mean?”, or, “what exactly are we expected to do for this?”, trying to get a bit more, hum, scope of the work. Some things are left quite open, and maybe be subject to interpretation.”

(Daniel, Interview 6)

By asking his teachers to provide examples from their past experiences, Daniel was actively engaging in the process of framing his learning in terms of, at least, time and space. Consequently, by focusing on his teachers past stories he was focusing on his own future and learning how to frame it for future transfer.

Ultimately, for Daniel the placement in the sugar factory was an experience with immediate learning consequences regarding the process of applying to a job, going to an interview and starting a new job. It was also a transforming experience regarding his approach to his own future, by providing him with a clearer idea of what he wanted to do and on the features of the workplace that really mattered to him. Theory over money was one of his own conclusions and it focused on the fact that his professional identity was better suited to the more theoretical and technical world of mechanical engineering, rather than on the management side of the factory jobs.

“Although it’s not being what I expected, you know, at first it didn’t seem very beneficial. Hum, I think, it’s beneficial in the fact that, hopefully, I’ll not make the mistake in the future choosing the job that, you know, for the wrong reasons. Or maybe, now knowing what I want to focus on more, one thing I was told before I came on placement, at least if you don’t figure out what you want to do, you’ll figure out what you don’t want to do. Hum, I thought, you know, that’s ridiculous, I, I’m not going on a placement to find out what I don’t want to do. But, hum, yeah, it, it has actually been an eye opener, hum, so yeah, it’s been, it has been very beneficial.”

(Daniel, Interview 5)

To conclude, Daniel’s perception of his placement benefits supports previous research regarding the academic benefits of supervised work experiences and the improvement of students’ understandings of the figured world of work.

5.4.5 Case Summary

This section described the transition between university and a one-year work-placement at a sugar factory of Daniel, a 23 years-old mature student of Mechanical Engineering. The argument presented was that Daniel

experienced a classic case of far transfer because there were more differences than continuities between the two contexts, which in turn created several aspects to which Daniel had to adapt, but also some opportunities for development and learning.

Regarding social interactions, despite the initial difficulty to get to know the who's who of the placement, Daniel realised that in his placement people were the main source of access to information and to projects, which led him to implement a proactive strategy of socialisation based on shadowing his colleague during their daily activities. Moreover, Daniel understood that the helpful others in his placement could be a great source of support, like his third supervisor, and that they embodied different work strategies, some that he would want to emulate during his placement and others that he felt were not as relevant for him. During this process of observation and working with others Daniel learned how to belong to that community of practice and developed the ability to work independently, to supervise projects as any other full participant. In short, Daniel became one of them, an engineer, rather than a placement student. In his return to university, Daniel had the expectation that he could be a better student and that he had a better understanding of what he would like to do professionally, in the future.

To summarise, in this section I presented the case that Daniel experienced in his transition between university and the workplace a classic case of far transfer, through which he struggled to enter, to participate and to belong to that new community of practice. However, in his process of adjusting to the placement, Daniel proactively implemented strategies that gave him access to relevant conversations and projects and supported his faithful leap into the role of an engineer, rather than maintaining his student identity. In turn, this proactivity in the placement supported his professional identity development and recognition from his peers, thus becoming recognised by his colleagues as a full participant.

5.5 Summary

This chapter presented the participants' individual placement experiences and characterized them as near-far experiences that were transformative,

consequential and mediated by others and self. Additionally, this chapter argued that to some extent placements may act as a mediational experience between university and the workplace.

The next chapter shifts the analytical focus from the individual to the overall experiences of learning transfer experienced by the students in their transitions between university and the placement. In order to achieve that analytical shift, the next chapter analyses the students' placement experiences through a cross-case strategy.

Chapter 6 – Cross-Case Analysis and Discussion

6.1 Introduction

The previous chapter presented Julie, Maggie and Daniel's transition between university and their one-year work-placement. It focused on their individual trajectories and sense-making of the figured world of work, of relevant social interactions in the placement, of their personal identity development journey and, of their return to university. As I argued in Chapter 4 (section 4.2.2) this individual focus on three cases was instrumental (Stake, 1994) to achieve an in-depth knowledge of the students' lived experiences of this complex transition (Cohen et al., 2007; Yin, 2012).

However, looking at the students' transitions across their individual landscapes of action and searching for patterns of common and/or contrasting elements was also necessary for the development of a more sophisticated understanding of the process of learning transfer on itself. Therefore, this chapter moves from the individual level of analysis presented in Chapter 5 to a cross-case level of analysis to examine the different perspectives on learning transfer presented in Chapter 3 and the view of placements as instruments for development presented in Chapter 2.

Structurally, this chapter is organised around the three main research questions, addressing (RQ1) how students experienced and made sense of their transitions between university and the workplace; (RQ2) how the conceptual framework presented in Chapter 3 (section 3.4) was used as an analytic tool to investigate the students' transitions; and finally, (RQ3) how the students' experiences of the transition between university and the workplace can inform and enhance the understanding around graduate's employability.

6.2 How do students experience and make sense of the transition between higher education and the workplace, in their placements?

In Chapter 2 I argued that literature on the transition between university and the workplace tends to focus on the benefits of supervised work experiences and, overall, provide an unproblematic view of placements regarding the

transition between university and the workplace. Moving forward to Chapter 3, I argued that those views could be linked to some assumptions regarding learning and transfer, including: (1) that it is broadly expected that students will know how to transfer knowledge and learning from education to work (Larsen-Freeman, 2013); (2) that such transfer would happen in a one-way, mechanical and unproblematic application manner (Bransford and Schwartz, 1999; Guile and Young, 2003; Perkins and Salomon, 2012); and, (3) that student's ability to integrate theory and practice once in the placement is also broadly taken for granted (Guile and Young, 2003). Looking at the learning transfer theories presented in the same chapter, my argument was that these views and assumptions might be consistent with a near transfer perspective (Mayer, 1975; Royer, 1978) that stressed the closeness between the learning and transfer situation or task for the existence of transfer.

However, the definition of learning transfer used in this study (section 3.3.3) was problematic regarding the stated assumptions about transfer of learning. The understanding of students' trajectories between university and the workplace as a complex and multidimensional transition raised the question that, possibly near transfer perspectives and the policy interpretations of Human Capital Theory's premises to higher education were not the most suitable frameworks to explain this transition. Furthermore, based on the individual journeys presented in Chapter 5, this chapter presents the case that defining placements as instruments for employability that will make the students' future transitions from university to the workplace smoother (see, for example Humburg et al., 2013), by broadly framing students' transitions as near transfer situations (Mayer, 1975; Royer, 1978), might limit the ability of universities, career centres, teachers, and the students themselves to prepare for and cope with far transfer instances when they occur.

In this section I argue that these students did not experience the transition between university and the workplace as unidirectional, near, mechanical and unproblematic transfer. On the contrary, I argue that the participants experienced this transition as a continuum from near to far and that at both extremes there were challenges and opportunities for the transition between university and the workplace. I also argue that investigating placements as communities of practice (Lave and Wenger, 1991; Wenger, 1998) clarified the

importance of relevant others as mediators of the participants' learning in the placement. Finally, I argue that the way the students perceive their placements has implications regarding their understanding of the transition between university and the workplace as one continuous process and that expansive framing offers an important contribution to connect both contexts within students' transitions between university and the workplace.

6.2.1 Drawing on classical theories of transfer – near and far transfer

Chapter 3 presented Thorndike's theory of identical elements (Woodworth and Thorndike, 1901; Thorndike, 1906) as one of the most pervasive frameworks in transfer research and literature, and one that contributed to the so called "transfer problem" (Georgenson, 1982, p.75) or "transfer failure" (Bransford and Schwartz, 1999, p.63), by narrowing transfer to students' ability to identify similarities between learning and transfer situations and applying previously learned material in a similar manner. Within this view, students had to be able to identify the "surface similarities" (Carragher and Schliemann, 2002, p.3) between both contexts in order for transfer to occur, meaning that transfer would more easily occur in near transfer situations than in far transfer situations (Mayer, 1975; Royer, 1978; Perkins, 2009). Indeed, Goldstone and Day (2012) noted that considerable research has indicated that students do not often transfer directly what they have learned across "superficially dissimilar scenarios" (Goldstone and Day, 2012, p. 149), thus reinforcing the view that far transfer of learning is more difficult to achieve. Accordingly, after considering these arguments on the possible implications of near and far instances to transfer of learning, there were two propositions that required analysing: the first, that transfer situations could be characterised as near or far; the second, that transfer occurred more straightforwardly in near transfer situations.

Regarding the first proposition just stated, which characterised transfer situations as either near or far, data analysis (e.g. coded interviews, field notes and secondary data) confirmed that material coded under "starting the placement" and "learning to navigate the placement" presented several instances of both near and far transfer. These were presented earlier in

Chapter 5 in the individual accounts of the participants' placement experiences.

However, it is important to note that this study took a more flexible approach to Royer's (1978) near and far definition (articulated in Chapter 3), which described near transfer as the transfer of material learned in the classroom to a different situation but still in the classroom, and far transfer as all the transfer that occurred outside of school. The need for flexibility emerged because of the specific context in which this study was developed, the transition between university and the workplace. In this context Royer's (1978) view was not a useful starting point because it would lead to the characterisation of every instance as far transfer due to the focus on placements, hence outside of university.

Consequently, although still using Royer's (1978) main idea and terminology, for analytical purposes the definition of near and far was expanded to incorporate some aspects of Woodworth and Thorndike's (1901) theory of identical elements, which characterised similarity as shared identical elements between two tasks or, more broadly, two situations. Accordingly, in this study, near transfer situations were those instances in which some knowledge, a skill or a formula was applied in the placement in a similar way as it was learned and used in university, or, if transfer occurred in a very similar setting to university. On the other hand, far transfer instances were those moments that in order to make use of prior knowledge the students in transition had to interpret and readapt it to the new situation or requirements, or, if the setting was very different to university.

Furthermore, the characterisation of near and far transfer was also based upon the participants' own perceptions of the continuity or discontinuity between university and the work-placement. This followed Billett's (2013) view that near and far can be person dependent if the analysis is based on the individual's perceptions of what is near and far. For example, it was stated in Chapter 5 (section 5.3.1) that Maggie's placement was developed in a setting that she was familiar with and had navigated before. In theory, this would be characterised as a near transfer situation. However, because she had to readapt her personal navigation of the building as a student to her new

capacity as an employee, in which she had to develop a different understanding of that setting to include knowledge regarding the multiple navigation possibilities and the particular challenges for certain groups of students, I argued that this particular instance, as it was perceived and experienced by Maggie, was better defined as a far transfer situation. Therefore, this particular instance was characterised as far transfer based not on dissimilarity per se, but on Maggie's perception of dissimilarity in that situation.

As a result, the overall characterisation of near or far situations within the participants' placement experiences was not always straightforward. The outcome was a more nuanced understanding of near and far, as a continuum, rather than the dichotomy presented by Royer (1978).

In order to illustrate how near and far was applied in this study, Table 6.1 presents a summary of the participants' placement experiences that were described in Chapter 5. Here they are characterised following the more nuanced view of near and far as a continuum. The table also provides the association between the participants' experiences and the learning transfer dimensions of analysis used in Chapter 5 (which included navigation of the placement's setting ⁽¹⁾, navigation of the placement's social interactions ⁽²⁾, and identity development ⁽³⁾). Furthermore, in this table it is also possible to analyse the instances of transfer that were coded under "struggle in the placement" ⁽⁴⁾.

Table 6.1 – Summary of near to far transfer instances in the placement

	NEAR		FAR
JULIE	Navigating the Physical Setting ⁽¹⁾ ; Daily Routine ⁽¹⁾ ; Knowledge of some Lecturers and Administrative Staff ⁽²⁾ ; Some tasks – Reading, Writing, Searching for Papers, Preparing Data Collection Tools ⁽¹⁾ .	←	Previous Knowledge of Supervisors ⁽²⁾ ; New Understanding of Deadlines ⁽²⁾ ; New Understanding of Work Routine ⁽¹⁾ ; Development of a Sense of Shared Responsibility ⁽²⁾ ; Getting and dealing with Feedback ⁽²⁾ .
MAGGIE	Knowledge of some Staff ⁽²⁾ ; Knowledge of Previous Placement Student ⁽²⁾ ; Some Tasks and Skills – CV's Checking, Computer Skills, Working with Excel ⁽¹⁾ .		Navigating the Physical Setting ⁽¹⁾ ; Understanding of the Services provided in the Union ⁽¹⁾ ; Goals-Setting ⁽²⁾ ; Definition of Success ⁽²⁾⁽⁴⁾ ; Development of a Sense of Shared Responsibility ⁽²⁾ ; Fluid Identity ⁽³⁾ .
DANIEL	Some Self-Learning Strategies – Researching, Reading ⁽¹⁾ ; Some Knowledge – Engineering Concepts ⁽¹⁾ ; Adopting a leading role in projects ⁽³⁾ .		Daily Routine ⁽¹⁾ ; Navigating the Physical Setting ⁽⁴⁾ ; Getting to know his Colleagues ⁽²⁾ ; Interacting with Colleagues ⁽²⁾⁽⁴⁾ ; Some Tasks – Administrative and Health and Safety Procedures ⁽¹⁾⁽⁴⁾ ; Application of Theoretical Knowledge ⁽¹⁾⁽⁴⁾ .

Legend:

- (1) – Transfer Instances regarding the setting (physical setting, tasks, knowledge and processes)
- (2) – Transfer Instances regarding social interactions
- (3) – Transfer Instances regarding identity and role
- (4) – Instances of transfer coded as “struggle in the placement”

The first reflection emerging from the information presented in Table 6.1 was that the participants' experiences seemed to be better described following the understanding of near and far as a continuum, in which there was more opportunity to analyse continuity and discontinuity between university and the workplace. Moreover, four other relevant considerations about the participants' placements were drawn based on the analysis of the information presented in Table 6.1, namely that:

- 1) All three participants experienced some near transfer situations regarding know-what or know-how (Lundvall and Johnson, 1994; Lundvall, 1996), in which university learned information or skills were relevant for their placement tasks. Some examples included in Table 6.1 refer to Julie's task of searching for academic papers, Maggie's task of checking other student's CVs for language mistakes, or, Daniel's application of theoretical concepts in the placement regarding, for example, pipe flow and fluid mechanics. Such data emerged despite the low level of academic knowledge transfer identified by Daniel (section 5.4.4) and Maggie's claim that most of her degree knowledge was not being used in her placement (section 5.3.4). Moving forward, these instances are reflected upon to argue that, overall, the participants presented a narrow understanding of transfer of learning (section 6.3.3).
- 2) All three participants experienced a shift in their perceptions of work and developed a sense of shared responsibility that highlighted the social dimension of the placement (sections 5.2.2, 5.3.2 and 5.4.2). Julie and Daniel's characterisation of this changed perception addressed their feelings of responsibility for working as part of a team and feeling accountable for the overall outcome of the activity, instead of their particular contribution. Maggie's view, although it was framed in a similar manner, was placed by herself at the level of her office and team and in opposition to other teams in the Union. In either case, the participants experienced a shift in their perception of working as an individual activity in university towards a more social activity in the placement, thus highlighting the need for a negotiation of meanings within the social practices of the placement. This analysis also supports the argument developed in this study that, during the transition between university and the workplace, students will encounter far transfer situations that will require them to adapt their knowledge, behaviour and identity to successfully adapt to the placement or to university when they return. A reflection on the implications of this finding is presented in Chapter 7.

- 3) All three participants experienced some far transfer situations regarding the development of placement appropriate interactions with colleagues, which is further explained in section 6.2.2.
- 4) Despite all three participants having experienced some near and far transfer situations, in the continuum from near to far, Julie arguably experienced mostly near transfer situations, Maggie experienced some near transfer situations and some far transfer situations, and Daniel faced mostly far transfer situations. These distinctive experiences might have provided the students in transition with a different overall perception of the placement experience. Furthermore, they may provide some insights into how placements should be organised to promote transfer of learning.

At this point, this cross-case summary of the participants' experiences serves the purpose of, on the one hand, introducing for discussion the limitations of the analysis of students' university to workplace transitions following a dichotomist perspective of near or far. On the other hand, this summary contributes to this thesis overarching argument regarding the complexity of the transition between university and the workplace and the limited understanding offered by traditional theories of transfer regarding this transition.

Indeed, based on Table 6.1, the analysis of the participants' experiences of near and far, regarding the dimension of identity (instances in Table 6.1 with the caption ⁽³⁾) suggests three distinctive experiences. At almost opposite ends are Daniel, who looked for and assumed a leading role in several projects in his placement, thus acting the role of the engineer on site; and Julie, who struggled to let go of her student identity and maintained it throughout the placement. Furthermore, there is also the interpretation of Maggie's identity as sometimes near (acting as a student) and sometimes far (acting as an employee), which might have been lost within a dichotomist view of near and far. Instead, by following this more nuanced approach it was not only visible, but it was highlighted as a determinant aspect of Maggie's adaptation to the placement, as previously argued in Chapter 5 (section 5.3.3).

Upon reflection, it is possible that this nuanced understanding of the participants' experiences became more relevant in this study than in more traditional studies about transfer because of the broader approach and definition of transfer used here (section 3.3.3). Indeed, this nuanced analysis only became necessary and relevant at the intersection between near and far and the conceptual framework's dimensions (knowledge, social interactions and self). The analysis of identity, for instance, benefited from the possibility of understanding the students' experiences as a continuum from near to far and also, by including the participants' own perceptions of what was near and far, and thus, more or less challenging. The analysis of the data showed that identity development benefited from far transfer situations, possibly by posing a challenge to the participants that required a greater involvement and understanding of the placement to be overcome. Consequently, the possible implications at this stage were that, arguably within a multidimensional understanding of learning transfer, classic transfer theories can be an important tool or starting point, but might fail to offer a comprehensive understanding of the student's placement and learning transfer experiences. The reason for this limitation might be, on the one hand, that within some transfer theories identity development was not considered as part of the transfer process, but also, on the other hand, that transfer was mostly perceived as application, thus, more like an individual event than a process.

Furthermore, the analysis of the second proposition arguing that transfer occurred more straightforwardly in near transfer situations than in far transfer situations was also not immediate and transparent. On the one hand, there were some data supporting the idea that near transfer situations were less struggled with than far transfer situations. But, on the other hand, the analysis of students' struggles in the placement regarding this study's transfer dimensions (knowledge, social interactions and self) showed that the existence of struggle, possibly acting as challenge, also provided opportunities for the students to develop within the placement.

Indeed, there were some examples in the data supporting the claim that students experienced transfer in near situations as more straightforward and easier to identify due to a greater degree of direct application of knowledge (Bransford and Schwartz, 1999). Examples of these occurrences were

explored in Chapter 5 and are also documented in Table 6.1 under near transfer (e.g. Julie's navigation of the placement's physical setting). When comparing the occurrences of near transfer with areas that the participants reported having struggled with, there was no association. It is possible to confirm this analysis by looking at Table 6.1 and note that no instance of transfer listed under near transfer has the caption ⁽⁴⁾. Subsequently, this analysis of the data supports the idea that near transfer situations were less challenging for the students in transition.

Furthermore, on the other side of the perspective that near transfer was easier to identify and deal with, laid the suggestion that far transfer situations were more difficult for the students to cope with, due to the surprise factor (Louis, 1980) and the overall sense of unexpectedness on entering the placement (Arnold, 1985). Following the same strategy to look at occurrences listed in Table 6.1 under far transfer and comparing them with areas that the participants reported having struggled with (instances in Table 6.1 with the caption ⁽⁴⁾) shows that several instances of far transfer were associated with the students' reports of struggle (e.g. Julie's approach to her new role in the placement).

Further analysis of this association between types of transfer situations and struggle in the placement demonstrated that most far transfer instances were associated with struggle in the placement, some transfer situations between near and far were also associated with struggle in the placement, but no near transfer situations were associated with struggle in the placement. The possible conclusion at this stage was that there seemed to be some association between struggle in the placement and far transfer situations, but that not all far transfer situations were struggled with. This point is illustrated in Table 6.1 by Maggie's adaptation to talking on the phone and Daniel's adaptation to the work-placement daily routine. This aspect highlighted that despite a possible correlation between far transfer and struggle, other possibilities should be analysed with regards to why students struggled with some situations in the placement and not with others. To further this analysis, Table 6.2 provides some examples of the association between the far transfer situations identified in Table 6.1 and quotes coded as "struggle in the placement", for each student, regarding the dimensions proposed in this

study's conceptual framework (knowledge, social interactions and self). This intended to open the analysis to include those dimensions as a new and important lens of inquiry.

Table 6.2 – Examples of the juxtaposition between far transfer situations and data coded as “struggle in the placement”

	TRANSFER SITUATION (FRAMEWORK'S DIMENSION)	DATA CODED IN “STRUGGLE IN THE PLACEMENT”
JULIE	Role (Self, Identity Development)	<p><i>“(…) the bad thing is that I think it’s quite lonely, although I was given a desk at the PhD cluster, I didn’t really like… Well, I used to sometimes go there, but even if you go there, you’re still working alone (…) it’s just really independent work, and you’ll meet your supervisor, but on a weekly basis and you just have to know how to work alone. If you like working alone, that’s fine. But for me, I sometimes like it, but I don’t like to be completely isolated all the time and this year you do, you felt quite lonely (…)”.</i></p> <p>(Julie, Interview 5)</p>
MAGGIE	Interacting with Colleagues (Social Interactions)	<p><i>“(…) in social environments outside of work I’m quite a mature person. So, in that respect I kind of tend to seem older than many of my friends. But, being one of the youngest in a team of people when you’re working with them is very difficult when you’re not used to people bossing you around. It’s very difficult to work your head around, especially if you don’t like that person. It can be very frustrating and very degrading in some ways, cause it can feel very sort of, against your will. But, it’s kind of a case of learning to, sort of, suck it up in a way, and get on with it.”</i></p> <p>(Maggie, Interview 6)</p>

DANIEL	Application of Theoretical Knowledge (Knowledge, Know-what)	<i>“But the people I was working with on a day-to-day basis hadn’t engineering, especially, mechanical engineering degrees. So I don’t think they actually understood the level of, hum, complexity of the work I’ve done at university. Hum, not to try and sound, you know, big-headed, but they don’t appreciate the level of knowledge that you have from two years of mechanical engineering degree. So, maybe is it just seem a bit depreciated when you get there and they give you something that is not as, maybe it’s a lot easier and not as technical as you would like.”</i> (Daniel, Interview 6)
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Taking into consideration the information presented in Table 6.1, the initial conclusion was that the participants reported more struggle in the placement with instances that were considered closer to the far end of the near-to-far continuum. If the analysis ceased at this level, looking only at the connection between near, far and struggle, the conclusion regarding classical transfer theories’ claim that transfer was promoted by continuity or similarity would be supported. Conceptually, the implication of this conclusion would be that identical elements (Woodworth and Thorndike, 1901; Thorndike, 1906) and near transfer situations (Mayer, 1975; Royer, 1978) were fundamental mechanisms towards promoting transfer in the transition between university and the workplace.

However, by incorporating into the analysis the dimensions illustrated in Table 6.2 (knowledge, social interactions and self), which are also the dimensions that support the conceptual framework developed for this study, the conclusions to be drawn had to be reformulated. Hence, while near transfer situations (Mayer, 1975; Royer, 1978) and identical elements (Woodworth and Thorndike, 1901; Thorndike, 1906) seem to have enabled the students’ participation in the placement at the level of the navigation of the setting, of learning the who’s who in the placement, and within some application of knowledge; near transfer situations (Mayer, 1975; Royer, 1978) and identical elements (Woodworth and Thorndike, 1901; Thorndike, 1906) did not seem

to have had the same positive impact at the level of identity development. Indeed, the reported presence of more instances of near transfer (Mayer,1975; Royer, 1978) in Julie and Maggie's placement experiences did not translate into a straightforward professional identity development, whereas Daniel, who experienced fewer instances of near transfer (Mayer,1975; Royer, 1978), found his identity development less problematic.

Overall, the conclusion to be drawn regarding the association between near, far, struggle and the conceptual framework's dimensions was that whereas near transfer situations might have promoted transfer at the level of knowledge application and social interactions, meaning at the level of participation; they did not offer the same opportunity regarding identity development, meaning at the level of belonging and becoming. Furthermore, the argument of this study is that transfer of learning should be characterised as both participation and belonging, thus reinforcing the need for this more nuanced understanding of near and far to make sense of the participants' placement experiences regarding transfer of learning.

To conclude, this section started with the analysis of classical perspectives on transfer of learning's use of near and far to analyse the students' experiences of the transitions between university and the workplace in order to test the classical transfer theory's argument that similarity and continuity are essential tools for promoting transfer of learning. The outcome of this analysis was that, in the transition between university and the workplace, a more nuanced understanding of near and far as a continuum was necessary. Furthermore, the inclusion of students' perceptions of near and far was key to reach this more flexible approach to near and far as to better reflect students' experiences and sense making of this transition. This finding reinforced the claim to listen more closely to students' voices to enhance our understanding of their experiences, which has been highlighted by researchers, nonetheless in different contexts (e.g. Edwards, 2010 regarding the rights of young children as learners) and had also been identified in Chapter 2 (section 2.3.3) as a major limitation in previous studies regarding supervised work experiences.

Indeed, the main conclusion reached in this section was that near transfer situations were found to facilitate transfer in the transition between university

and the work-placement, particularly regarding the setting and the direct application of know-what and know-how. However, far transfer situations also seemed to contribute to transfer of learning, particularly at the level of identity development and the definition of transfer as belonging and becoming. To further address the analysis of transfer of learning as belonging and becoming the next section analysed the contribution of situated and sociocultural perspectives to this study.

6.2.2 Drawing on situated and sociocultural approaches to transfer of learning

One conclusion drawn from the analysis of the three instrumental cases (Stake, 1994) presented in Chapter 5 was that the process of learning transfer did not occur in a vacuum, and that the contexts in which the transition between university and workplace occurred, the people that inhabited those spaces and the students in transition were all important facets to be considered. The specific interest in social aspects of learning and transfer was attributed in Chapter 3 to situated and sociocultural perspectives; namely, Wenger's (1998) conceptualisation of learning contexts as communities of practice, Lave and Wenger's (1991) description of the learning taking place in those contexts as legitimate peripheral participation, and Beach's (1999; 2003) understanding of learning transfer as becoming. Within these perspectives, the transition between university and the workplace regarding learning transfer was established around three propositions that required analysing:

- 1) Learning transfer was developed through participation in a community of practice;
- 2) Students in transition moved from newcomers to full participants;
- 3) During the transition students developed a new identity.

Regarding the first and second propositions, the argument was that the workplaces the students entered in their one-year work-placements could be characterised as communities of practice (Wenger, 1998), with their "own practices, routines, rituals, artefacts, symbols, conventions, stories and histories" (Wenger, 2009, p.212), and that the students would learn them through increasing participation in the placement's daily activities, moving

from inexperienced newcomers to more knowledgeable and skilled full participants (Lave and Wenger, 1991).


Using data coded as “starting the placement” and “learning to navigate the placement” (see Appendix E) enabled the reconstruction of the participants’ placement experiences following the situated and sociocultural perspective. Figure 6.1 illustrates a summary of that reconstruction for each participant.

At the individual level, Figure 6.1 presents a summary of the participants’ journeys presented in Chapter 5, showing that each student followed the path from newcomer and inexperienced towards more experienced and full(er) participant, but to a different degree. Indeed, Figure 6.1 depicts Daniel’s journey from entering the placement as a timid placement student, keeping mostly to himself, spending the day at his desk, reading and accepting passively all the tasks that were given to him, towards becoming an integral part of the placement’s community and contributing to it by proposing new projects that addressed problems he had identified in the placement. It also depicts Julie’s journey, from starting the placement with valuable information regarding the setting, the people and her tasks but struggling to belong, and ending the placement maintaining a peripheral position in the workplace’s community.

Looking across the participants’ journeys, Figure 6.1 presents Julie, Maggie and Daniel’s gradual adaptation to the placement through increased interaction with the people, the activities and the knowledge. Accordingly, all three started the placement as observers of the daily practices and conventions of the placement and progressively became able to perform them independently. As explained in Chapter 5, such progression was facilitated by supervisors, helpful others (Eraut, 2007) and near peers (Lave and Wenger, 1991) through several strategies like collaborative work, feedback, overall support and mentoring. Furthermore, the participants’ progression was evident in their increased and improved scope of social interactions and knowledge, and in the emergence of situations in the placement, in which they had become more skilled than others. Some examples included the new researchers that Julie introduced to the university, the new team colleague that Daniel taught the specific software he had learned to use just months

before, or general colleagues less skilled with computers that Maggie helped. Overall, the participants' improved ability to act in the placement was gradually developed and socially supported.

Figure 6.1 – Summary of the participants’ trajectories from newcomer to full participant in the placement

	MOMENT IN PLACEMENT JOURNEY	PARTICIPANTS' ACTIONS		
		DANIEL	MAGGIE	JULIE
 <p>NEWCOMER</p> <p>FULL PARTICIPANT</p>	Entering the Placement	Sitting at his desk Saying nothing Little social interactions Most support/information coming from previous placement student Figuring out placement setting Accepting all tasks	<i>(Maggie entered the placement with some previous knowledge of the setting, people and tasks, which positioned her from the start not quite as a newcomer)</i> Sitting and being a sponge Reconfiguring her view of the setting	<i>(Julie entered the placement with some previous knowledge of the setting, people and tasks, which positioned her from the start not quite as a newcomer)</i> Little social interactions (office and conference) Observer (in companies and conferences)
	Learning to Navigate the Placement	Moving around the factory Shadowing Learning a new software Learning the placement language Reconceptualising work as a social activity Increasing scope social interactions	Developing the appropriate mental maps for social interactions Adjusting personal goals to placement goals Reconceptualising work as a social activity Increasing scope of social interactions	Reconceptualising the meaning of deadlines Reconceptualising work as a social activity Increasing scope of social interactions Going alone to companies
	Becoming a Member of the Community	Increasing confidence in own ability Teaching software learned in the placement to colleague Recognition as staff by colleagues Praise on his work Proposing new tasks and projects	Increasing confidence in own ability Teaching computer skills to colleagues Recognition as staff and student by colleagues Developing a fluid identity that benefited her community of practice	Increasing confidence in own ability Increased understanding of research Improved knowledge and skills Presenting the campus to new PhD students <i>(Julie finished her placement in a peripheral position and maintaining a student identity)</i>
		<i>(Introducing changes in the placement/community of practice as a result of belonging)</i>		

Therefore, from this analysis of the students' experiences, it is possible to argue that the conceptualisation of context as a community of practice (Wenger, 1998; 2000; Wenger et al., 2002) provided a useful lens to investigate and make sense of the students' placement experiences in regards to their activities and social interactions. More specifically, it permitted the analysis of the participants' journeys as a multidimensional process, rather than just focusing on the application of factual "university" knowledge (know-what), and also emphasised the importance of others in that process.

However, addressing the second proposition identified at the beginning of this section, which stated that departing from the understanding of placements as communities of practice (Wenger, 1998) and of learning as legitimate peripheral participation (Lave and Wenger, 1991) implied that successful transitions led to the development of "knowledgeably skilled identities" (Lave and Wenger, 1991, p.55) in a one-directional movement from newcomer to full participant was more problematic.

Looking back at Figure 6.1 and focusing on the final stage of the placement journey, labelled as "becoming a member of the community", it was evident that not every participant developed a personal narrative of becoming that easily translated Lave and Wenger's proposed trajectory of entering a new community of practice as a newcomer and continuously developing into a full participant (Lave and Wenger, 1991; Wenger, 1998). Indeed, Maggie's narrative of belonging can hardly be described as a progressive transition from newcomer to full-participant, as she developed a fluid approach to her identity (section 5.3.3), through which she moved between the centre and periphery of her placement and between her professional and student identity, as it was suitable for herself and to the placement. Additionally, Julie also never developed the level of becoming that both Beach (1999; 2003) and Wenger (1998; 2000) would argue to be part of this transition. As also illustrated in Figure 6.1, Julie finished her placement maintaining a peripheral (Urrieta, 2007) or marginal (Tanggaard, 2008) positioning in the placement, through which she became a full(er) participant, but never perceived herself as being a professional. Therefore, this analysis of Julie and Maggie's narratives of becoming within the placement evidenced a possible limitation of understanding students' transitions between university and the workplace as

the movement from newcomer to full participant. The difficulty here resided on conceptualising this transition as always progressive, moving from inexperienced and thus in the periphery of the community of practice, to master and at the centre of the community. This progressive assumption of Lave and Wenger's theory does not accommodate well alternative trajectories such as Maggie's, who moved in between her identity as student (periphery) and professional (centre); or Julie's, who actively positioned herself at the periphery of the community of practice. It is possible that Lave and Wenger's conceptualisation applies better to apprenticeships that are the entry route to a profession, than to work-placements that are set in between academic years and, consequently, imply a return to university after the work-placement.

Julie and Maggie's narratives of becoming within the placement also highlighted some difficulties in the analysis of the proposition that within the transition between university and the workplace students would become "someone or something new" (Beach, 1999, p. 102), by possibly developing a professional identity. As just explained, while Daniel developed a sense of being a professional and was recognised as one, both Maggie and Julie took alternative routes regarding their identity development. Maggie positioned herself in between a student and professional identity, embodying each one depending on what suited her immediate goal or task, but also the placement's needs. Julie did not engage at all with a professional identity and reinforced a self-view of being a student, working in a student environment. Again, this discrepancy might be the consequence of the work-placements being set in between academic years and the students in transition assuming them as a mediational transition (Beach, 1999; 2003), a mere simulation of future workplaces, which possibly reduces their commitment to develop a professional identity within the transitory experience of the work-placement.

Subsequently, taking this data into consideration required an adjustment to the claim that, within placements, students develop professional identities, as this does not seem to easily translate into the participants' placement experiences, regarding identity. What the data showed was that, instead of developing a professional identity in the placement, the participants engaged in a testing experience of emerging professional identities and notions of professionalism, which do not necessarily led them to a self-identification with

being a professional or, being a professional in that specific context of the placement.

Nonetheless, for the students, the placement experience contributed to a better understanding of specific professional identities and the extent to which they desired becoming those identities. As articulated in Chapter 5, both Julie and Daniel learned that there were aspects of the specific professional identities that they tested in the placement that they would not like to pursue in their future professional lives. Indeed, despite reporting a clear interest in university and studying, Julie developed an insight into academic life and into what meant being a researcher or a PhD student that she believed was not in line with the professional path she would like to develop (section 5.2.3 and 5.2.4). In the same way, also Daniel encountered in his placement dimensions of professionalism that he would not like to pursue in the future, like the overall focus on management and foremost on having to manage people, their interests, needs and schedules. For Daniel, the placement provided a relevant insight in how to test the relevant dimensions of professionalism for any given future job. Because of the placement experience he developed the plan of questioning prospective employers during the selection interview about the more theoretical and technical aspects of the job and how he, specifically, could contribute to them (section 5.4.4).

Despite finding data that considered the students' identity development within placements as problematic and not always following Beach's (1999; 2003) view of learning as becoming as presented in Julie's case, this data still offered an important insight to consider. Instead of becoming, and possibly even within a process of reinforcing their student identities, students actually engage in a process of testing emerging professional identities and overall notions of professionalism within their placement experiences. This view was also argued by Ibarra (1999), who argued that "people adapt to new roles by experimenting with provisional selves that serve as trials for possible but not yet fully elaborated professional identities" (p.764). For the author, a great part of assuming a new role was not just about learning the new knowledge and skills of that role, but also learning how to define themselves in that new professional role (Ibarra, 1999).

This finding that placements provided students with opportunities for testing emerging professional identities and future professional paths is also congruent with Urrieta's (2007, p. 109) view presented in Chapter 2 that placements can be seen as "sites of possibility" when students are able to overcome the possible initial perception that work-placements and, more generally, workplaces can be prescriptive in terms of the social and professional roles that individuals can adopt and develop in them.

Finally, by focusing on situated and sociocultural perspectives and on the development of identity in the placement, the data continued to present transfer of learning as a multidimensional process and highlighted the relevance of others in the process. Moreover, it provided some insight into how confidence and agency were important features to consider; specifically, since Julie, Maggie and Daniel's experiences were intimately related to their own actions within the placement, and their growing confidence in their own ability to interpret and act within the placement. On the other hand, focusing on this transition as a unidirectional, progressive experience, as implied in Lave and Wenger's (1991) conceptualisation of moving from newcomer to a full participant, would have limited the understanding of the participants' developed narratives of becoming.

To conclude, this section described the students' transitions between the work-placement and university as gradual and incremental. Students became more and more aware of how to navigate their placements through socialisation (Van Maanen, 1976; Eraut, 2000) and mediation (Eraut, 2007; 2012) processes in which they learned the placements' appropriate procedures, its language and who was who. The use of situated theories to analyse the participants' experiences also identified relevant others (e.g. placement supervisors, peers, colleagues, etc.) as essential for learning in the placement (a more detailed discussion of this aspect is presented in section 6.3.2). Furthermore, the focus on the concept of communities of practice (Lave and Wenger, 1991; Wenger, 1998; 2000; Wenger et al., 2002) provided a relevant contribution to understanding the social dimension of the placement and how this might be interpreted by the students in transition as different from university (e.g. shifting notions of working, deadlines and goal setting). However, the analysis of students' experiences according to this concept also

presented some limitations regarding the interpretation of Maggie and Julie's alternative narratives of becoming. These, I argued, might have become clear in the context of this study due to Julie and Maggie's possible perceived perception of the placement as a mediational transition (Beach, 1999; 2003) with a bidirectional nature, from university to the workplace and from the workplace back to university. To further explore this dimension, the next section addresses Beach's (1999; 2003) conceptualisation of transitions and Engle's (2006; 2012) expansive framing as a strategy to mediate the intercontextual nature of the transition between university and the workplace.

6.2.3 Drawing on expansive framing theory

One of the assumptions presented at the beginning of this chapter was that transfer of learning was often represented as a vertical, one-way movement. Additionally, in Chapter 2 I argued that a view of the transition between university and the workplace as progressive and unidirectional was also the one implied by employability frameworks and a specific reading of Human Capital Theory's premises to higher education. The critique to this view was that it arguably contributed to an unproblematic view of placements regarding transfer and created a boundary as to what could be counted as transfer in that transition.

The underlying critique in this unidirectional and progressive perspective was that it resulted in a problematic conceptualisation of transfer of learning in general, but specifically within the context of work-placements. The problem emerged from the definition of work-placements as, by nature, transitory experiences placed in between the students' academic years. Placements were not unidirectional and possibly not always progressive. Indeed, supervised work experiences can assume different formats, from one-year work-placements in between academic years to shorter work-placements during the academic year, or during the summer break. In any case, these supervised work experiences were set in between the students' degrees and presumed a transition from university to the placement and back.

These critiques of the traditional understanding of transfer were also identified by Beach (1999; 2003), who, with the intention of overcoming the implications of the transfer metaphor and its constructs, reconceptualised transfer as

consequential transitions. With this reconceptualization, Beach broadened the scope of what would count as transfer and, while the more classical perspectives would fall under his definition of lateral transition (section 3.2.3, Table 3.1), the other options including, collateral, encompassing and mediational transitions (Beach, 1999; 2003), offered new possibilities to interpret transfer.

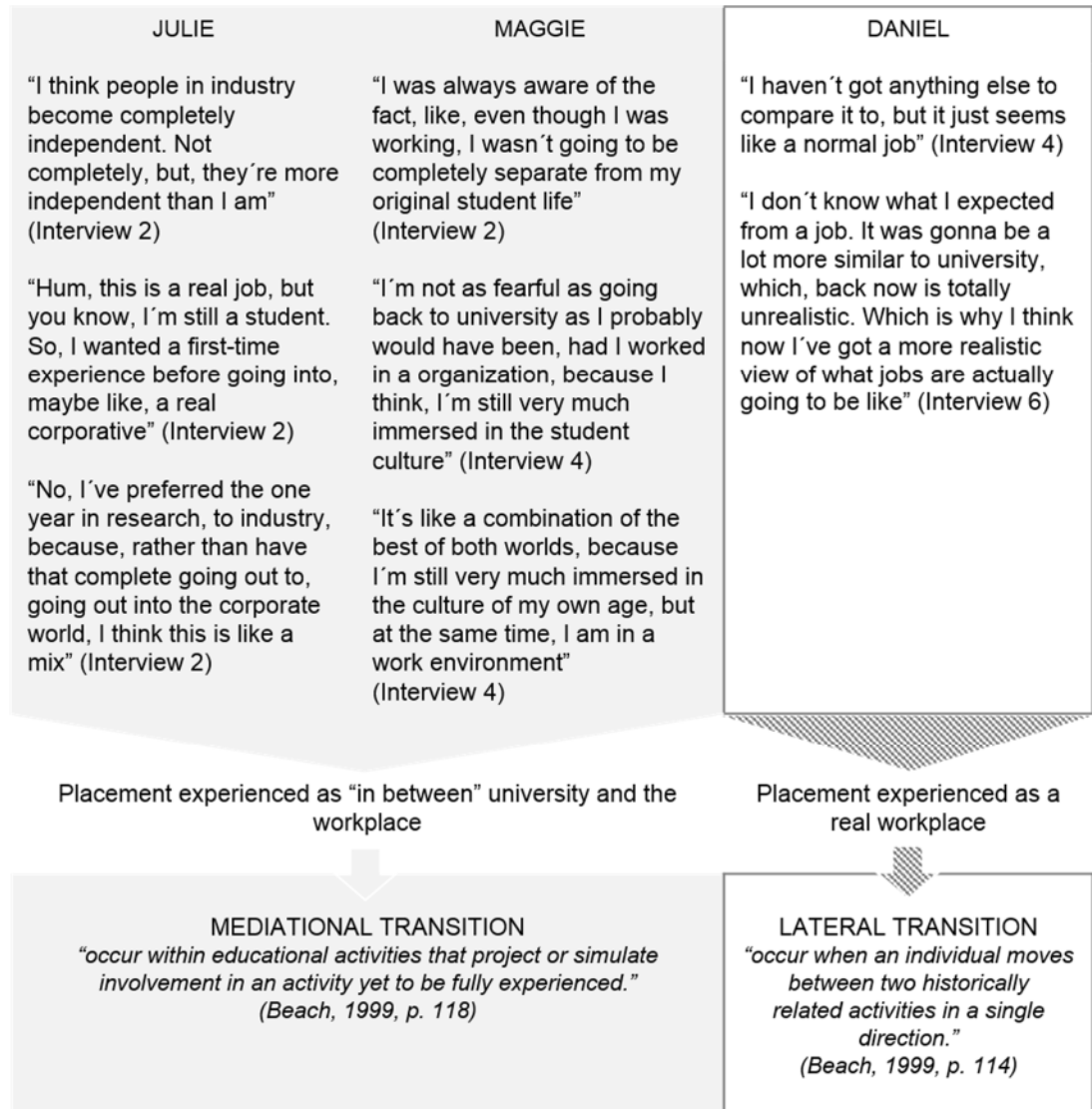
Thus, the propositions under analysis at this stage were: first, that within a traditional view of learning transfer students would experience transfer of learning between university and the workplace as a lateral transition (Beach, 1999; 2003); second, that by following Beach's framework other types of transition could be investigated and these could contribute to the interpretation of learning transfer as multidirectional.

Indeed, Chapter 5 presented the students' individual placement journeys and, as part of the analysis of those journeys I focused on the participants' perceptions of the placement experience in light of Beach's work (1993; 1999; 2003). My intention was to understand to what extent the participants interpreted their transitions between university and the workplace as a continuous process. The analysis showed that, while Julie and Maggie's reports about the transition between university and the workplace focused on the placement as a transitory experience, clearly delimited in time, space and scope by their degree, Daniel reported experiencing something different. Figure 6.2 provides a summary of the participants' experiences regarding Beach's framework that portrays those different experiences.

The data presented in Figure 6.2 corroborates that both Julie and Maggie expressed an understanding of the placement as being in between studies, and with a focus on that experience as a simulation of a real workplace. On the contrary, Daniel's perception of the placement was as a real workplace, in which he reported getting the same experience that any new employee to his department would have. As articulated previously (section 6.2.2) this diverse understanding of the placement by the participants might have contributed to their different approaches regarding identity development, with Daniel adapting better to the idea of becoming a professional and with Julie and

Maggie developing alternative approaches that favoured the maintenance of their student identity.

Figure 6.2 – Summary of the participants’ placement descriptions and their characterization according to Beach’s (1999, 2003) framework



Analysing the participants’ trajectories using Beach’s framework (Beach, 1993; 1999; 2003) allowed for a comparison between Daniel’s placement experience as a lateral transition and Julie and Maggie’s placement experience as a mediational transition. This comparison was particularly relevant because, while the mediational transition set the stage for investigating the participants’ participation in the placement and the establishment of direct application of knowledge, the lateral transition better explained the participants’ needs for adapting, transforming and becoming in order to deal with the new and different environment. It is possible to argue that Maggie and Julie experienced their placements as a safe environment to

experiment with their emerging professional identities because they interpreted them as a simulation of a real workplace. On the contrary, Daniel experienced a more challenging transition regarding his identity because of his interpretation of the placement as a real workplace in which he had to become a professional. Therefore, what the data showed in this instance was that these different perceptions about the placement may have significant implications for students' transfer of learning from university and the workplace. This insight could be used to foster transfer of learning if, for example the different trajectories are discussed with the students prior to their placement experiences.

The one aspect both interpretations of the placement had in common was the certainty that the university context and the placement contexts were connected and that students needed to establish those connections in a continuum from direct application of knowledge to becoming a full-participant, in order to have successful transfer experiences in their placements.

Following this recognition of the need for an analytic tool to interpret the possible connections between university and the workplace, expansive framing became an important tool to investigate temporal, spatial, content and social links between learning and transfer situations (Engle 2006; 2012; Engle et al., 2010). Indeed, all three students implemented several framing strategies from the learning in the workplace towards their last year in university, a summary of which is presented in Table 6.3.

Table 6.3 – Examples of expansive framing in the data

	JULIE	MAGGIE	DANIEL	SECONDARY DATA
Framing Time	✓	✓	✓	✓
Framing Space	✓	✓	✓	✓
Framing Content	✓	-	✓	✓
Social Framing	✓	✓	-	✓
Request Framing	-	-	✓	-

The participants' framing strategies included examples of framing regarding time, space, content and social framing, which could include a focus on roles or participants. For instance, framing time was based on the students'

perceptions that their learning during the placement could be relevant for “next semester” (Julie), “next year” (Julie, Maggie, Daniel and Secondary data), or even for future professional life (Julie, Maggie and Daniel). This meant that the participants were mostly focusing on their return to university, but also, although to a much lesser extent, on their future professional lives. Framing of space, which refers to other places in which current learning can be useful (Engle, 2012) followed the same line of time framing; focusing on final year dissertation (Julie, Maggie and Secondary data); future working in creative environments (Maggie), job interview scenarios (Daniel), or, more broadly, future jobs (Maggie, Daniel and Secondary data).

In addition to these aspects that were established by Engle (2012) and present across the data set, there was one particular aspect that was present only in Daniel’s interviews, which focused on Daniel’s intentions of requesting expansive framing of learning in situations when that was not available.

“I think when I go back, I’ll probably have a lot more conversations with lecturers on their work in the past. (...) (asking) ‘how can I apply that in the future?’ or, ‘I like this subject, where can I use that in the future?’. Hum, I think it also will help me focus on which direction I wanna go into.”

(Daniel, Interview 5)

It is possible to argue that Daniel perceived framing to be such a relevant tool for promoting transfer that, by building on his teachers’ past experiences he could arguably better frame his own learning in the future (time), in different tasks or environments (space), and within different jobs (social). What Daniel reflected on was how his experience of the placement changed his perception of the learning situation in university regarding the future usefulness of any information or skills. Furthermore, Daniel realised that the increased usefulness of learning could be achieved by framing his learning by himself, or when that was not possible, by requesting teachers to share experiences that would expansively frame that particular learning. As shown in Table 6.3, this requesting teachers or other relevant others to expansively frame learning was only identified in Daniel’s data. However, because of the implications it may have to, first, expand Engle’s theory of expansive framing and, second,

to provide guidelines for educational practice, I believe it was a relevant finding to report. Indeed, the argument for expansive framing is that it can improve transfer of learning by emphasising the future usefulness of current learning. The data presented here supported this view by showing that transfer of learning, particularly on the return to university, was promoted by the participants' use of time, space, social and content framing. Overall, this finding might have important practice implications in the preparation of students going into placements in order to improve their learning transfer from the placement back to university, but also on how learning situations in university can also use expansive framing to promote transfer from university to the placement.

As a result, the analysis of expansive framing presented in this section might offer what could be an important piece of development of Engle's expansive framing theory as a promoter of transfer. Within Engle's writings about expansive framing (Engle 2006; 2012; Engle et al., 2010) the teacher assumed the responsibility for framing learning. However, what this analysis shows is that the students positioned themselves as the agents of framing, implement it by themselves or, like Daniel reported, elicited it from their teachers. This new consideration could mean that, instead of understanding framing as a teacher's responsibility, students themselves might be able, when they understood both contexts, to implement it. In this manner, they became more able to prepare for transfer and also to assess transfer on the application moment. In doing so, they would not only be perceiving, but experiencing the transition between university and the workplace as intercontextual (Engle, 2006; 2012; Engle et al., 2010).

To conclude, this section began by identifying the problems of conceptualising the transition between university and the workplace within placement experiences as progressive and unidirectional because of the bidirectional nature of work-placements, in which students move from university to the workplace and back. Data presented here showed that the participants had different perspectives on their transition, as Maggie and Julie's perceptions of the placement were better illustrated by the notion of mediational transition (Beach, 1999; 2003), whereas Daniel's perception was more accurately portrayed in a lateral transition (Beach, 1999; 2003). This finding was

highlighted in this report due to the implications it may have had regarding the students' perceptions of the transition between university and the workplace as a continuous process and to support the suggestion that a compartmentalisation of students' transitions might limit the opportunity to frame it as continuous. Finally, expansive framing was presented as a possible strategy to promote transfer of learning by attempting to frame the usefulness of current learning more broadly in terms of time, space, content and participation. Furthermore, it was suggested by the data that, through their own agency, students can learn how to frame their learning expansively, which could contribute for their ability to independently promote transfer of learning.

Regarding the research question of how the participants experienced and made sense of the transition between university and the workplace in their work-placements, the data revealed a more complex process than the mechanistic and straightforward transition presented in Chapter 2. The findings revealed that the participants experienced the transition between university and the workplace as multidimensional, focusing on knowledge, behaviours and strategies for social interactions, and shifting identities; and as intercontextual, meaning that the participants experienced continuity between both settings (even if their overall perception and understanding of learning transfer was limited, as section 6.3.3 explores).

Regarding their sense-making of the transition between university and the workplace, data revealed a gradual and incremental understanding of the figured world of work, starting from the explicit and physical aspects of the work-placement, moving to the knowledge of who's who in the placement and, finally, understanding and acting accordingly with the placement's implicit rules and procedures. In this process, the participants experienced the transition between university and the workplace as a mixture of near and far transfer situations, in which their adaptation was founded on their ability to develop the appropriate mental maps to move independently in the work-placement. The participants also experienced this transition as socially mediated, in which the relevant others in the placement had a fundamental role in providing them access to information and knowledge, implicit and explicit about the placement.

Finally, agency was a fundamental aspect of the participants' sense making of the transition between university and the workplace and allowed them the creation of opportunities for development within the placement experience. The participants' initiative towards framing expansively their learning in the placement back to university and their future professional life was a good representation of how agency had a positive impact on their learning transfer between university and the workplace.

6.3 In what way and to what extent are students' experiences of the transition between university and their placements reflected by the developed learning transfer model?

Chapter 3 provided a summary of limitations in the conceptualisation and study of transfer of learning. It described problems in the definition of transfer as being too narrow (Bransford and Schwartz, 1999; Packer, 2001; De Corte, 2003), and theories being too fragmented and polarised. In addition, it also presented some methodological issues in the design of research on transfer, namely, the creation of identical activities for measuring transfer (Lave, 1988; Barnett and Ceci, 2002; Day et al., 2012), the passive role attributed to individuals (Bransford and Schwartz, 1999; Hatano and Greeno, 1999; Beach, 2003), the lack of consideration for the context in transfer processes (Lave, 1988; Lave and Wenger, 1991; Lobato, 2006), and a main focus on knowledge as the unit of transfer (Lave, 1988; Billett, 2013).

In order to address some of these issues, which contributed for the investigation of transfer of learning being considered problematic, particularly within a complex context such as the transition between university and the workplace, a new conceptual framework to investigate it was proposed in Chapter 3 (section 3.4). This conceptual framework aimed to allow the study of the transition between university and the workplace regarding transfer of learning in a holistic manner, as a multidimensional, intercontextual and socially mediated process.

Therefore, in this section I draw on the designed conceptual framework to analyse the participants' experiences and sense-making of the transition between university and the workplace and reflect on the possibilities and

limitations it provided to understand their experiences. More specifically, I use the designed model of learning transfer to investigate what the participants transferred and how they transferred it.

6.3.1 What learning was transferred?

The model of learning transfer described in Chapter 3 (section 3.4) presented the transition between university and the workplace regarding transfer as a multidimensional and intercontextual process. It represented transfer as evolving around three dimensions: knowledge, social interactions and self. More specifically, following the learning transfer model, the investigation of the students' transitions between university and the work-placement comprised the analysis of the transfer of: the knowledge of facts and theories (know-that); the skills (know-how); the strategies to identify relevant people (know-who) and to interact and work with them (social interactions); and, of the strategies to make sense of the new setting (know-why). All of these were also interrelated with the students' ability to act in the placement in an appropriate manner, thus becoming part of it (self).

Conceptually, the definition of learning transfer as multidimensional contributed to this study's aim of overcoming the narrow definition of learning transfer that was identified in previous research as a limitation, by enlarging its scope for interpretation and measurement. In practice, the multidimensional perspective directed the processes of data collection and analysis, for example, in the creation of theory-driven codes (DeCuir et al., 2011) that represented the four types of knowledge, know-what, know-how, know-why, and know-who (Lundvall and Johnson, 1994; Lundvall, 1996), with the expectation that the participants would experience all of them during the placement.

The intercontextuality in the definition of learning transfer contributed to framing the transition between university and the workplace regarding transfer of learning as a process, a continuous journey or narrative, instead of a two-phased event, divided into the learning situation and the application (transfer) situation. Conceptually, intercontextuality contributed to the aim of addressing previous critiques on placement's research; namely the lack of research on the return to education after placement experiences (Auburn, 2007) and the

lack of understanding of how placement experiences were integrated within students' wider university experiences (Ryan et al., 1996; Blackwell et al., 2001; Fell and Kuit, 2003; Auburn, 2007). Additionally, it also served the purpose of disputing the notion that transfer is unidirectional and progressive, as expected in traditional transfer theories (presented in Chapter 3) and assumed within the policy interpretation of Human Capital Theory's premises and employability frameworks (presented in Chapter 2). In practice, the focus on intercontextuality directed the research to investigate the students' return to university by introducing a post-placement interview (section 4.3.1) and the creation of a sub-code called "learning transfer from the placement to higher education".

Consequently, the two propositions under study at this time, whose verification in the data would reinforce the definition of transfer of learning as a multidimensional and intercontextual process of transformation experienced by the students in transition, were that:

- 1) Students would transfer several types of knowledge in their transition between university and the work-placement; and,
- 2) Transfer of learning would occur from university to the work-placement, but also in the opposite direction, from the work-placement back to university.

Regarding the analysis of the first proposition, the data revealed some examples of the participants' experiencing transfer not only of factual knowledge, but also of the other types of knowledge identified in Chapter 3 (section 3.4.1.1). As a reminder, the four types of knowledge drawn from the work of Lundvall (Lundvall and Johnson, 1994; Lundvall, 1996) were know-what, know-why, know-how, and know-who.

Following this, Table 6.4 provides a summary of the knowledge types that were identified in the data, from each participant and from secondary data. In addition, Table 6.4 also provides one example for each type of knowledge, taken from the participants' interviews (section 4.3.1) or from the additional students' placement reflections that were collected as secondary data (section 4.3.4). These examples are provided in order to exemplify what the four types of knowledge referred to within the participants' placement experiences

(further information on these codes can be found on the Codebook V5, in Appendix E).

Table 6.4 – Examples of knowledge transfer in the data

	JULIE	MAGGIE	DANIEL	SECONDARY DATA	EXAMPLES
Know-What	✓	✓	✓	✓	<p><i>“Hum, there was some material data. So you can get a data sheet, which has a different, this was for a type of steel, has a different composition of the steel, different elements and etcetera. So, I had a look through, I can’t remember the reason why I was looking through it now, but, just having a look through and noticed that some of the elements that were in there were a lot higher than they should be, 10, 20 times higher than you’d expect, for that type of steel.”</i></p> <p>Daniel, Interview 3</p>
Know-How	✓	✓	✓	✓	<p><i>“(…) sometimes you just ask questions depending on what the person said, so I did that, hum, since I’ve done quite a few of them, that’s quite easy for me now as well, you know, to just ask them questions and not actually run the semi-structure interview.”</i></p> <p>Julie, Interview 4</p>
Know-Why	✓	✓	✓	✓	<p><i>“(…) in student culture everybody always gets approached, being asked to do things, to fill things out. But I always made sure I had my lanyard on me, so they knew I was a member of staff and that I wasn’t sort of from a company or anything like that. And I made sure I explained what it was I was doing before I asked them to do it. Hum, which worked out a lot better, and, if I already knew some of the people, got them to do it first, then a lot more people were more approachable as well.”</i></p> <p>Maggie, Interview 3</p>

Know-Who	✓	✓	✓	✓	<p>This month I have decided to work closely with the occupational therapist. Having the chance to work intimately with a trained therapist is a rare opportunity and one that I thought was important to take up. He introduced me to a variety of techniques in physical, speech and vocational therapies.</p> <p>Lena, Monthly Reflective Pieces</p>
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Upon analysis of Table 6.4, the main conclusion to be drawn was that all participants experienced transfer of the four types of knowledge. In practice, this meant that every participant transferred theoretical knowledge, but also tacit and personal knowledge (Eraut, 1993) from university to the work-placement. The theoretical knowledge was incorporated in the research as know-what (Lundvall and Johnson, 1994; Lundvall, 1996) and included information, theories and concepts that the students learned in university and found useful in the placement. Examples of this transfer in the data were identified in Chapter 5, and included Julie’s knowledge on the topics of health and safety, sustainability, or research methods; Daniel’s knowledge of fluid mechanics and pipe flow; or even, Maggie’s knowledge of the formal use of the English language. The tacit and personal knowledge was incorporated in the research as know-how, know-why and know-who (Lundvall and Johnson, 1994; Lundvall, 1996) and included examples of the way the students made sense of, worked and learned in the placement. Examples of these types of transfer in the data were also identified in Chapter 5, and included all three participants’ use of research as a strategy for learning in the placement, Maggie’s ability to work with computers, or Julie and Daniel’s ability to learn how to use new softwares in the placement.

The data presented above provided reasonable grounds to consider that the participants experienced transfer of learning in the context of the transition between university and the workplace as multidimensional. This indication that every participant transferred aspects of previously acquired knowledge, but also skills and working strategies from university to the work-placement was in line with the understanding of the nature of the transition between university and the workplace and of the definition of transfer used in this study

and can be further interpreted as supporting the value of the learning transfer model in the investigation of transfer in a broader sense.

Regarding learning transfer theories, these results can also be used to argue that focusing only on the “carrying over” (Lave, 1988, p.24) of factual, codified knowledge provides a very limited view of transfer and creates a clear boundary for the interpretation of students’ transitions between university and the workplace, which limits the conceptualisation and promotion of transfer of learning in this particular context. On the contrary, the developed model’s specification of knowledge as what, how, why and who provided a finer analysis of the types of knowledge that, according to Eraut (1993), contribute to expertise development in the placement, thus creating a more encompassing narrative of the process of learning transfer between university and the workplace, concerning what is transferred.

Regarding the second proposition, which suggested that transfer of learning would occur from university to the workplace, but also in the opposite direction, the analysis of the participants’ experiences confirmed that Julie, Maggie and Daniel experienced transfer of learning in both directions. In addition, some examples that supported that claim (Table 6.4 and 6.5) were also found within secondary data (e.g. Lena’s Reflective Pieces).

Transfer of learning from university to the workplace was already addressed above (Table 6.4) and its data was briefly discussed. Therefore, the attention now is directed towards the analysis of transfer in the opposite direction, from the work-placement back to university.

Indeed, there were several examples in the data of the participants’ expectations and reports of transfer from the work-placement back to their final year. Furthermore, some of the participants referred to how they anticipated that this experience would transfer beyond their last year, into their future professional life. Table 6.5 provides a summary of the types of transfer from the work-placement to university and beyond that were identified for each participant and complements it with an example taken directly from the interviews or from the additional students’ placement reflections.

Table 6.5 – Types of transfer from the work-placement to university in the data

	JULIE	MAGGIE	DANIEL	SECONDARY DATA	Examples
Transfer from Placement to Degree	✓	✓	✓	✓	<p><i>"I think I realized how many hours in a day there are. Because obviously, like, if I don't have to go into university till 12 o'clock, sometimes I'll sleep into 11 o'clock. Whereas 9 to 5 you can't really not come in from 9 (...). I think I've become more routinized in the way that I do things."</i></p> <p>Maggie, Interview 5</p>
Transfer from Placement to Final Year's Work	✓	✓	✓	✓	<p><i>"I just decided that I'm going to do my dissertation on this topic. I was going to do it on another topic but I thought, I've worked on this for a whole year, so I might as well, and my supervisor said that, she'll supervise my dissertation."</i></p> <p>Julie, Interview 5</p>
Transfer from Placement to Future Work	✓	✓	✓	✓	<p>My placement year has enabled me to think about my future career choices. I now know that I am interested in working in the charity sector, particularly working with vulnerable people. (...) Although I had the most rewarding experience as a teaching assistant, I now know that I do not want to be a teacher in the future, which I was unsure of before beginning my placement.</p> <p>Lena, Monthly Reflective Pieces</p>

The first conclusion drawn from Table 6.5 was that, indeed transfer from the work-placement to the university was part of the students' experiences. They reported it being relevant for their final year work and for their degree. They also reported, although to a lesser extent, that their placement could become relevant for future jobs or interview processes. For example, in her final year

Maggie took on a part-time job that was mostly built on her placement experience. First, because she became aware of it through contacts with employers she had developed in the placement. Second, because her task in the new part-time job was to contact people on the phone, a skill that she lacked before starting the placement and developed in the placement.

Regarding the expectations and reports of transfer from the placement back to university, the participants reported mostly expectations related to improved self-management, strategic thinking and working, and confidence. Table 6.6 provides some examples of these aspects that were present in the data, for each participant.

Table 6.6 – Examples of transfer from placement to university in the data

	JULIE	MAGGIE	DANIEL
Self-Management and Strategic Planning/ Working	<p><i>"I'm just able to do more, I'm less distracted now. Before, I used to just get distracted by everything, like, every two seconds I was checking my phone. But now I know (...) I'll just spend two or three hours on my work and then, take, three or four hours off (...) I'm just more aware of, like, just finish your work and then have your time off."</i></p> <p>(Interview 5)</p>	<p><i>"(...) having done this year out, I've had to get used to a 9 to 5 schedule, which as an English student I haven't had before, because, in first and second year of university I had 9 to 12 hours a week. So I think, in my final year, I'll be a lot more organized in my time."</i></p> <p>(Interview 3)</p>	<p><i>"I think I realized I mean, my organization's probably going to be a lot better. So, for example when I do my final year project I'll have a better understanding of how to approach it, you know. Sounds daft, but not leaving for the last minute, things like that."</i></p> <p>(Interview 4)</p>
Confidence	<p><i>"(...) before, I always used to do the work and I would say to someone else, 'look you present and I'll do the work'. Whereas now, I think, I'll present a bit as well, (...) I know it's important (...) this year, I will be presenting."</i></p> <p>(Interview 5)</p>	<p><i>"I think there is a certain amount to do with the placement. I think I feel a lot better in myself (...). A lot of personal things changed as well, so I just felt a lot better about going back in my final year."</i></p> <p>(Interview 6)</p>	<p><i>"I think when I go back, I'll probably have a lot more conversations with lecturers on their work in the past. Hum, if I'm in a lecture, hum, learning something, (asking) 'how can I apply that in the future?', or, 'I like this subject, where can I use that in the future?'"</i></p> <p>(Interview 5)</p>

These findings seem to be consistent with the expectations articulated in Chapter 2 (section 2.3.3) that supervised work experiences bring several benefits to the students that undertake them. The importance of confidence, for example, was well documented by Eraut (1993; 2007) and Eraut and Hirsh (2007) in the study with novice nurses. He suggested that regarding the study with novice nurses, confidence was developed in overcoming the challenges of the placement and used in further navigating and interacting with the placement, thus being crucial for seeking learning in that context (Eraut, 2007). Within this study, the emergence of confidence as a theme was the consequence of questioning the participants about their development, their identity, and mostly, from seeking the participants' reflections on what was changing during the placement. Following this, it was difficult to assess if, for the participants, confidence was the consequence of overcoming challenging situations or part of the gradual mastery of their daily tasks. Nonetheless, it became clear that confidence was the most reported change throughout the placement and was considered by the participants as one of the major benefits of their placement experience. Moreover, their improved confidence was a change that overflowed into their final year of university.

However, despite this clear focus on the benefits of the placement regarding the return to university, the participants also reported some difficulties in specific tasks that they had not focused on during the placement.

JULIE: "(...) it's hard to, like, in terms of doing the exams, I's really hard to get back into the swing of studying (...)." (Interview 6)

DANIEL: "(...) writing a report has taken a lot longer because it's something I haven't done in over a year. Or an essay or something like that." (Interview 6)

MAGGIE: "well, at first I was quite anxious and I spoke to my tutors about it, cause I said, 'I've not written an essay forever, sort of like 18 months, now, I'm quite nervous about it'." (Interview 6)

Despite being present in the three cases, the reports in the data about these difficulties were not very frequent. Nonetheless, it was relevant to note that they focused on specific activities from the university setting that had no direct correspondence in the students' figured worlds of work. In terms of

interpretation, this raised questions about the characterisation of university and the workplace as two different settings, which could hinder students' transitions between university and the workplace, and further contributed to the need to discuss the implications of near and far transfer, which was already addressed earlier (section 6.2.1). In the data, this type of references were included in the code "fear of forgetting", which (further information can be found on the Codebook V5, in Appendix E) included the participants' references to their fear and anxiety of forgetting mostly know-what that they were not using in the placement. Regarding the argument being made about transfer as an intercontextual process, this data regarding the "fear of forgetting" could be interpreted as a limitation. The justification is that students' interpretations about the links between university and the workplace are key to framing transfer as an ongoing process. Hence, when students perceive the two figured worlds, university and the workplace, as intrinsically different the possibility for transfer is hindered. The code "fear of forgetting" was one of these instances in which the participants noted the discontinuities between university and the workplace.

However, despite this possibly contradictory analysis regarding the participants either experiencing the transition between university and the workplace as intercontextual or not, the general sense coming across in the data was that transfer of learning was generally experienced by the participants as intercontextual. The overall supporting data for this claim comprises not only the examples provided above of transfer from university to the workplace (Table 6.4), and from the workplace back to university (Table 6.5 and 6.6), but also the discussion of expansive framing addressed earlier (section 6.2.3).

To conclude, this section addressed the type of learning transfer between university and the workplace that was identified in the data. Accordingly, there were examples of learning transfer of know-what, know-how, know-why and know-who across all the data set. Additionally, such examples were identified within the transition from university to the placement and from the placement to university. There was also some evidence in the data that showed the participants intentions of transferring learning beyond university and into their future working life. These findings corroborated the argument presented in

Chapter 2, regarding the benefits of supervised work experiences for the students' academic and professional lives. Regarding literature on transfer of learning, these findings contribute to bridge the identified gap in research regarding transfer as more than straightforward and unidirectional and provide a starting point for the analysis of how learning transfer as intercontextual can be better promoted within students' transitions.

However, regarding the participants' actual reports of learning transfer, data showed that the participants reported mostly the intention to transfer know-what from university to the placement, whereas in the opposite direction their reports included not only know-what, but also, know-how, know-who and know-why. Therefore, using the developed learning transfer model allowed the verification in the data of transfer of learning as multidimensional and intercontextual. Furthermore, using the learning transfer model to guide data collection and to frame the analysis of the data permitted the uncovering of relevant aspects of the transition between university and the workplace. One of those was the importance of confidence for the participants' placement experiences and further return to university, which initially was not considered. This finding corroborated previous research developed by Eraut (1993; 2007; Eraut and Hirsh, 2007), who found confidence to be a fundamental learning for newcomers to be able to navigate the world of work independently.

Another relevant aspect was the possibility this study offered to identify a shift in students' perceptions of transfer, regarding what could be transferred in this transition. They all started with a limited view of transfer from university to the placement as transfer of know-what and gradually began perceiving transfer of learning from the work-placement back to university as more than just know-what. This shift in the perception of transfer was also identified regarding how transfer occurred in this transition, which is now addressed in the following section.

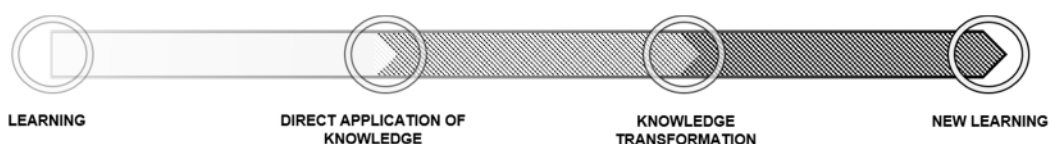
6.3.2 How was learning transferred?

Overall, research about transfer of learning has not been limited to the analysis of what is transferred from one context to another, but also how this transfer occurred. Indeed, previous research on transfer has focused on tasks, context and the individuals as units of analysis (Tuomi-Gröhn and Engeström,

2003). For example, Beach (1999; 2003) identified transfer mechanisms, such as developmental coupling, that allowed the analysis of interaction between the individual and social activity and their mutual change.

However, most often the research on transfer focused on only one unit of analysis at a time. Research focused either on the task, the context, or the individual in his or her mental processes or dispositions. The outcome was the provision of, at best, partial understandings and explanations of the transfer process, and at worst a fragmented view of what counted as transfer of learning. Indeed, to start the inquiry about how transfer occurred was important to first address the issue of what counted as transfer (Marton, 2006). Chapter 3 described several theories of learning transfer and highlighted that the selection of one over the others would produce different results based on different understandings and measurements of transfer (Tuomi-Gröm and Engeström, 2003; Marton, 2006). Hence, following Wenger's warning that "our perspectives on learning matter: what we think about learning influences where we recognise learning" (Wenger, 2009, p. 214) and acknowledging the same concern for learning transfer, the previous section addressed what was transferred within the participants' transitions between university and the workplace, highlighting a multidimensional approach. Accordingly, in this study transfer was conceptualised encompassing three dimensions, self, knowledge and social interactions, arguing that not only factual, codified knowledge was transferred between university and the workplace, but also tacit and personal knowledge (Eraut, 1993). Such a broad understanding of what counted as transfer within the transition between university and the workplace required the subsequent broad understanding of how transfer occurred. This directed both data collection and analysis to the investigation of instances of transfer occurring not only as the direct application of factual knowledge, but also as the transformation of knowledge and as new learning, as shown in Figure 6.3. In addition, these types of transfer were not conceived of as isolated events, but as part of an ongoing process of transfer.

Figure 6.3 – Types of transfer of learning considered in this study



Indeed, across the data there were examples of transfer from every participant that were congruent with a direct application of knowledge approach, but also with transfer as transformation or as new learning. Some of these examples were presented individually in Chapter 5 and are now summarised in Table 6.7. One important explanation regarding the data presented on Table 6.7 refers to the fact that only the data included in the row named “direct application of knowledge” was reported by the participants as learning transfer. The rest of the data, which includes the other two rows, “knowledge transformation” and “new learning”, were inferred from the data as transfer based on the broader understanding of transfer that guided this study.

Table 6.7 – Summary of the types of learning transfer identified for each participant in the data

	JULIE	MAGGIE	DANIEL
Direct Application of Knowledge	<ul style="list-style-type: none"> ▪ Literature Review ▪ Knowledge about Sustainability, Health and Safety and Research Methods 	<ul style="list-style-type: none"> ▪ Knowledge of English ▪ Proofreading ▪ Computer Skills ▪ Writing 	<ul style="list-style-type: none"> ▪ Knowledge about pipe flow, fluid mechanics
Knowledge transformation	<ul style="list-style-type: none"> ▪ Deadlines ▪ Working (Individual to Social) 	<ul style="list-style-type: none"> ▪ Deadlines ▪ Working (Individual to Social) ▪ Goal definition and success 	<ul style="list-style-type: none"> ▪ Working (Individual to Social) ▪ Prioritising work
New Learning	<ul style="list-style-type: none"> ▪ New Software (e.g. NVivo) ▪ Performing Data Analysis ▪ Communication Skills ▪ Knowledge about Disasters 	<ul style="list-style-type: none"> ▪ Communication Skills ▪ Using the Phone Professionally ▪ Website Management 	<ul style="list-style-type: none"> ▪ New Software ▪ Knowledge about Lean Sigma Principles ▪ Project Management ▪ Communication Skills

Overall, Table 6.7 depicts an image of transfer as wider and more complex than its understanding as the mere “carrying over” of knowledge (Lave, 1988, p.24). Indeed, this view of transfer as the acquisition, accumulation, transportation and application of knowledge (Sfard, 1998) was present in the data, as depicted above. However, its presence was nonetheless very limited in terms of the quantity of instances reported and of the types of knowledge it referred to, when considering this study’s conceptual model regarding the dimension of knowledge.

A closer analysis of what type of transfer knowledge (e.g. know-what, know-how, know-why or know-who) was included in the first row of Table 6.7 (direct

application of knowledge) revealed a predominance of know-what. This meant that, regarding transfer as direct application of knowledge, the participants reported mostly the transfer of theories, concepts and information learned in university to the work-placement. There were also some examples of know-how, but to a much lesser extent and not for every participant. Daniel, for example, did not report any transfer of skills from university to the placement. The value of this finding regarding the predominance of know-what in the students' reports about transfer should not be underestimated. On the one hand, because as I argue in the following section (6.3.3), this finding might reveal the personal views of the participants regarding transfer. On the other hand, because of the possible implications of why there was such a predominant report of transfer of know-what. The two possible explanations considered were that, either the students failed to consider other types of knowledge as learning transfer, or that they were not transferring other types of knowledge. The data directed me towards the second explanation, because, as also presented in Table 6.7, there were examples in the data of other types of learning transfer occurring within the students' transitions.

Accordingly, the data presented in Table 6.7 also represented how during the placement all the participants experienced the reconceptualization of previous knowledge into a version more appropriate for the new setting. One example, common to all participants, was the reconceptualization of what it meant to work in university and in the placement. All three participants changed their narratives of working in university, where they perceived working as an individual activity, in which they set their own goals and schedules, to a new narrative of working in the work-placement as a social practice, in which tasks, targets, schedules and successes were socially negotiated. In a traditional view of transfer, such changing narrative would not be considered transfer. However, I argue that the participants' adaptation to the workplace regarding its work processes was facilitated by the comparison of their mental map (Van Maanen, 1976) of working in the university to the new modes of working in the placement. This could be a case such as Marton (2006) documented, in which the ability to perceive differences between situations might actually enable individuals, in this case the students in transition, to act in a different manner than they would normally do. Thus, although not in a traditional way, previous

learning possibly enabled the students to act appropriately in a new and different setting. In this case, the suggestion was that it could be classified as transfer. It would be a case of far transfer (Mayer, 1975; Royer, 1978), more difficult to interpret and measure and also more problematic for the students to recognise as learning transfer, but learning transfer nonetheless.

The same analysis was then developed regarding the instances of new learning presented in Table 6.7. Drawing on the participants' learning of how to operate a new software for example, the question was if it was possible to link this new learning to previous learning in the university? The answer was that not directly, and not within the scope of this research. However, there was a strong suggestion that their ability to learn to operate these new softwares in a manner that they reported as fast and easy, could have been facilitated by having to regularly face this challenge of learning how to use or work with diverse and new computer programmes during their degree.

Nonetheless, the argument for transfer of learning within these last two examples of "knowledge transformation" and "new learning" was problematic because the students themselves failed to see them as transfer of learning between university and the workplace. This difficulty in the classification of what counted as transfer has long been declared as a limitation in transfer research and other authors have dealt with it before (e.g. Marton, 2006).

My approach of considering instances of knowledge transformation and new learning as transfer of learning was guided not only by the definition of learning transfer and the conceptual model used in this study, but also by previous approaches taken by other researchers in dealing with the same problem. For example, Lobato and Siebert (2002) assessed transfer in their study of an eight grade students' mathematic reasoning by asking if his most recent ability to solve a mathematical problem was in any way connected to a previous training in quantitative reasoning. Departing from this question the authors were then able to establish such connection and considered that there were reasonable suggestions of transfer. Marton (2006) argued that, within a more traditional view of learning transfer, such as direct application of knowledge, Lobato and Siebert (2002) would not have found any transfer in that situation.

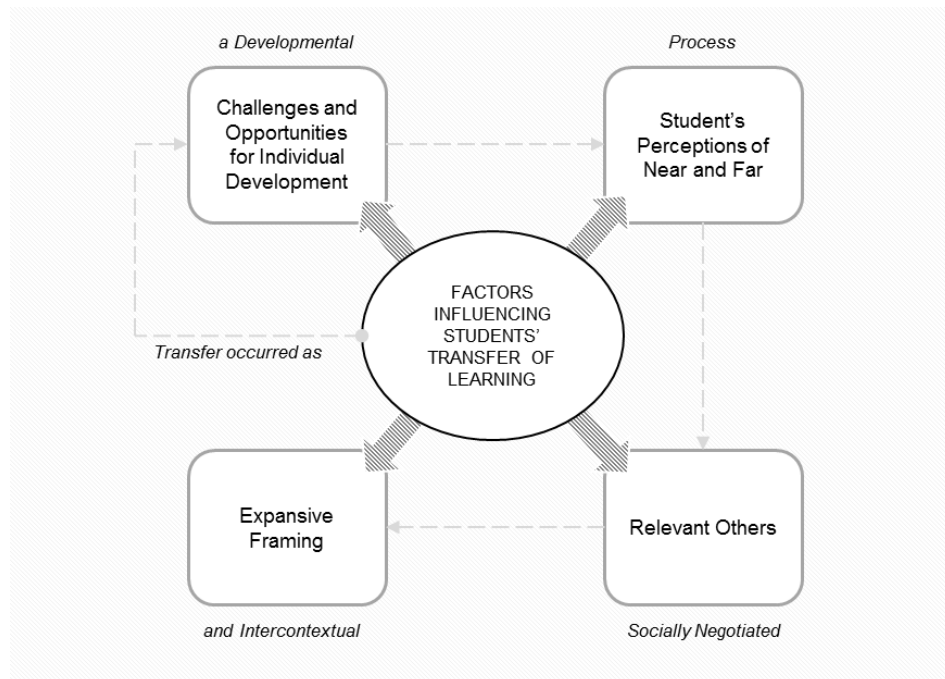
Instead, the broader scope allowed the authors to reasonably establish transfer of learning in that instance (Marton, 2006).

This discussion about what counted as transfer was fundamental for this study because of the proposed definition of transfer as a process (Section 3.3.3), rather than a disconnected two-moment event. The first of learning and the second of transfer of learning.

Hence, while in traditional views of transfer, such as the direct application model (Bransford and Schwartz, 1999) transfer was presented as a two stage event, in this study, learning transfer was broadened to include transformation of knowledge and new learning. This shift was fundamental to reframe learning transfer from a two-moment event to a process, in which it was important to follow the participants' learning trajectories in the placement and their sense-making of those transitions.

Within this view of transfer as a process, the findings highlighted a number of factors that might influence the students' transfer of learning in the context of the transition between university and the workplace. Those factors are identified in Figure 6.4, namely: (1) the students' perceptions of near and far or of the similarity and difference between the figured world of university and of the workplace; (2) the presence of challenges and opportunities for individual development in the transition between university and the workplace; (3) the expansive framing of the students' transition in terms of time, space, role and participants; and finally, (4) the influence of relevant others within the students' transitions. Furthermore, Figure 6.4 also relates these findings of how transfer occurred with the definition of transfer of learning adopted in this study, which describes learning transfer as an ongoing process of transformation that is intercontextual and supported and mediated by relevant others. Therefore, Figure 6.4 summarises the factors identified in the data as relevant for the participants' processes of learning transfer and relates them with the definition of learning transfer adopted in this study.

Figure 6.4 – Factors influencing the possibilities for transfer of learning



In the transition from university to the work-placement the social dimension was particularly prominent. What the data demonstrated was that relevant others (e.g. supervisors, tutors, peers, etc.) were fundamental mediational means, contributing to the participants' access to information, participation, learning and belonging to the work-placement.

Back in Chapter 3, when introducing the conceptual framework used in the analysis of learning transfer, mediational means were presented as physical and conceptual tools that individuals could use to mediate their learning (Holland et al., 1998). However, while the relevance of physical and conceptual tools was an area of interest, the data collected on this aspect was limited. For example, there were some instances in the data of Daniel using his knowledge of theories and concepts (conceptual artefact) to facilitate his action in the placement, such as in his intervention on the incorrect data presented by a company regarding a type of steel they would be using in the factory. There were also some instances in the data of Maggie using her placement's online agenda (physical artefact) to get to know the people in her placement, to track them when she needed some information or help, or to set her daily schedule. Maggie's example derived from a question that I formulated while observing her in the placement. Without that moment in which I saw her using that calendar to track a colleague, I might have not been

aware of such artefact and of its relevance in Maggie's navigation of the placement. Such realisation drove me to consider the restrictions on my data collection regarding this aspect, due to the limited opportunities to observe Maggie and Julie in the placement, and no opportunity at all for Daniel.

Indeed, overall physical artefacts quickly became part of the participants' routines and it is possible that without extended observation periods, some of them are ignored by the participants as something they had to learn. Hence, while being aware of this limitation, and asking particular questions about the software, the books, the possible physical artefacts the students might have been using, the data collected did not offer the desired depth for its analysis.

Nevertheless, the importance of mediational means, in terms of Swain and Steinman's (2010) perspective that people can also act as mediators was clear in the data. Data showed that social interactions were the most frequent means of learning context-specific approaches to the placement and the appropriate social repertoires of the communities of practice (Lave and Wenger, 1991; Wenger, 1998).

It is possible that relevant others in the placement setting assume such a leading role in the access to information, rules, processes and overall modes of working due to a lesser focus on formal structures of learning in the placement. Participants reported learning mostly through what can be described as informal strategies of socialization, such as Julie's observation of her placement supervisor (section 5.2.2), or Daniel's shadowing strategy (section 5.4.3).

For Daniel, the implicit nature of knowledge transmission in the placement was clear. By the end of his placement he suggested that other students coming to his placement or even in other placements started their experiences by shadowing different people, one week at a time in order to accelerate the process of learning about the placement's setting, people, activities, while developing a better understanding of how they, the new student, could make use of their knowledge and expertise in that new setting.

This suggestion was important in the sense that it demonstrated how the understanding of how the transition between university and the workplace was experienced by the students might allow, not only an improved understanding

of the process of transfer itself, but also enable a discussion about how placements, and the overall transition between university and the workplace, can be designed and/or changed, to facilitate transfer of learning.

To conclude, this section addressed how transfer occurred in the transition between university and the workplace within Julie, Maggie and Daniel's placement experiences. Data showed that transfer of learning within the participants' placement experiences occurred as direct application of knowledge, as knowledge transformation and as new learning. This finding supports the argument that transfer of learning is a complex process that occurs in a continuum from the application of knowledge in a very similar manner as it was learned to the possibility of building on previous knowledge to support new learning in different contexts. From this finding also emerges a possible criticism to classical learning transfer theories and to mechanistic views of the transition between university and the workplace for offering a very limited view of what counts as transfer. The following section addresses the students' perceptions of transfer of learning and reflects on possible implications for having and promoting a narrow understanding of learning transfer.

6.3.3 Participants' perceptions of learning transfer

Additional areas of interest also emerged during the analysis of the students' experiences of the transition between university and the workplace regarding transfer of learning. For example, the students' expectations of transfer and what they reported as transfer did not always coincide. That was the case in Daniel's journey, when he reported having considered the placement to be an opportunity to implement in practice the theoretical knowledge he had developed in university, and experienced a lack of perceived transfer of know-what (Lundvall and Johnson, 1994; Lundvall, 1996). It was also described in Maggie's experience of the placement, which she anticipated would be very different from her degree in terms of knowledge, but then experienced transfer of learning from university to the placement. Some examples of her reports of learning transfer included the use of spreadsheets in the placement, the ease in learning how to manage the vacancies website and an overall ease in dealing with the technological demands of her placement. Other examples

that I interpreted as transfer, despite her not referring to them as such, included Maggie's ability to research and write reports.

These conclusions became more relevant when considering that they directed the analysis towards the students' perceptions of transfer. Indeed, it was possible to identify several of the participants' understandings about transfer from the data, namely that:

- 1) Transfer was mostly reported by the students as direct application of knowledge in near transfer situations. As already discussed in this section, there were several references in the data to transfer of learning. However, most of these referred to instances that can be classified as a direct application of knowledge (Bransford and Schwartz, 1999). It seemed that students were able to identify and recognise transfer of learning, but only when there were similarities of knowledge or context to support it.
- 2) Students' perceptions of what should transfer from university to the work-placement focused mostly on know-what (Lundvall and Johnson, 1994; Lundvall, 1996). This was reported, for example, in Daniel's initial perception of the placement as an opportunity to develop his theoretical knowledge, but also on Julie's reports of transferring information about specific topics, and Maggie's reports of only transferring to the placement her knowledge of English.
- 3) Lack of perceived transfer from university to the work-placement was interpreted by the students as the degree not being so relevant to their placement. The students' focus on know-what (Lundvall and Johnson, 1994; Lundvall, 1996) meant that transfer of other aspects were not perceived by them as learning transfer. Their ability to do research was a good example of this, as they often used research skills learned in university to develop their placement activities, but never included them when answering questions regarding what previous learning was useful for their current tasks.
- 4) When asked about transfer or what in their placement had been useful to university, students focused on different types of transfer. Contrary to the transition from university to the workplace, the students were

able to identify several types of knowledge transfer in the transition from the work-placement to university. These included know-how of project management (Maggie and Daniel), writing (Julie, Maggie and Daniel), self-management and confidence (Julie, Maggie and Daniel), but also know-what such as lean sigma principles (Daniel), or industrial disasters (Julie).

- 5) Consequently, transfer was more easily perceived by the students from the work-placement to university, than from university to the work-placement.

My interpretation of the data regarding the students' perceptions about learning transfer was that the students demonstrated a narrow understanding of learning transfer, mostly focused on traditional notions of the application of factual knowledge. From my analysis of their experiences, this narrow perspective hindered their understanding of which aspects of their degree were useful to the work-placement and limited the value they attributed to their education regarding the figured world of work. Because of this, they also reinforced a perspective and understanding of the university and the workplace as two intrinsically different contexts. As discussed previously this stance might further hinder students' possibilities of transferring learning.

The fact that students articulated more easily experiencing transfer from the work-placement back to university also reinforced this conclusion, through the explanation that, possibly their understanding of transfer was broadened during the placement and, upon return to university they were not focusing only on factual knowledge. This can also be interpreted as a positive conclusion towards believing that students' perceptions of transfer can be improved through broadening the conceptualisation of learning transfer and preparing them for learning transfer that occurs beyond direct application of knowledge.

Consequently, regarding the research question of the extent to which the students' experiences of the transition between university and their placements were reflected by the developed learning transfer model, data revealed several positive aspects, but also some limitations. On the one hand, the learning transfer model reflected the complexity of the transition between

university and the workplace by permitting transfer of learning to be defined as a process that is multidimensional and intercontextual. Using the designed model also facilitated the process of data collection and analysis by identifying relevant areas of inquiry that were specific enough to enable a finer understanding of, for example, the types of knowledge that were transferred, but also broad enough that allowed the emergence of initially disregarded topics. Confidence development in the placement and its implication for the process of learning transfer was one of these cases in which the inquiry around the dimension of self prompted the development of questions regarding what changed during the placement experience regarding the participants' themselves.

On the other hand, the analysis of mediational means regarding the physical artefacts that may mediate the students' learning transfer in the placement was very limited and did not permit the development of relevant conclusions. The reason for this limitation might be concerned with the research design and the limited possibility of conducting observations. This aspect is further reflected on in the following chapter, but for now, it is important to acknowledge that because of the implicit nature of much of the learning that takes place in the placement, and the reported difficulty of novices to reflect on and articulate their own learning, methods of data collection that allow for the analysis of events as they unfold are, in my understanding, fundamental to capture all the learning that quickly becomes second nature for the participants. One other limitation of the model is that it should not be used as an instrument for a general theory of learning transfer. Instead, this model is focused on the transition between university and the workplace and highlights dimensions that are particularly relevant in this context. The model was beneficial to the researcher as an instrument to guide the analysis and interpretation of students' experiences of the transition between university and the workplace regarding transfer of learning.

6.4 How do students' perceptions of their transition between university and the work-placement and its theorisation inform and enhance our understanding of current debates on graduate employability?

Chapter 2 presented the argument that in the past decades placements have been widely construed within higher education as instruments for employability. This view derived mostly from the implementation of an employability agenda that represented educational policy efforts to follow a particular understanding of Human Capital Theory (Becker, 1993, 2002) that focused on educated individuals as promoters of national economic growth.

By following this economic-based rationale for higher education, placements were interpreted as opportunities for the promotion of students' employability and for putting theory into practice in an often unproblematised manner. Employability was generally defined as the development of transferable skills and the improvement of students' opportunities to secure a graduate job after their studies. Some criticisms were made to these views and Yorke and Knight (2004) noted that the evolution of employability's definitions towards becoming more processual and including, for example, subject knowledge might have been the outcome of the changing perception of employability as more multidimensional than what was initially considered.

Furthermore, it was also argued in Chapter 2 that this understanding of the transition between university and the workplace as the making of employable graduates that would "hit the ground running" (Atkins, 1999, p.274) had important implications for the understanding of transfer of learning. Employability frameworks and the premises of Human Capital Theory applied to higher education assumed transfer of learning as a one-way, straightforward opportunity to apply university's knowledge and transferable skills in a practical environment. These assumptions contributed to a mechanistic view of the transition between university and the workplace, based on the direct application of technical knowledge and on the perception of individuals as simply "carrying over" that knowledge from one place to another.

Overall, this study argued that the language of transferable skills and the narrow understanding of employability, transfer of learning and of the transition between university and the workplace were problematic. Consequently, the main proposition under analysis in this section was if the overall argument of the policy dominant discourse of employability as the possession of knowledge and skills that are transferable, and of the transition between university and the workplace as straightforward and mechanical, were easily translated into the participants' experiences of the transition between university and the workplace.

Overall, the data showed that the participants were aware of the economic based arguments for having a placement (e.g. improving their employability) and that to some extent they agreed with those views. Table 6.8 presents some examples taken from the code "reasons for having a placement" (further information can be found on the Codebook V5, in Appendix E) that reflect the participants' awareness of the economic rationale for having a placement.

Table 6.8 – Examples from the sub-code “reasons for having a placement”

	JULIE	MAGGIE	DANIEL
Focus on Employability	<p><i>“It (placement) just provided (me) with experience because my brother and sister also studied in management and they got first class degrees, but whenever they were applying for jobs the employers always said ‘you don’t have any experience’. So, I thought I could really get some experience.”</i></p> <p>(Interview 1)</p>	<p><i>“For the copywriting internship, the reason I did that was that I could put on my CV, on paper, that I have had experience professionally in writing (...). If you’ve gone through an interview process, you’ve been employed, knowing now that other candidates were interviewed that you were the best in written wise, that’s really useful.”</i></p> <p>(Interview 1)</p>	<p><i>“Well, that was one of the key things that I did it in the first place (for getting another job). Because a lot of people say, you know, ‘oh, you’ll struggle to get a graduate job if you don’t have experience and things like that’. And I suppose it is true, you know, just to some extent.”</i></p> <p>(Interview 5)</p>

As Table 6.8 shows, the participants reported interest in the placement as a strategy fundamentally connected with the advancement of their future careers, by possibly improving their chances of getting a graduate job after completing their studies. There were other arguments for having a placement in the data, such as having a break from education (Maggie) or broadening

knowledge (secondary data - Lena), but the rationale that focused on employability was, unquestionably, the most reported one across the data set. Nonetheless, a word of caution is necessary in Daniel's case as he also reported having some doubts if recent engineering graduates actually struggled to get a job. His understanding, at least at the time of our first interview (February, 2014), was that engineering graduates did not have to struggle much to find a graduate job. However, by the time of our final interview (January, 2015), Daniel was looking for a summer placement and was struggling to find one, which contrasted with his initial perspective and made him feel confused.

"When I left the placement, I thought because of the experience I had, I'll be a lot more employable, for future jobs. And at the minute, I'm looking for a summer placement, and I'm struggling massively to get responses from companies. (...) I really don't know why, because, obviously, I've got the experience, I've got, you know, I have an average 75%. So I'm kind of a bit lost at the minute as to what employers want. So I, although I may have a different opinion, I thought the experience with the high grade is, I don't know, I'm a bit lost. Hum, you come up with a good answer for that and let me know!"

(Daniel, Interview 6)

What this quote reflected, in the same way as the overall data set did, was that the participants did not report a linear understanding of employability. Moreover, the participants did not report views that only reflected the straightforward and mechanistic transition between university and the placement that the employability agenda and the higher education policy's reading of Human Capital Theory assumed. On the contrary, the data showed that there were different perspectives on employability coming across in the data.

At this stage, Holmes' (2013) competing views on graduate employability were beneficial to make sense of the participants' multiple understandings of the transition between university and the workplace regarding employability. According to Holmes (2013) there are three competing perspectives on employability; including employability as possession, as positional and as

processual. In Chapter 2 this framework was presented as a recent development in the study of graduate employability by its wider interpretation of this phenomena and by going beyond the notion of employability as the acquisition and application of transferable skills.

Indeed, this framework improved my understanding of the participants' reports and allowed a more sophisticated interpretation of their experiences and understandings of employability. Hence, following Holmes' (2013) classification to analyse the data showed that, firstly, the participants reported mostly experiences of employability as possession. This meant that the participants were discussing employability following, for example, Yorke's (2004, p.8) widely known definition of employability as a "set of achievements" that included knowledge, skills and personal attributes.

However, the participants' list of possessions went beyond Yorke's (2004) definition to include other aspects, such as, for example, experiences of work. Table 6.9 presents some examples of the type of things the students included in their perspective of employability as possession.

Table 6.9 – Examples of employability as possession and positional in the data (drawing on Holmes, 2013)

	JULIE	MAGGIE	DANIEL
Employability as Possession (focus on knowledge and skills)	<p><i>"I think it (university) gives you a good knowledge base. I think it's founded in giving you a good knowledge base and then also helping with communication, like the presentations, and helping with group work. So, I think it gives you, like, a good foundation on several levels."</i></p> <p>Interview 6</p>	<p><i>"So, it means I can actually put on my CV, like, I've done this module. So for instances things like that language, text and context that takes you through a range of histories and language and how it's progressed over the years, also goes through the key areas of language. So, there's grammar, spelling, things like that, so I can actually put on my CV I've done this module, this is what it included."</i></p> <p>Interview 1</p>	<p><i>"I think, you know, the degree becomes more relevant, because you can speak to your prospect employer about individual subject matters. So, I could say, for example, hum, you know, 'I have very high grades in thermodynamics, so material times', and that makes you a bit more employable to them, if that makes sense."</i></p> <p>Interview 6</p>

<p>Employability as Possession (focus on other aspects)</p>	<p><i>“Hum, placement year (laughing). A lot of voluntary work, maybe. And then just general things, like, just generally being able to talk about how you’ve learned from stuff daily. People just go on holidays and like, you know, adventurous holidays and then they talk about that and the employers even like that.”</i></p> <p>Interview 6</p>	<p><i>“It’s not enough in the sense that been said by employers that you need to be able to show that you got academic skills, but also, that you can do things in your extra-curricular, that you can manage your time well, that you’ve also got experience, (...). It’s not enough anymore to just get a first in your degree. I can’t remember who it was by, but there’s a quote that’s, basically, between two students, one who has a first in their degree, and one who’s got a 2.1, who’s also worked part-time, volunteer and, maybe somebody who’s part of a committee society, that person will get the job, even though the other person has a first in their degree.”</i></p> <p>Interview 5</p>	<p><i>“It seems to be something that’s expected when you go for a job interview. You know, it’s not, ‘do you do any extra-curricular activities?’, it’s ‘what do you do?’ (...). It, it just seems like an expectation. It’s almost like a degree plus extra-curricular activities, plus experience is becoming the new benchmark. If, if you don’t meet that benchmark, your chances are just reduced, massively. Whether that’s true, I don’t know, but that’s the way it comes across.”</i></p> <p>Interview 6</p>
<p>Employability as Positional</p>	<p><i>“Oh, well, obviously my year in research should help me a bit, because, hum, very few people have done it, so it should help me to stand out.”</i></p> <p>Interview 5</p>	<p><i>“I do my stuff for my degree first, and then, with the time that I’ve got left, I do my other things. Because that’s a choice, it’s not that I have to do those things, I’m choosing to do those things, because I know it will put me in a good stead.”</i></p> <p>Interview 5</p>	<p><i>“(…) you can have 100 graduates come out of university with a 2.1 or a first, but you might only have 20 of those graduates that have actually the skills set to go with it, and the right mentality to actually pursue what they want to pursue.”</i></p> <p>Interview 5</p>

Looking at the data presented in Table 6.9 regarding employability as possession, it is possible to argue that the students’ understandings of this type of employability went well beyond the notion of skills, knowledge and personal attributes that were part of most employability definitions (e.g. Hillage and Pollard, 1998; Harvey and Knight, 2003; Yorke, 2004; Cole and Tibby, 2013). In their reports, the participants included references to work experiences, placement experiences, involvement in sports, societies and voluntary work. Moreover, the participants discussed their views of employability as if it was *“probably a lot of other things as well”* (Daniel,

Interview 6). Overall, regarding employability as possession, the participants did not refer to a set list of skills, knowledge and attributes, but more often described an ever growing list that constantly created a new benchmark for recent graduates in search of a job.

The picture the participants were gradually, but incrementally building along the interviews in their narratives of employability resembled the image of a young kid with a sticker album to fill. They bought new stickers, traded stickers, negotiated stickers and the ultimate goal would be to, not only complete the album, but to be the first one to achieve such deed. Like the kid in this metaphor, the participants talked about their experiences as the necessary means through which they could build proof of their value to show to future employers. Therefore, even within their interpretation of employability as possession, there was the suggestion that having those skills and knowledge would not be enough without the proof of having them.

“When I was in industry, I would quite often hear people say, you know, ‘a degree is not worth the paper it’s written on’, ‘you only need the degree to get accepted for interviews and things’. And I suppose that’s relevant in some cases, if you want to go into a job that isn’t relevant to your degree, because, obviously then you get a lot of training on the job and things like that. It’s almost like the degree is just proof that you can learn.”

(Daniel, Interview 6)

“(…) if they (employers) ask me a situation of how I solved something, in university, if I hadn’t done a year in research, I just feel like, hum, solved this exam question, or (laughing) something like that, I had no experience, I’d have to make something up (laughing). But now, you know, I do have (...). You have more examples, cause you have more experience and you, you’ve dealt with, once you’re working, you have so many problems that come to you. So, you just, you have to overcome them, but then you have examples of, ‘oh, I did this here, and did this, and did this’.”

(Julie, Interview 5)

In a sense, the sticker album metaphor and the quotes presented above contributed to formulate the argument that the participants’ understanding of

the transition between university and the workplace was, to a great extent, about signalling something to future employers. It could be a signal of good grades, but also, of alternative, relevant and varied experiences, ranging from sports to engagement in societies; from part-time and placement experiences, to volunteering. This finding regarding how students interpreted employability as possession through their experiences provided an insight that was not predictable within the view of the transition between university and the workplace promoted by the employability agenda. It portrayed a more complex picture of students' interpretations and experiences of employability, indeed departing from the commonly accepted view of employability as the possession of knowledge, skills and attributes, but moving towards the inclusion of their broader, and not necessarily academic, experiences during university.

Furthermore, the sticker album metaphor developed from the data also encapsulated another one of Holmes' (2013) competing views on employability, that of employability as positional. Some examples of this type of employability in the data are also identified in Table 6.9, and they reflect students' understandings of employability as some kind of "competition" between graduates regarding available jobs. According to Holmes (2013), the positional aspect denotes the relational nature of graduate employability and represents a particular view that has been generally ignored by previous employability frameworks. Following this observation made by Holmes (2013), it was interesting to note that the participants were not so explicit about experiencing employability as a competition as they were about it being a matter of collecting experiences and proof of those experiences. Nonetheless, there were some instances in which they talked about the things they could do that "*really distinguishes you from people*" (Julie, Interview 6), meaning, from other graduates that might have similar degrees, knowledge and skills.

The analysis of these references of employability as positional showed that the participants experienced employability not only as the acquisition of knowledge and skills, but as the constant comparison of their knowledge, skills, attributes and experiences with a benchmark that is always moving. Therefore, even if placements were perceived by the participants as instruments for employability, their experiences of the transition between

university and the workplace were far from the straightforward and mechanical transition based on the application of technical knowledge that was expected in the policy discourse on employability. What the data showed was that the participants reported employability as possession of skills, knowledge and attributes (Yorke, 2004), following the dominant policy view, but experienced it more as positional (Holmes, 2013) and against a moving benchmark, which was a source of concern and anxiety, but also a major drive in the participants' initial decisions to have a placement.

The last view of Holmes (2013) towards graduate employability as processual focused on the development of identity through situated processes of identification. Holmes (2013) efforts to broaden the scope of employability have been supported by other authors (e.g. Tomlinson, 2012; 2015; Jackson, 2014b), and identity has become a key-construct (Jackson, 2014b) in recent approaches to employability.

In this study, the participants did not refer explicitly to a view of employability as identity development. However, the adopted definition of learning transfer in this study (section 3.3.3) included self as a dimension of analysis regarding students' processes of learning transfer in the transition between university and the workplace. Accordingly, the participants' trajectories and narratives of becoming were presented in Chapter 5 (sections 5.2.3, 5.3.3, 5.4.3) and explored further in section 6.2.2 in order to investigate if the participants experienced any identity shift during their placement experiences and if this was correlated with their transfer of learning. The findings explored regarding the dimension of self, showed that the confidence the participants developed during their placements might have been associated with their desire and ability to become better students on their return to university. Furthermore, it was argued also in section 6.2.2 that during the placement the participants engaged in a process of testing possible professional identities and notions of being a professional that are suggested to influence their future experiences with the world of work in terms of searching for appropriate jobs and interacting with the workplace. Overall, these findings support the recent trend to include identity development within employability frameworks and this study suggests that placements should be reframed as instruments for learning and

development through which the students may develop important tools and strategies to face future experiences with the world of work.

Finally, I believe that it is important to address here the criticism posed by previous research regarding students' views of employability being under-researched and generally unknown (Moreau and Leathwood, 2006; Gracia, 2009; Tymon, 2013) and the imposition of a policy discourse that narrows students' experiences of the transition between university and the workplace to a mechanistic application of knowledge and skills. This research opted to listen carefully to participants' experiences, stories, interpretations and sense making of a complex transition that is, often, their first incursion into the world of work. The purpose of this choice was to gain insight into what are the factors that might influence their experiences both positively and negatively and to systematise the acquired knowledge into strategies that may be used to better inform university engagement with supervised work experiences regarding transfer of learning and employability. The participants were crucial in this endeavour and through the generous sharing of their thoughts, opinions, fears and accomplishments this thesis was formed.

Students' voices are often overlooked in policy documents and regulations and there is a responsibility of research to make these voices visible and allow them to inform the policies that address them (Edwards, 2010). Using the developed learning transfer model to investigate students' transitions between university and the workplace enabled me to listen carefully to the participants' engagement with employability and frame it was wider and more complex than what was assumed by the employability agenda frameworks. In the data, students talked about employability as possession, but experienced it also as positional. Overall, they revealed confusion towards the dominate discourse since it did not reflect their struggle and underplayed the importance of the relational dimension of employability. Identity was also found to be relevant towards employability dimension, but it was absent in students' narratives of employability, proposing that there is a possibility to explore this dimension further within students' preparation for work-placements.

To conclude, this research suggests that listening to students' voices is fundamental to better understand the students' transitions between university

and the workplace regarding employability. They are the only ones that can shed light on what are the barriers and facilitators in the transition between university and the workplace, and in listening to these students this research has been able to identify some limitations in previous definitions of employability. It has presented data that supports recent trends towards focusing on identity development as part of employability definitions. And finally, suggests that employability's overall aim of assuring that students are well prepared to face the challenges posed by the world of work and beyond, will be facilitated by a better preparation of students for transfer of learning.

6.5 Summary

This chapter presented a cross-case level of analysis of the participants' transitions between university and the workplace, and of their learning transfer processes within those transitions. Through this analysis the chapter answered the three research questions that guided this study. Namely, in this chapter I argued that the participants experienced the transition between university and the workplace as multidimensional, intercontextual and developmental and that the students in transition made sense of this transition by a gradual and incremental understanding of the figured world of work, supported by the help of relevant others and by learning to frame their learning expansively.

Regarding the usefulness of the learning transfer model, this chapter argued that it facilitated the conceptualisation of learning transfer between university and the workplace as a complex process with multiple aspects that may influence students' experiences. Here I also argued that there were some limitations in the investigation of some dimensions of the model, such as the limited access to the possible importance of physical artifacts as mediational means for the participants' learning transfer. Finally, I argued that listening carefully to the participants' voices regarding their experiences of the transition between university and the workplace is necessary to better inform educational policy of the aspects that can facilitate that transition and of what are the implications, for students and their future employability and development of having a placement experience. In light of these considerations, this chapter suggested that work-placements should be

reframed as instruments for development and learning, instead of instruments for employability.

The next and final chapter draws on the whole study to summarise the main findings, present its main contributions to knowledge, reflect on possible implications for theory and practice, and point towards possible avenues for further research.

Chapter 7 – Conclusion

7.1 Introduction

This study investigated the process of learning transfer within students' transitions between university and the workplace, by analysing the one-year work-placement experiences of three undergraduate students from the University of Leeds. The previous chapters have addressed the theoretical concepts on which this study was designed (Chapters 2 and 3) and presented an alternative framework for the investigation of learning transfer within this particular context (Chapter 3). Previous chapters also presented the main findings and discussed them in light of different theoretical approaches on transfer of learning, arguing for the need to develop a broader and more encompassing understanding of students' transitions between university and the workplace (Chapters 5 and 6).

Overall, this study has provided some insights into how Julie, Maggie and Daniel experienced the transition between university and the workplace and about the process of learning transfer in those transitions. In doing so, it problematized simplistic understandings of transfer of learning and of the transition between university and the workplace, by contributing to knowledge about students' work-placement experiences.

This final chapter is one of reflection into what was achieved by this research and its possible implications for theory and practice. Therefore, it begins with a presentation of the main findings regarding three key areas: the students in transition, the learning transfer model, and work-placements. The chapter then continues with a reflection on methodology and on the implications of the study for policy, practice and research. The last section provides a summary of this study's overall contribution to knowledge and identifies possibilities for further research.

7.2 Summary of findings

The purpose of this thesis was to investigate students' transfer of learning between university and the workplace, by analysing how students navigated and made sense of this transition in their one-year work-placements. The

findings of this study were expected to contribute to the theoretical discussion on transfer of learning and add to the debate on how transfer of learning can be examined and promoted within this specific context. This study also proposed to problematize students' placement experiences in light of a policy dominant discourse based on an interpretation of Human Capital Theory (Becker, 1993; 2002) and employability frameworks (e.g. Yorke, 2004) that highlighted an economic-based understanding of the transition between university and the workplace, framed placements as instruments for employability and assumed transfer of learning as easy, straightforward and mechanical.

Consequently, this section focuses on the three main features of the study, (1) the student in transition, (2) the learning transfer process model, and (3) the placement, by consolidating the findings, analysis and interpretations presented throughout this thesis.

7.2.1 Being a student in transition

During university, but probably starting even before that, during ones' overall educational journey, individuals learn how to be students. They learn how to think as students, how to act as students, and how to identify with being a student (Daniels and Brooker, 2014). To some extent, by the time any individual reaches university, they have spent most of their lives making sense of the figured world of school and education and of their place and role within it.

Moving on to a placement such as the ones undertaken by the participants in this study becomes an interruption to that long period of learning how to be a student. In that transition students are asked, although often implicitly, to let go of those figured worlds and identities and learn to belong to a new community (Louis, 1980). There, students in transition have to learn a new identity, in a new role. Theoretically, the importance of identity in learning and on learning transfer has been increasingly advocated by situated and sociocultural theories (Lave and Wenger, 1991; Beach, 1999; 2003), while processual approaches on employability have also more recently advocated for it as a research focus (*inter alia* Tomlinson, 2012; Holmes, 2013; Jackson, 2014b).

In this study, belonging to the placement's community of practice (Lave and Wenger, 1991; Wenger, 1998) was perceived as the ultimate level of participation and, achieving it was intimately connected with the participants' ability to develop within their new role in the placement. Nonetheless, each participant dealt with identity development in a different manner.

Julie experienced an identity confrontation in the placement (Tanggaard, 2007; 2008), in which she struggled "to cross an identity boundary going from student to worker" (Tanggaard, 2008, p.220). In this struggle, Julie did not let go of her student identity (Louis, 1980) and, instead, reinforced it by maintaining some features of her student life during the placement and by assuming the same student positioning in her relationship with the placement supervisors and peers. Maggie also experienced an identity confrontation in the placement (Tanggaard, 2007; 2008). However, unlike Julie who reinforced her student identity, Maggie developed a unique approach that she named "fluid identity" (Maggie, Interview 2). For Maggie this approach meant that she could move back and forward between being a student and a worker on her convenience and on her placement's convenience. Although literature states that moving back and forward between education and the workplace can be confusing for the students in transition (Perrone and Vickers, 2003; Tanggaard 2008), Maggie's experience was that this fluid identity served her best regarding the purpose of belonging to the work placement. Finally, Daniel experienced what I have argued to possibly be a diametrically opposite experience from Julie's. He wanted to engage professionally with the placement from the start, so he searched for ways to gain more responsibility in the placement and to lead his own projects. By the end of the placement experience Daniel was no longer perceived as a placement student, he had become one of them and was perceived as an engineer.

Although these experiences were unique for each student and specific to their broader placement contexts, some overarching aspects emerged across their experiences. First, the realisation that possible identity shifts in the transition between university and the workplace might influence students' engagement with the placement, which in turn might influence their learning transfer. Such conclusion supports sociocultural theories and recent employability frameworks' effort to acknowledge the role of identity as part of learning

transfer processes. Second, learning to belong can be a source of struggle for the participants. Such conclusion supports Lairio *et al.* (2013) claim that students should be given opportunities to construct their professional identities while still at university, due to its possible impact on how they will experience the transition into work life. And finally, that students' professional identity was developed in relation to the students' interactions with the others that inhabited their placement experiences, but also on their self-positioning within their placements' communities of practice (Wenger, 1998). Data showed that becoming part of the placement was as much an aspect of self-identification with the new role and with the placement's notions of professionalism, as it was of recognition by the placement's peers of that role.

Generally, the data presented in this study regarding the students' placement experiences did not corroborate the assumption presented in Chapter 2 that moving from university to the workplace was either mechanical or straightforward. Nor did it corroborate the assumption presented in Chapter 3 that this transition' success would rely on the transfer of academic knowledge as mere application. Instead, the data presented participants struggling to belong and battling through the differences between the figured worlds of university and workplace. This finding corroborated the classical view that far transfer situations are challenging and may become sources of struggle for the students in transition (Mayer, 1975; Royer, 1978), thus reiterating Louis (1980) and Arnold's (1985) argument that students should be better prepared to deal with the surprises and unexpectedness of a new workplace. Learning how to bridge the apparent dissimilarities between university and the workplace (Resnick, 1987; Candy and Crebert, 1991; Tangaard, 2008) and developing the appropriate mental maps (Van Maanen, 1976) for the new setting is something that students in general, but specifically those going on a work-placement experience, should be prepared for.

Within this context of change and far instances in the transition between university and the workplace, this study found expansive framing (Engle 2006; 2012; Engle et al., 2010) to be a relevant tool for the promotion of transfer. Learning how to frame their own learning in terms of time, space and contribution was a key aspect of the participants' development during the placement and in improving their expectations for learning transfer on the

return to university. Theoretically, the evidence regarding the participants' ability to frame their own learning was interpreted as an important development of expansive framing theory. For Engle (2006; 2012; Engle et al., 2010) expansive framing was conceptualised from education to other scenarios and the teacher always assumed the role of promotor of framing. The findings presented in this study add to this theory in the sense that students can also assume the role of promoters of expansive framing. In practice, this finding could be used to make the argument for wider placement experiences implementation in higher education and also, for their introduction at an earlier stage. One possibility to be further investigated would be the extension of the placement model used in medical schools of short placements occurring more often during the degree to other degrees. Previous research on supervised work experiences has already advocated for wider professional experiences during university, including a focus on identity development (e.g. Urrieta, 2007; Ibarra, 1999; Daniels and Brooker, 2014). My view is that it would not be a massive leap to extend this recommendation to other degrees and professional areas. Even more so since previous research has revealed that students from less vocational degrees struggle more to recognise the value of their degree in the job market, and that these are also the students collecting less returns on their degrees, on average.

Data also presented the participants juggling learning about the changing context, the changing tasks, the changing relevant knowledge and procedures to complete them, and the changing nature of social interaction. Furthermore, regarding the return to university, data showed the participants' readapting to the initial familiar context bearing in mind all the learning and change they had undertaken during the placement year. These findings emphasized the view of learning transfer proposed in this study as multidimensional and intercontextual and reinforces the urgent need to broaden students' understandings of students' transitions between university and the workplace to encompass all the relevant dimensions. The data collected regarding students' return to university reinforced the criticisms made by previous research on the lack of support students receive to reintegrate their learning during the placement back to their degree (e.g. Fell and Kuit, 2003: Auburn,

2007) and thus calls for higher education institutions to be more mindful of this transition from work-placements back to university.

In conclusion, this study showed that regarding being a student in transition the dimension of self and identity development are important aspects of students' learning transfer processes; that there was some level of direct transfer of learning, but that the participants engaged in processes of transformation of learning and developed additional new learning; and that students were not well prepared to deal with the multidimensional nature of transfer and always deal positively with far transfer instances, surprises and the unexpected.

I shall suggest that based on the findings of this study, students undergoing placement experiences are made aware of the several dimensions of learning transfer, particularly the dimension of self, and of its implications to the transition into the world of work. I believe that there are many opportunities at university level to explore with current students their emergent professional identities and understandings of professionalism, in order to better prepare them to deal with the transition into work. The fact that students moving between university and the workplace encountered far transfer instances (Mayer, 1975; Royer, 1978) was presented in this study as one of the most difficult aspects students had to overcome during their one-year work-placements. Having experienced the most far experiences of all participants, Daniel often commented on the placement's lack of support for placement students and the desire for a more structured entrance into the world of work. Daniel arguably had the hardest experience of understanding the figured world of work because of the perceived differences between university and the sugar factory. Learning to bridge those differences and make sense of the figured world of work is possibly the most important task a student will face when entering the workplace. How prepared students are to deal with far transitions might dictate how successful they are in adapting to the workplace and learning transfer.

7.2.2 The learning transfer process model revisited

The development of the learning transfer process model (section 3.4) derived from the analysis of learning transfer literature and the realisation that transfer

theories offered a fragmented approach to transfer conceptualisation and research. Additionally, but diametrically opposed, were the common assumptions about transfer of learning between university and the workplace (*inter alia* Guile and Young, 2003; Perkins and Salomon, 2012; Larsen-Freeman, 2013). These assumptions that transfer would easily occur had already been deemed simplistic (Eraut, 2004; Veillard, 2012) and, regarding my growing understanding of the concept of learning transfer, they were also very narrow. Indeed, one of the main intentions of this study was to problematize the view of learning transfer as a two-stage event; one initial moment of learning and a following moment of application of the previously learnt material to a different situation (transfer).

My argument was, following also the arguments of other researchers (*inter alia* Bransford and Schwartz, 1999; Beach, 1999; 2003), that this narrow understanding of transfer limited its perceived value and scope for application in more complex, real-life situations. Indeed, other researchers (e.g. Sfard, 1998; Packer, 1991; Hatano and Greeno, 1999) had already faced the conceptual and methodological limitations of the learning transfer concept and many opted to reconceptualise it. Some examples include Beach's (1999; 2003) popular consequential transitions, Bransford and Schwartz's (1999) preparation for future learning, or even Billett's (2013) more recent adaptability.

Despite the advances in the study of transfer that these reconceptualization's enabled, they also created some rupture by focusing on the shortcomings of the concept and creating new terminologies. Within this study the learning transfer terminology was maintained as I believe that despite the metaphorical constraints discussed earlier (section 3.3.1), the image it provides to the reader can be a good foundation to begin a discussion in which transfer is problematized and developed. Therefore, the learning transfer process model was the outcome of this critical analysis and encapsulated my attempt to explore learning transfer within the specific context of the transition between university and the workplace.

Overall, the learning transfer model designed for this study (section 3.4) was helpful towards achieving several of the aims presented above, namely in

acknowledging the complexity of learning transfer in life real life situations; in broadening its definition by analysing multiple dimensions; and by broadening what could count as learning transfer in this particular context.

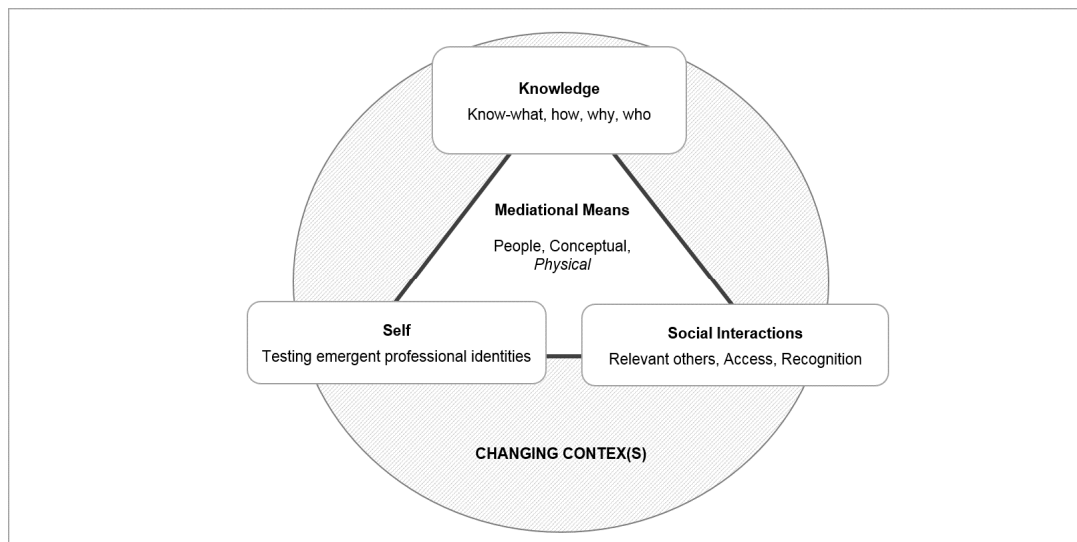
Drawing on the learning transfer model, which included three dimensions of learning transfer (knowledge, social interactions and self), introduced mediational means (physical, conceptual and people) as instruments to mediate learning transfer, and considered the transition between contexts as the place for transfer, contributed to the definition of learning transfer within the transition between university and the workplace as a multidimensional and intercontextual process that is developmental and socially mediated. Therefore, the learning transfer model contributed to my understanding of what got transferred in the students' transitions between university and the workplace (section 6.3.1), how it got transferred and where (section 6.3.2). Indeed, the learning transfer model laid out the dimensions that were relevant to transfer in theory, but allowed me to identify the ones that the participants' experienced and struggled with in practice. This possibility to investigate students' experiences and sense-making was fundamental to connect with the students' voices (Johnston, 2003; Edwards, 2010) regarding what they experienced in this transition, which is essential to better inform universities and policy makers of how these experiences can be improved.

Another conceptual view promoted by using the learning transfer model as an interpretative framework was the understanding of learning transfer as a continuum. Often learning transfer theories resorted to dichotomies to explain transfer (e.g. Gagné, 1965; Mayer, 1975; Royer, 1978) or focused on a two-phase process that created a view of transfer as carrying-over knowledge from one place to another. However, in this study transfer was defined as a process and this conceptual shift allowed for the understanding and verification in data of learning transfer occurring as application of knowledge, but also as the transformation of knowledge and new learning. Knowledge itself was offered a larger scope than in traditional perspectives on transfer and it facilitated a more detailed analysis of students' placement experiences regarding what learning was transferred. It was stated before that basing this study on classical views of transfer would have produced a very limited account of the participants transfer, one that happened rarely and mostly regarding know-

what. This overall processual approach to learning transfer allowed for flexibility and nuance in the analysis of the participants' experiences.

However, the learning transfer model also offered some limitations. The pictorial representation of the learning transfer process offered by Figure 3.1 focused on the broad areas of inquiry and does not offer enough detail to the reader of the concepts and areas of interest. For example, the dimension of knowledge includes the analysis of know-what, know-how, know-why or know-who (Lundvall and Johnson, 1994; Lundvall, 1996) that is not immediately perceptible on its graphic representation. It's also possible to argue that naming that dimension as knowledge might initially steer the reader to a traditional understanding of that dimension as factual, codified knowledge, which is not intended. Another aspect that the pictorial representation of the learning transfer process offered by Figure 3.1 failed to characterise is the dynamic nature of context. Indeed, in this study context implies the analysis of the university context, of the placement context and of the interaction between both. Taking these aspects into consideration, Figure 3.1 was reformulated to address these limitations and offer a better immediate perception of what are to be the areas of inquiry involved in an analysis of learning transfer in the transition between university and the workplace using the learning transfer model. This new representation is presented in Figure 7.1 and proposes to be a contribute to the investigation of learning transfer between university and the workplace that follows a view of learning transfer as a multidimensional and intercontextual process.

Figure 7.1 – Learning transfer model revisited



7.2.3 Placements as instruments for development

The way placements were framed within university shaped the participants' views and experiences of them. The findings of this study suggest that the students' placement experiences and, most of all, their initial perceptions about them reflected to some extent dominant discourses about supervised work experiences as instruments to promote employability. These reflections were manifested in the participants' reports on employability as the possession of skills, knowledge and experiences that could act as proof of value to employers. They were also reflected on the understanding that having a placement would promote the application of those skills and knowledge in a real workplace.

However, the participants' placement experiences also suggested an underlying awareness towards the relational dimension of employability. For all participants, the placement was perceived as an instrument to improve their future employability, to reflect their value over other students, and to provide them with a head start in the search for a graduate job. In my interpretation of the data, this implicit understanding of employability was at the centre of the students' reasons for having a placement.

This research suggested that students' understandings of placements, of what they entailed, how they were organised, and of their value reflected the current political and economic discourse on the connection between education and the world of work through employability. Within this view, I argued, placements are designed to make transfer between university and the workplace near. They also promote transfer as the easy and mechanical application of knowledge from theory into practice.

The participants' journeys presented in this study did not reflect this view of the transition between university and the workplace. Indeed, on arrival to the placement the equally anxious and excited students struggled to make sense of the figured world of work and to overcome far transfer instances. All three participants had to reconfigure previous knowledge, strategies and behaviours to adapt to the new requirements of the placement. Moreover, previous familiar and successful strategies, such as using research in the

university sense of online and book search to acquire information, proven not to be the most useful strategies in the placement context.

While on the placement, all participants emphasised its social dimension and data showed that relevant others – placement supervisors, colleagues, mentors, peers – were the main sources of access to information and involvement in the placement's practices. This finding was even more relevant regarding access to the implicit rules and procedures of the work-placement. Consequently, for these students in transition, learning to navigate the social dimension of the placement was a long-term task within the placement duration and it was founded on daily interactions and on a gradual increase in the participants' involvement with the practices and activities of the placement. Learning how to navigate the figured world of work in each of these three journeys was not easy nor mechanical.

Indeed, what the three participants encountered in the placement was a much more personal experience. One that shaped not only their knowledge, but also their identity. All three participants reported the development of an increased self-confidence and in their abilities to perform their tasks. The participants also reported the development of self-awareness regarding work strategies and abilities and an overall better understanding of their professional expectations and aspirations. Despite not having actual evidence that the participants became better students, this conclusion supports the argument (e.g. Mansfiels, 2011; Kettis et al., 2013) that supervised work experiences might also contribute to improve students' academic performances.

In conclusion, this study focused on the participants' placement journeys as developing beyond the prescriptive definition of putting theory into practice and unveiled placements as unique experiences within the participants' wider university experiences, which contributed to improve students' understandings of the workplace, but also of themselves, as future professionals and current students. Therefore, and for all that was reported, the suggestion is that placements would be better framed as instruments for learning and development. From the university perspective, placements, more than instruments to promote students' employability could be used as an important area of research and source of information towards improving

students' university experiences and learning. Regarding transfer of learning, researching students' work-placements would provide access to students' transitions between university and the workplace in multiple sectors, from different degrees and for a reasonable period of time. Within this view, work-placements could then be instruments for the development of employability, as is expected, but also of transfer of learning and of teaching and learning practices in university. For students, placements could be an important moment to reflect about learning and to frame transfer of learning as the ability to navigate the transition between different types of knowledge, different styles of learning, different contexts and different practices.

7.3 Reflections on methodology

Wellington *et al.* (2005, p. 95) would argue that "one of the challenges for social science researchers is to get to grips with the plethora of methodologies and methods which may be used in conducting research". A second challenge that I would add to Wellington's is acknowledging that each methodological decision made will have certain implications for the research's outcomes. Some of those implications are foreseeable at the time of the decision process, but others are not. Therefore it is important to implement some opportunities for reflexivity in the research, particularly as a novice researcher. For Denzin and Lincoln (2011, p. 124) "reflexivity is the process of reflecting critically on the self as a researcher" and on the choices made during the research process.

Therefore, this is my opportunity to address some of the methodological issues that were cause of concern. The first one is related with the size of the sample of the study (N=3) and my overall concern with how much data is enough. Indeed, I started to contact possible participants with the awareness that being a participant in this study involved a great commitment of time and of availability to share one's experiences and thoughts, which could hinder students' interest in the study. Nonetheless, five student accepted to take part and the interviews began. When two participants dropped out because of personal reasons, my concerns rose again. Where three participants enough? I took to expert voices to reassure me that it is not as much about the numbers, but the whole design. Indeed, Brannen (in Baker and Edwards, 2012)

explained that “cases are not only selected for the purposes of interview but also, most importantly, for the purposes of comparison in the analysis” (16). Regarding this aspect, my process for the selection of participants (section 4.2.3) enabled the selection of contrasting cases that provided more opportunities for reflection and a stronger testing of the developed learning transfer model.

In addition, also Bryman (2012) in the same publication compared the number of interviews regarding the issue of breadth and scope. The aim of this study was to achieve in depth data of the participants’ lived experiences of the transition between university and the workplace. Indeed, Adler and Adler (1998, p.8) agree that “qualitative researchers generally study many fewer people, but delve more deeply into those individuals, settings, subcultures, and scenes, hoping to generate a subjective understanding of how and why people perceive, reflect, role-take, interpret, and interact”. Hence, although the smaller sample number might limit the study’s ability to draw generalisations based on the experiences of three students, the depth in the analysis enabled by this small sample still provided a substantial volume of rich data that can be used to interpret learning transfer processes and inform future research. Therefore, this analytic generalisation (Yin, 2011) was still possible within such a small sample qualitative study as it focused on how, for example, the developed learning transfer model can be used in other contexts and contribute to further the study of transfer of learning within the context of students’ transitions between university and the workplace.

Furthermore, the continued concern with the question of how much was enough led to the search for additional data, such as the collection of additional students’ placement reflections. Also in this instance a small number of students responded (N=3), which might be related with the adopted strategy to request the reflections. All contacts with students were made through an e-mail that I prepared and was forwarded to them by each school’s placement tutor. In future research, alternative methods that could include face-to-face contact with the student might provide a better result.

A second methodological concern was related to the lack of data regarding physical artifacts, with the focus on the importance of mediational means

within students' learning transfer processes. In hindsight, such data was highly reliant on the observation of the students in the placement, which was limited completely for Daniel and very reduced for Julie. The resource to observation was driven by Eraut's (2007) work, in which the author argued that they provided an important "discourse of description" (Eraut, 2007, p.405). However, its relevance towards this specific type of data (access to the physical artifacts of the placement) was somewhat unknown at the beginning of the study. In future opportunities, a greater relevance should be given to observation or to other strategies of direct access to the participants' placements in order to gain access to this information.

Finally, a reflection must be made regarding the possible impact my presence as a researcher might have caused to the participants' placement experiences, as my presence became part of their experience. Indeed, Julie wrote about in her placement reflections.

"I believe that by doing this I was able to better reflect on my own Year in Research because when asked questions such as 'What do you hope to gain from this experience' I was not only able to go back and pinpoint the reason why I am doing this Year in Research but also ask myself if I am achieving these unwritten targets I have given myself. Further from that, I believe by carrying this task out I have increased my self-awareness and realised how much I have learnt in this short time."

(Julie, Excerpt from Placement Reflections)

This influence was also acknowledged by the other participants, who made comments during the interviews on how participating in the research made them more aware of what was happening in the placement and allowed them to reflect more on their learning. On hindsight this outcome was expected as it was presented in the participants' information sheet (Appendix A.1) as a possible benefit of participating in the research. Thus, the reader should be aware that the data presented in this study includes the participation in the research as part of the participants' experiences. Nonetheless, the comparison of that data with previous research and with additional secondary

data might reassure the reader of its value for drawing some practical and theoretical implications.

7.4 Implications of this study for policy, practice and research

An important reason for conducting educational research is to gather evidence that can be used to inform policy makers and practitioners on how to improve current educational policies and practices. Regarding this study, the findings can contribute to the limited body of knowledge regarding learning transfer within the transition between university and the workplace and inform present practitioners and policy makers and future researchers on how to improve students' experiences and sense-making of these transitions. Accordingly, in this section I provide a brief discussion of this study's implications for policy, practice, research and myself.

Indeed, a primary purpose in undertaking this research was to gather evidence that could be used to problematize a current policy discourse that favours an economic understanding of the transition between university and the workplace as employability promotion, and assumes learning transfer in this transition as straightforward and mechanic. One implication of the data presented here regarding students experiencing the transition between university and the workplace as multidimensional and intercontextual is that the toolbox metaphor often used to describe this transition is a failed representation of the learning transfer process and should be replaced for a more sophisticated interpretation of students' experiences.

Furthermore, it has been argued in Chapter 2 that the dominant policy discourse on supervised work experiences and employability has been generally deprived from students' perspectives. Another implication of this research to educational policy on higher education regarding work-placements and employability can be the inclusion of students' voices in policy development and using students' experiences of this transition to actually reform existing policy. For example, it was discussed in this study how work-placements are limited to a small number of students and that they are similar in competitiveness to applying for an actual job. It is my belief that due to this

competitive nature of work-placement opportunities the majority of students that get these opportunities are, like the participants of this study, top students. The argument here is that there might exist an inequality problem regarding who is having access to these opportunities, which should be addressed by educational policy. Given the notion that placement experiences are generally beneficial for students, mechanisms towards providing a wider access to them should be put into place.

Indeed, this study reinforced the view of placements as beneficial experiences for undergraduate students regarding learning transfer and potentially useful in introducing students to the world of work in a manner that will promote their transfer of learning and, thus, contribute to their future employability. However, I argue that there is a policy imperative in making sure that the discourses and practices on the nature, relevance and benefits of supervised work experiences match and are built on a more sophisticated view of the transition between university and the workplace.

Regarding practice, this study's findings can be useful in preparing students for placement experiences, in preparing placements to receive students and in promoting a better understanding of learning transfer within universities' practices. Indeed, at university the learning transfer model can be used by those in charge of preparing students for placements to introduce them to the expected areas of learning transfer (knowledge, social interactions and self), to the modes in which it may occur (direct application of knowledge, transformation of knowledge and new learning), and to the factors that may facilitate students' transitions (relevant others, knowledge and use of mediational means, expansive framing). Furthermore, given the findings revealed in this study, university career advisors and placement tutors can inform students of the possibility of far transfer situations and of the overall implicit nature of learning in workplaces. The argument is that if students are prepared for dissimilarity, the surprises that may hinder their learning transfer will be diminished. For placements receiving placement students, this study's findings highlight the need to implement structures of support, particularly at the beginning of the placement and to gradually provide students with more challenges and opportunities for independent work. Furthermore, this study suggests that the implementations in the placement of mechanisms such as

shadowing might be useful to accelerate students' navigation of the figured world of work.

Furthermore, with regards to universities' practices it is important to argue that the finding regarding the importance of expansive framing towards promoting learning transfer is very timely in a moment when higher education in the UK is implementing a teaching excellence framework. The data presented in this study supported the view that if learning is framed expansively in terms of time, space, content and social participation, students are more likely to focus on the learning moment and expect the future transfer of that learning. Therefore, within the governments' recent aim to recognise and reward excellent learning and teaching the implementation of expansive framing might be a useful contribution to universities' already existing mechanisms and strategies to promote quality learning for their students.

Regarding impact for research, I believe that the main contribution of this study is the learning transfer model and the contribution to reframe learning transfer in the transition between university and the workplace as an ongoing process. Conceptually, this study established new links between different parts of the literature on learning transfer to propose a definition of transfer that could be used to investigate the transition between university and the workplace. It drew on classical perspectives of learning transfer, on situated and sociocultural theories to identify several dimensions in the process of learning transfer and allow for the analysis of the bidirectional nature of the transition between university and the workplace. Regarding the dominant policy discourse informed by a particular reading of Human Capital Theory and employability frameworks, this study criticized their limitations in describing the students' experiences of their work-placements and proposed a reframing of placements as opportunities for learning and development. The following and final section of this study addresses how this study's contribution to knowledge can be used to develop further research and continue to deepen the available knowledge on transfer of learning within students' transitions between university and the workplace.

Finally, this study had important implications for my development as a researcher. Since the beginning of my doctoral programme, all the academic

lectures, supervision meetings, training and workshops, participation in formal and informal groups of academic and methodological discussion, seminars, conferences and a myriad of other activities in which I was involved contributed for my academic, technical and personal development. Much like with my participants' journeys, my introduction to this new community of practice was gradual and incremental. Step by step, I learned how to think, design, develop and write academic research. I also learned about the concept I was investigating and how my previous personal and professional experiences informed my thinking.

Overall, this thesis is as a representation of my learning process as a researcher and, therefore, it is not textbook perfect. It evidences the many things I wish I had done differently, been aware of sooner, or learned faster. On hindsight, I would like to have implemented different strategies to invite participants to this study, to design a more balanced design regarding interviews and observations and explored more the already existing data on work-placements at the University of Leeds, such as the students' placement reflections.

7.5 Summary of the study's contribution and further research

This study differed from previous research on transfer of learning in a number of aspects. At the conceptual level, it drew on a definition of transfer that accounted for the individual, the knowledge and the context, reflecting an overall broader and more encompassing view of transfer.

Then it focused on the particular context of the transition between university and the workplace, by investigating students' experiences of a one-year work-placement, placed temporally in between students' second and third years at university. Empirically, this aspect generated a longitudinal study of transfer in its natural occurring setting, while investigating students' placement experiences and sense making of the transition between university and the workplace at the same time. Such framing of the research permitted the investigation of two aspects considered to be under-researched, (1) students'

sense making of both transfer and placement experiences, and (2) students' return to university after a placement experience.

Finally, and to some extent because of the previous aspects regarding the definition and context of learning transfer investigated in this study, data collection and analysis was guided by a conceptual framework designed purposefully for this research. This alternative conceptual framework on learning transfer was introduced in Chapter 3 (section 3.4), revisited in this chapter (section 7.2.2). It represented learning transfer as a multidimensional, developmental and intercontextual process.

The previous sections of this chapter (7.2.1, 7.2.2 and 7.2.3) discussed how the insights generated in this study might contribute to the understanding and reframing of the concept of transfer of learning within the context of placement experiences and the transition between university and the workplace. The previous sections also presented how these insights could be helpful to universities regarding the development of placement opportunities for students, namely in designing the appropriate modes of preparation and support of students on placements, but also the employers offering those placement opportunities. Still within universities, some insights of this study might also be helpful in designing learning opportunities that intent to maximise students' transfer of learning not only to placement experiences, but to workplaces more generally. Finally, regarding employability, the insights presented earlier (section 7.2.3) might be helpful for the understanding and reframing of students' views and experiences of employability as a competition against an impossible benchmark.

Overall, it is my belief that this research may assist practitioners, including professors, career advisers and any professional involved in the designing of placement experiences for undergraduate students, to better inform their own practices and advise students as to what is involved in the process of learning transfer within placement experiences, how it can be investigated, and possibly improved.

Nonetheless, it is important to remind the reader that the conclusions presented in this study are not normative, but descriptive. The focus on the process of learning transfer required a design that was based on a small

sample, with the purpose of obtaining a detailed and in-depth account and understanding of the participants' learning transfer processes within their placement experiences (Cohen et al., 2007; Yin, 2012). My intention was to clarify "what goes on in such places (placements), (and) to reduce the puzzlement" (Geertz, 1973, p. 16) about the process of learning transfer.

Despite the impossibility for generalisation of the findings in the more traditional, statistical sense, I argue for the possibility of analytical generalisation (Yin, 2009) within this study. Further research can be developed using a new conceptual framework and test its suitability against other contexts (that not the University of Leeds, the UK, or one-year work-placements) and using different methodologies. One specific aspect of the proposed learning transfer process model that requires this exact further examination is the analysis of mediational means within the process of transfer. The lack of data gathered in this study regarding physical artifacts due to logistical limitations with access to students' placements and the time constraints for even more data collection within the scope of a doctoral degree possibly hindered the necessary access to the moments in which these artifacts were used. A wider use of observation, I believe, would be necessary to complement the findings presented in this study, regarding this aspect.

Other areas of interest emerging from this research that could fuel future studies include the wider analysis of students' placement reflections, given that this data is already available to the university and could be used, if analysed systematically, to interpret students' placement experiences, to provide useful insights on how to improve placement experiences and promote students' transfer of learning. A relevant area of study that emerged in this research, but that was not developed was that of the role of motivations within students' choices and meaning making of the placement. Therefore, a more focused inquiry into students' motivations regarding placement experiences might improve the overall understanding of identity development in consequential transitions. One other area that remained problematic even after this study was students' return to university and understanding how they incorporate the learning they developed during the placement back into their studies. Following this line of inquiry, further research into Beach's (2003; 1999) mediational transitions, including students' agency in the organisation

of their own placements, is also proposed. Additional research further into students' professional lives is also lacking. Finally, this study reported students as actors of expansive framing, which might have important implications for the promotion of learning transfer between university and the workplace. Therefore, expanding research on expansive framing within this context could open important recommendations on how transfer of learning can be improved.

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Appendix A

Information Sheet and Consent Form

Before becoming a participant, every student was sent a copy of: (1) an Information Sheet containing the main details of the research and the researcher's direct contacts and, (2) a Consent Form that detailed the type and extent of consent they would have to provide in order to participate.

A.1 Participants Information Sheet

STUDY TITLE: *"Transfer of Learning in Higher Education"*

I would like to invite you to participate in my PhD research on Transfer of Learning from Higher Education to the workplace. However, before you decide, I would like you to read carefully the following information about what will happen and what is required of all participants. I am available to answer to any questions you might have or to give further information on any aspect you would like to know more about. Please, take your time to consider if you would be available and willing to participate.

I would also like to thank you in advance for your time and attention, hoping you will be interested to collaborate in my study.

Gisela Oliveira

PhD Student, School of Education, University of Leeds

.....

What is the purpose of the study?

This research aims to understand the process of Transfer of Learning in a group of 4 students from the University of Leeds that are undergoing a placement year starting in September 2013. The research aims to identify the main strategies students use to transfer what they learned in Higher Education into their work placements; to identify what are the barriers and enablers students find in their work placements and understand how the students' perspectives on transfer of learning change when they go through a placement experience.

This research will be undertaken as a part of my PhD in the School of Education at the University of Leeds, under the supervision of Professor Geoff Hayward. I started to prepare my research on October 2012 and will submit my thesis on September 2015. During this year (September 2013 – August 2014) I will be collecting all the relevant data.

Also, the main ethical issues have been addressed and my study has already approved by the University Ethic Committee.

❑ Why have you been chosen to participate?

The students considered for this research have to be students from the University of Leeds, which have a one year placement in Leeds, starting in September 2013.

All the students' contacts that fitted the above criteria were provided by placement tutors and all of them were invited by e-mail to participate. The students that responded affirmatively to the e-mail will participate in an interview with the researcher and, finally, 4 students will be chosen as participants.

❑ Do you have to participate?

Participation is voluntary and it is up to you to decide whether you want to take part in this study. If you do decide to participate you will be asked to sign a consent form and receive a copy of this information sheet and of the signed consent form. If you decide not to participate there will be no consequence and your decision will be confidential.

Additionally, I would like you to know that, if you wish to participate you can still withdraw at any time without giving any reason and without there being any negative consequences. You can also refuse to answer any questions you don't want to answer.

❑ Are there any risks in participating in the research?

There are no anticipated risks in participating in this particular research.

❑ Are there any benefits in participating in the research?

The possible benefits that you will have by participating in this research are: Helping the development of the knowledge about the transition from Higher Education to the workplace that might benefit future students in the same situation; Increasing your knowledge about your own process of Transfer of Learning; Increasing your self-awareness about enablers and barriers to Transfer of Learning; Increasing your self-awareness on employability issues; and, Increasing your knowledge about research processes.

❑ What will happen if you decide to participate?

All four participants will be asked to collaborate in interviews and observation.

I will observe you in your placement in three moments: September-December 2013, January-March 2014 and April-May 2014. Each observation will comprise two days observation during your work at your placement. I will also interview you 5 times: 1 Pre-Placement Interview, 3 During Placement Interviews and 1 After Placement Interview. Each interview will last between one and two hours.

Will I record you?

Yes. All the interviews will be audio recorded in order to facilitate the process of data analysis. They will be transcribed and used for illustrating purposes in the thesis document, published papers and conferences. However, all data will be anonymised prior to their use and you can refuse to allow any part of the interviews to be used in the research, because all interviews will be transcribed and I will ask you to read the transcripts of your interviews to get your consent to use it in the research.

What will I do with your data?

All collected data will be used only for research purposes, being part of the final thesis document, published papers and conference presentations or posters. All publication of the data will be made by the use of coded names that only account for the participants' gender. Therefore, all data will be anonymised and coded after the interviews and all of it will be stored in the University server as to allow for security measures. All your personal data, like the Consent Form Sheet will be digitised and kept in the University server, making that only the researcher has access to it.

In which case will your data not be confidential?

All the information I will collect from the interviews and observation will be confidential. However, in some particular cases when your wellbeing is in danger or when some sort of illicit behaviour is present I will have to report those cases to the competent authorities. For example, confidentiality would not be possible if a participant were to tell me that he or she was suicidal or that he or she would commit a crime.

Who will have access your data?

The only people that will have access to your data will be the researcher, the supervisors and one or two research colleagues that will help to validate the data analysis.

Do you need any extra information?

If you need to know more about the research or if you have any doubts that you would like to make clear before decide on your participation, please contact me at:

E-mail: edgmdf@leeds.ac.uk

Mobile: 07874341158

A.2 Participants Consent Form

STUDY TITLE: *“Transfer of Learning in Higher Education”*

	Add your initials next to the statements you agree with
I confirm that I have read and understand the information sheet dated 01/09/2013 explaining the above research project and I have had the opportunity to ask questions about the project.	
I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason and without there being any negative consequences. In addition, should I not wish to answer any particular question or questions, I am free to decline. Researcher Contact (Gisela Oliveira): 07874341158	
I give permission for members of the research team to have access to my anonymised responses. I understand that my name will not be linked with the research materials, and I will not be identified or identifiable in the report or reports that result from the research. I understand that my responses will be kept strictly confidential.	
I agree for the data collected from me to be used in relevant future research.	
I agree to take part in the above research project and will inform the lead researcher should my contact details change.	

Name of participant	
Participant's signature	
Date	
Name of lead researcher	
Signature	
Date*	

*To be signed and dated in the presence of the participant.

Once this has been signed by all parties the participant should receive a copy of the signed and dated participant consent form, the letter/ pre-written script/ information sheet and any other written information provided to the participants. A copy of the signed and dated consent form should be kept with the project's main documents which must be kept in a secure location.

Appendix B

Interview Guide for Interview 1

INTERVIEW 1 GUIDE

STUDY TITLE: *“Transfer of Learning in Higher Education”*

AIMS	PARTICIPANT	DATE	TIME (expected 1 hour)
<ul style="list-style-type: none">▪ To know the participant▪ Learning in Higher Education▪ Placement Expectations		__ / __ / ____	From: To:

Preamble:

Hi! Thank you for coming and for volunteering to be a part of this research. We have spoken by e-mail but it is really nice to finally meet you.

As you already know I am interested in understanding how student's move from Higher Education to the workplace and that is why I am interviewing and observing you, and other students, during your placement.

I would like to make sure that you are aware of what will mean to be a participant so I brought the participant consent form and the information sheet for you to read. Take your time.

Do you have any questions? I need you to sign the consent form and after the meeting I will digitise it and send it to you by e-mail, so that you have a copy. All my contacts are also there, so that you can use them when you want to talk to me.

Now, I will start the recorder and we will talk for a while about some issues related with going from Higher Education to a placement.

1) Can you tell me about yourself?*

2) What do you think of your experience in Higher Education so far?*

- » Learning
- » Future Relevance

3) This year you have a work-placement; can you tell me about that?

- » Expectations
- » Why doing a placement
- » First day / week

4) Based on your experience until now, what advice would you give to a student that is thinking about having a work placement?

5) What kind of work do you have / did you do?

- » Relation to the degree

(*) Prior / current working experience

Appendix C

Excerpt of Interview Transcription

The excerpt presented here was taken from the first interview with Maggie and it is presented in the same form as it was written in the document word for the interview. Each turn I or the participant spoke was given a number and, additionally, at the end of my lines I stamped the time. These strategies were implemented to facilitate my movement between the text and the audio.

GO(128): *Hum-hum. You, do you stress often that your supervisor is only in 20 hours of the week. What does that actually mean to you? (37m58s)*

M(129): *Hum, I've kind of got used to it to be honest, hum, cause she comes in four days a week. She works Monday, Tuesday, Thursday, from 10h00 till 2h00 and then Wednesday all day. Hum, but to be fair the first hour of the morning I'm checking e-mails and doing various administrative things, cause I'm not the best morning persons as it is, so, when I wake up, I like to do the simplest things in my day in the beginning hour. Hum, so, but, she's quite happy for me to contact her, hum, on her phone if I need anything and she always answers e-mails and things like that. She's always on her e-mails at home, so. Even though she's not got a physical presence all the time, she's never, sort of, out of the loop, if I make sense. So, the only day that I don't actually see her is at Friday, so.*

GO(130): *So, you still think that, even though she's not there, you get the answers and information you need. (38m50s)*

M(131): *Yeah. Not a lot of the time, I just kind of do my own thing and I work my own way, hum, and if I need to ask her things, I'll e-mail her. Hum, so she can answer them either over the weekend or when she gets back in on Monday. Hum, and then, if it's something that I do need an answer that day, then I'll text her and she, she replies within a couple of hours, so.*

GO(132): *Ok, you were telling me that you also have, aside from the supervisor, the mentor. How would you, you know, what's the difference between? (39m24s)*

M(133): *Ok, my supervisor is essentially the person who manages what I do, hum. She looks after everything and she is the person who is responsible for*

me. Hum, and vice-versa. She is responsible for things that I do. Hum, but also, she is part of my team, hum, so where, we work in the same office and everything like that. Whereas my mentor is something that is advised, it's not something that is compulsory. Hum, so my mentor works in different department, as very different things and, hum, one of the things that goes on as part of my internship is that once a month we have sort of an intern support programmes, where we will go, hum, to, a sort of like for a meeting, there's about eight or ten of us, hum, and we get, sort of talks and things on varied different skills. So, we've had things like facilitation, how your internship can help with further employment, presentation skills, project management. Hum, so it's just various things that can add to our experiences as a whole. Hum, so, hum, as a part of that, it's suggested that we come up with a mentor. Somebody who we can meet with, as when we need to, to discuss things, so, like, it can be anything from stuff like how was your weekend, to what you're doing in your placement right now, to, like, hum what you're thinking of doing, stuff like that. It can be personal or professional, it doesn't really make a difference and it's more, just like I say, just like having coffee with a friend, than anything.

GO(134): *And how did you got one? (40m46s)*

M(135): *Hum, I choose my supervisor, oh, my mentor based on, hum, a person I had quite a lot of contact initially with, in the beginning of the year. Hum, cos it had to be someone out of our department, hum, but it had, I wanted it to be somebody who still had enough involvement with our department to kind of know what stuff we did, but little enough to not really know what goes on a day-to-day basis. Hum, and I picked my mentor, because, like I say, I have a lot of, hum, sort of initial contact with her. Hum, and, sort of we got on a, on a, sort of like, friendly basis anyway, so. And she initially had a mentor as well, a previous staff, so it was nice for her because she got to see the other side of it."*

Appendix D Codebook Review 1 Report

Meeting Number	1
Date	08/04/2014
People	Gisela Oliveira; (PhD Colleague)
Topics Discussed	First coding using Codebook V1

SUMMARY OF MEETING

Codebook: PhD Colleague told me her overall idea about the codebook. She thinks it is clear to understand and easy to use, although she felt she had to read it in full before starting to quote in order to get a sense of what was involved. She thought the information the codebook provides is detailed enough and the examples are helpful.

Coding: PhD Colleague coded two pages by herself and I coded the full transcripts by myself. We both used the same codebook (CODEBOOK_V1). She sent me her coding and I compared it with mine. We discussed the following differences during this meeting:

1) PHD COLLEAGUE

M(3): Hum, it's been quite, sort of, stressful and busy, really, [Higher Education Experiences] I think, cause, hum, if it wasn't for the fact that the fees were going up I was gonna take a gap year, hum, but, I was told if I deferred a year I would have to pay the higher fees so, having this year is like a work placement year kind of away from studying is quite nice, is quite different, so... [Non-Intercontextuality?]

ME

M(3): Hum, it's been quite, sort of, stressful and busy, really, I think, cause, hum, if it wasn't for the fact that the fees were going up I was gonna take a gap year, hum, but, I was told if I deferred a year I would have to pay the higher fees. [Higher Education Experiences] So, having this year is like a work placement year kind of away from studying is quite nice, is quite different, so... [Reasons for having a placement]

PhD Colleague agreed on my coding of the last sentence but we discussed on the fact that I should include in the codes all the data that, while reporting to them, might contradict them. That is why she called that sentence NON-Contextuality. She thought it was the participant telling us how HE and the WP are not related at all.

2) **PHD COLLEAGUE**

M (9): Hum, yeah, because I knew of this job, this job that was gonna come up because the person that did it in the previous year was a friend of mine, hum, and I was already friends with one of my colleagues, hum, for working at the (Other Institution within University) so I already knew them, [Social Interactions - Friendship] [Placement Environment] hum, and I knew of what the role entailed and I knew that there was a lot of project management because, hum, even though a lot of what I've done since the start of the University the jobs have been to do with, like, careers and recruitment, that's not the area I want to go into, it's publishing that I want to go into, [Previous Working Experiences] but, hum, the original intention that I had, hum, at the (Other Institution within University) was to do copywriter and this is a lot project management which if I go into publishing will be a good skill to already have anyway, so, I guess that's main decision for me was that it was useful for my future [Reasons for having a Placement]

ME

M (9): Hum, yeah, because I knew of this job, this job that was gonna come up because the person that did it in the previous year was a friend of mine, hum, and I was already friends with one of my colleagues, hum, for working at the (Other Institution within University) so I already knew them, hum, and I knew of what the role entailed and I knew that there was a lot of project management because, hum, even though a lot of what I've done since the start of the University the jobs have been to do with, like, careers and recruitment, that's not the area I want to go into, it's publishing that I want to go into, but, hum, the original intention that I had, hum, at the (Other Institution within University) was to do copywriter and this is a lot project management which if I go into publishing will be a good skill to already have anyway, so, I guess that's main decision for me was that it was useful for my future [Reasons for having a Placement]

I agreed with PhD Colleague's coding and the reason I hadn't coded the first sentences was because they discuss previous working experiences and not the current placement. However, I should consider including this in my coding because (a) in this case those previous experiences will reflect on the participant's current placement and (b) because they are still placement experiences that can provide useful insights.

FOLLOW UP TASKS

→ I will send PhD Colleague some transcript sentences that I am in doubt to see how she will code them. (Done » 09/04/2014)

→ I will update the codebook to include the codes I thought were missing when I coded the transcripts. (Done » 09/04/2014)

New codes:

Placement Tasks – I felt the need to have a code referring to the placement activities that can't be included in the codes about knowledge. Eg. Stuff related with bikes, it is a placement activity but I would not be able to place it in Knowing-what or Knowing-how.

Social Interactions – supervision – I felt the need to specify the social interactions between the participants and their supervisors because a great part of their development is based on this relationship. I didn't have this code from the start because I thought I could include those interactions in the Mediational-Means – people but, when participants talk about having meetings in a very descriptive way it does not meet the purpose of a mediation mean, so, I felt I needed a new code to include those descriptions.

Changed Codes:

Placement goals - Moved from being just focused on personal goals for the placement to include all types of goals.

Becoming Confident - Changed to include references to responsibility

Diagram:

I included the diagram because it is easier to use as a support (broad view of all the codes) when I'm coding. The table with the descriptions and examples is useful in case of doubts.

→ I will send supervisors the CODEBOOK_V2 and the transcripts to move on to second stage. (Done » 09/04/2014)

Appendix E Codebook V(ersion)5

1. Guidelines for Segmentation

The data from the interviews' transcripts and observation field notes will be segmented during the coding process following the subsequent rules (the reasoning process for this segmentation strategy is on *Memo on Coding: Segmentation*):

Unit of Data: Sentence (will allow for relevant information and context information to be part of the code).

Exception 1: If, within a paragraph (or several sentences) every sentence is to have the same code, then the unit of data should be the paragraph (or several sentences).

Ex:

I1_M(57): Just kind of, like, really corporate, sort of really kind of, stick to their own people, like, I don't know really, it's kind of, I guess it's probably stuff like what pop culture kind of brings forward, hum, to the table and you just kind of get that image of, like, the boss in your head, being this really scary person, who, like, could completely, like, end your career and things like that. It was kind of a bit of a shock to the system having people, like, being really friendly and things like that, so

CODES: "*Knowing-who*"

Exception 2: If there seems to be different codes within one sentence, the coding should follow the rule of "meaning" (MacQueen et al, 2008) within that sentence (this should prevent relevant data to be missed out on the basis of following the rule of what counts as unit of data).

Ex:

I1_M(79): Hum, so, throughout the week we just spoke to over a thousand students, so that was quite nerve-racking because, like I say, I'm not that kind of very outgoing, social person but, it's kind of, it's quite, it's all different because I, when it is a working environment and I know what it is I have to do, who it is I have to speak, where I have to go and ways to improve, then I'm quite comfortable speaking to people, hum, whereas, in like social situation I'm much quieter, hum, so there's kind of like, hum, a bit of, a mixture really, for me and it's sort of like finding out how I represent myself in a professional way

CODES: "*Social Interactions*" and "*Professional Identity*"

2. Simultaneous coding

Whenever there is a piece of text that could fit in more than one code, I will code it with the codes it fits. A reason for doing this has to do with multiple meanings within the same data (Saldaña, 2013), which, in turn, reflects the complexity and interrelatedness of social interactions and the codes that describe them.

Ex:

I1_J(81): Yeah, I feel really supported. **CODES**: "*Placement Environment*", "*Becoming Confident*" and "*Social Interactions - Supervisor*"

3. Codes

				Codebook Development				
MAIN CODE	SUB-CODE	DEFINITION	EXAMPLES	Code Source	Type of Code (DeCuir et al., 2011)	Type of Code (Saldana, 2013)	Date of Creation	Last Date of Revision
Higher Education Experiences	Academic Experiences	References to Higher Education, including the degree, assessment, relationship with teachers and peers.	I1_M(5): First years were fun, I have enjoyed University, hum, it's been sort of like the usual, really, of studying so, you wake up and you go to your classes you came home, you do work so, it's very just kind of similar, really.	I1_Laura (but present in all)	Data-Driven	Descriptive code	March 2014	June 2014
	Other Experiences	References various experiences during Higher Education but excluding academic areas (volunteering activities, social life)	I1_M(27): So, for instance, in my first year I did, hum, "Barefoot in the Park", which was a poetry festival, hum, and I was the fundraising coordinate of that, hum, and then, hum, for instance, of working in a diverse environment, hum, just being a student in general that's quite a diverse event because you're supposed to adjust to a lot of new things at once, so, stuff like that, just trying to work everything in, really.		Data-Driven	Descriptive code	June 2014	-
Learning transfer	LT – From Higher Education to Placement	References to the connection or transition from higher education and the placement or workplace.	I1_L(298): Hum, dealing with people in a customer service kind of say so, in high-school I did a fair amount of that to do with weekly muffin sales (laughing). I1_M(31): Yeah, cause one of the criteria for this job is that I can, hum, I proofread Cv's for international students so, a lot of that is based on my knowledge of English, hum, and the language itself so, a lot of the courses that I have done, quite a lot of stuff to do with, hum, looking at grammar and spelling and, pronunciation and things like that, so, hum, that kind of stuff does come in useful and it's also, sort of, hum, physical proof that I have got the skills to be able to do that as well, so.		Theory-driven	Descriptive code	March 2014	-
	LT– From Placement to	References to the connection or transition from the	I1_M(107): So, whereas, I think next year when I go back to University and do my third year and my final year, I think I'm more likely	Based on Engle, 2012	Theory-driven	Descriptive code	March 2014	-

	Higher Education	placement back to higher education.	to stick to a 9 to 5 structure, cause am I used to it now. So, just have to wait and see (laughing).					
	Fear of Forgetting	Reference to the fear of forgetting academic knowledge during the placement due to not using it.	I1_M(109): Hum, one of the things that I am worried about it that I am just going to forget everything (laughing) and then go back next year and go like "I don't remember any of this", so I'm going to have to start next semester, hum, actually, doing some more reading and doing some more, sort of, like, critical theory, while I'm actually off for the year.	I1_Maggie I1_Daniel	Data-driven	Emotional Code	March 2014	-
	LT- From Previous Work Experiences	References to the connection or transition from previous working experiences to either University or the placement.	I1_L: Hum, dealing with people in a customer service kind of say so, in high-school I did a fair amount of that to do with weekly muffin sales (laughing).		Data-driven	Descriptive code	August 2014	-
Placement	Previous Work Experiences	References to any working experiences before or during higher education. It includes voluntary work, associative work and paid work, full-time or part-time.	I1_M (7): I've always liked the idea of having work experience, hum, I've always kind of tried to work ever since I was 17, I think, when I had my first job, hum, and then I worked all the way through college, and, hum, originally a restaurant and then I move to a bakery	I1_Laura	Data-driven	Descriptive code	March 2014	-
	Reasons for having a placement	It will include any reference to why students decided to have a placement.	I1_L(59): I wanted to expand on those skills and I wanted to get some new skills as well.	I1_Laura	Data-driven	Structural code	March 2014	-
	Starting the Placement	First impressions, feelings and expectations about the placement	I1_E(21): I was just scared because, I don't know, it's new and exciting and you don't really know what to expect but you should just be excited about it, there's no time to be scared, you can't, because, I don't know, I'm quite a shy person when I'm nervous and so it will hold you back a bit, you can't be like that.	I1_Laura	Data-driven	Process Code	March 2014	-
	Learning to Navigate the Placement	References to the participant increasingly knowing how to work and act in the placement.	I1_D: It was basically a tour of the areas and where they are, very, very big, but it was more to get around, hum, which took, I would say, at least three to four months just to get used where to go and, where's the machinery, it's location and there's so much, it's a very large site.	-	Data-Driven	Processual code	August 2015	-
	Struggle in the Placement	Reference to situations or tasks perceived as difficult or that causes stress to the student.	I1_L(107): Yeah, I was expected to have a very defined boss and I don't, which is ok, I can cope with it but all the infightings is getting to me a little bit.	I1_Laura	Data-Driven	Descriptive code Emotional Coding	March 2014	-

<p>Shared Responsibility</p>	<p>References to increased sense of responsibility in the placement due to being part of a community working towards the same goal. It also includes participants comparing this feeling to how they don't experience it in University.</p>	<p>I3_J(277): I don't know, I feel like, you know, in the workplace you're responsible to other people as well, and you're answerable to other people, whereas, hum, on your study, you're not really answerable to anyone else, it's your own work. if you get a bad grade it's your own fault an then we can say to you, "why haven't you done the work?", and then you're guilty yourself if you get a bad grade.</p>	<p>-</p>	<p>Data-Driven</p>	<p>Descriptive code Emotional Coding</p>	<p>August 2015</p>	<p>-</p>
<p>Placement Environment</p>	<p>References to overall placement environment.</p>	<p>I1_M(153): I think, I think what helped me the most is knowing that I didn't have to struggle through on my own , like, knowing that everybody at the office was very helpful and very keen to, kind of, help everybody progress, like, everybody in the office is sort of very much invested in making sure that I am the same way, so we all make sure that we all have a bit, like we all get the chance to sort of gain that information. So, and we all kind of respect each other on a similar level of like, even though some people are higher than each other, like, for instance, hum, I know computers a lot better than a lot of the people in the office, so I spend a lot of time helping people with things like that and we're all quite willing to help each other with advice and things like that. So, I think that's one of the main things, really, it's just knowing that there is a real big community within our office , so..</p>	<p>I1_Laura</p>	<p>Data-driven</p>	<p>Descriptive code</p>	<p>March 2014</p>	<p>-</p>
<p>Placement Tasks</p>	<p>References to the job description and day-to-day activities in the placement.</p>	<p>I1_L(27): Hum, well, my placement is quite a practical role so, it's lots of hand-on stuff to do with bike maintenance, which is what, is not what I expected on the outset , to be honest, I expected an office role or a site of organising event and sort of get communications, which is part of what my role is, hum, but I get to go out and talk to people as well, which I really enjoy.</p>	<p>I1_Laura</p>	<p>Data-driven</p>	<p>Descriptive Code</p>	<p>April 2014</p>	<p>-</p>
<p>Learning in the Placement</p>	<p>References to how students learned within the placement.</p>	<p>I1_L(208): I found, well I was digging through the files about, in October actually, and there was a list of how to do it. So, oh, I did quite some of those that were wrong (laughing).</p>	<p>I1_Laura (but present in all)</p>	<p>Data-driven</p>	<p>Descriptive code</p>	<p>March 2014</p>	<p>-</p>
<p>Placement goals</p>	<p>References to goals that are set for the placement. It</p>	<p>I1_J(11): Hum, how to, like, hum, improve my writing skill, because next year I'll have to do a</p>	<p>I1_Maggie</p>	<p>Data-driven</p>	<p>Descriptive code</p>	<p>March 2014</p>	<p>-</p>

		includes students' personal goals but also the workplace goals and academic (Higher Education) goals.	dissertation and I think this will really help me. Hum, how to improve my researching skills, hum, how to communicate better with people, hum, like inter, how to give presentations and, hum, just how, learning more about the working environment.					
	Future Goals	Referenced to future goals that were developed within the placement or because of the placement experience.	I6_D(163): Yeah, yeah, which I think is one thing that should really help me when I go for a job in the future because, I've already done that, so hopefully, I can integrate that into a future job and, kind of, from the outset have that balance of confidence and obviously being new to the company, then, self in.	-	Data-Driven	Descriptive code	August 2015	-
Knowledge	Knowing-what	References to factual, content-based knowledge.	I1_E(7): Well, I know a hell a lot about fish now (laughing), I know a lot about the business and the importance of it and it's really interesting because I chose biology because I couldn't chose a specific area of biology to specialize in and it's quite interesting cause I feel I'm specializing in something this year	Lundval et al., 1996	Theory-driven	Descriptive code	March 2014	N/A
	Knowing-why	References to knowledge about rules and procedures.	I1_J(13): Hum, because, hum, when you're talking, for example, with students is quite informal and, hum, whereas as in the work environment there's these rules that you have to follow, it's more formal. Like, when you e-mail, when you e-mail someone you have to, hum, you know, the correct way and address them properly, whereas with the students, which I'm used to, talking to students, is, you can kind of say anything.	Lundval et al., 1996	Theory-driven	Descriptive code	March 2014	N/A
	Knowing-how	References to skills and the ability to do something.	I1_L(298): Hum, dealing with people in a customer service kind of say so, in high-school I did a fair amount of that to do with weekly muffin sales (laughing).	Lundval et al., 1996	Theory-driven	Descriptive code	March 2014	N/A
	Knowing-who	References to knowledge about other people, their roles and tasks	I1_M(73): It's intimidating I think because you meet so many people in such a short space of time and they just have to remember one name, whereas you've got to remember everybody, and like, even now, there are some people I think I haven't seen since that first day. In the other day, I was in, hum, one of the offices and a girl came in and I confused her	Lundval et al., 1996	Theory-driven	Descriptive code	March 2014	N/A

			with a different member of staff because their names are very similar and I need, I wanted to speak to one of them and I got the wrong one, and like, having been here, like, 12 weeks, which is really bad, it's still quite embarrassing if you do something like that, so.					
Self-Identity	Changing Identity - Student Identity	References to the characteristics, traits, roles and tasks of students.	I1_L(21): First semester, second year is all about sitting down with a book and planning through fifty hours of reading a week and, ahhh, just can't really do it (laughing).	Holland et al. (1998); Lave & Wenger (1991)	Theory-driven	Descriptive code	August 2015	N/A
	Changing Identity - Professional Identity	References to the characteristics, traits, roles and tasks of professionals.	I1_L(65): Part of my role is to improve communication with, hum, the travel activity team. So, that involves having a communication's matrix, which involves going to do a lot of fact finding in all the different stations, which means quite a lot of time out of the office in doing that, hum, so there's that. Hum, working with excel, I've never really worked with excel before, hum, so this has been really good	Holland et al. (1998); Lave & Wenger (1991)	Theory-driven	Descriptive code	August 2015	N/A
	Becoming Confident	References to gaining confidence in oneself and in the ability to perform task and role accordingly. It also includes gaining responsibility due to increased confidence.	I1_M(113): Hum, I think I feel a lot more confident in myself, in making decisions, cause I'm quite an indecisive person, hum, so, I feel like, I'm a lot more confident in, sort of, knowing that I can make that certain decisions and that that decision is a good decision. Hum, whereas, before, at the beginning of the semester I couldn't.	PPI_Laura (but present in all)	Data-driven	Process Coding	March 2014	April 2014 (changed to include references to responsibility)
	Pro-activity /Agency	References to students taking action to change/negotiate their role or their task within the placement.	I1_L(326): Hum, just kind of need to go and talk to people and then find out what you're supposed to be doing and they're not going to just sit you down tight so you need to figure out who to talk to and then you need go and talk to them and say, "what do you want from me in this year?"	PPI_Laura PPI_Maggie PPI_Daniel	Data-driven	Descriptive code	March 2014	N/A

Social Interactions	General	References to any interaction in the University or in the placement. Does not include when people are used as mediators for action / learning nor references to friendship in the placement.	I1_M(73): It's intimidating I think because you meet so many people in such a short space of time and they just have to remember one name, whereas you've got to remember everybody, and like, even now, there are some people I think I haven't seen since that first day.	Beach, 1999	Theory-Driven	Descriptive code	March 2014	N/A
	Friendship	References to the issue of friendship in the placement.	I1_M(119): It is a working environment but, at the same time I am friends with the people I work with, they're not just my colleagues, they are my friends.	PPI_Laura (but present in all)	Data-Driven	Descriptive code Emotional Coding	March 2014	N/A
	supervision	References to the relationship with the supervisor, feedback, meetings. It should not include the moments in which the supervisor acts as a mediational mean. In that case the sentence should be coded with Mediation-Means: people	I1_M(161): (...) And I also think it's a lot to do with the way that you are managed, as well. Whereas I'm getting quite a lot of freedom to do what I want, hum, as long as my manager is quite happy to do that, hum, and she's quite happy for me to, she knows that I'm quite happy just sitting and doing and if I need her, I come to her. So, I think, having someone who knows the way you work, as well, is really important.	PPI_Laura (but present in all)	Data-Driven	Descriptive code	April 2014	N/A
Mediational Means	Artifacts	References to any artifact, physical or conceptual that mediates students' actions and/or learning.	I1_L(328): So, I was expected to be promoting fresher's week and things, but I didn't know who to talk to, so, I used this outdated communication's matrix, it was just a list of names with the e-mail addresses, not a list of who does what.	Wartofsky, 1979	Theory-driven	Descriptive code	March 2014	N/A
	People	References to people (peers, supervisors, tutors, colleagues) that mediate students' actions and/or learning.	I1_M(113): It's difficult as well because my boss only works 20 hours a week, whereas I work full-time, so, hum, I would kind of be constantly sort of questioning myself and asking like, "is this ok?, should I do this?, should I do that", and she would just be going back at me with questions like, "I don't know, should you do that?", and it was forcing me to make decisions, so.. I1_E(35): Hum, they just looked after me, they made sure that I wasn't sat reading all day. If they were going for a break they would go like "oh, are you coming for a cup of tea?" and take me out and introduce me to people and made	Swain and Steinman, 2010	Theory-driven	Descriptive code	March 2014	N/A

			sure I knew where everything was. They took me, I remember when they took me to the stationary cupboard and showed me where the pens were (laughing)...					
Employability	Employability as Possession	References to employability as having knowledge and skills and other experiences	I6_D(95): Hum, I think it's a good combination of having good grades, the work experience, hum, experience outside of work and University, so, sports, societies, things like that. I think it's a combination of all three different things.	-	Data-driven	Descriptive code	March 2014	August 2015
	Employability as Positional	References to employability as staying ahead or as a competition.	I5_J(223): Oh, well, obviously my year in research should help me a bit, because I, hum, very few people have done it, so it should help me to stand out.		Data-driven	Descriptive code	March 2014	August 2015
	Instrumental Views and Actions towards Employability	References to understanding and acting based on an instrumental view of employability. For example, the search for proof and examples of know-how.	I1_M: Hum, well, for the copywriting internship, the reason I did that was that I could put on my CV, on paper, that I have had experience professionally in writing work. Hum, because it's quite difficult to get, hum, experience in that kind of area that I want to work in, being paid was really handy for me to have that, hum, sort of like a pre-requisite, so...		Data-driven	Descriptive code	March 2014	August 2015
	Awareness towards Employability	References to when and how the participants became aware of the concept of employability.	I6_J(137): I think I've become, hum, you know, I think I'm actually become aware of it since I started University, because they tell you that in the very first year.		Data-driven	Descriptive code	March 2014	August 2015
Julie		References to biographical data and to self-references about thoughts, feelings and behaviour.	I1_J(1): Hum, well, basically, I just finished my second year in management, Bcs Management at the University of Leeds and, hum, I wasn't actually planning to do a year in research, a year out, but then this opportunity came, to do a year in research, so, I applied for it and got it.	-	Data-driven	Descriptive code	August, 2015	N/A
Maggie		References to biographical data and to self-references about thoughts, feelings and behaviour.	I1_M(1): Ok, yeah, hum, so.. My full name is Maggie, hum, I was born in (city's name), which is about one hour east of here, hum, lived there all my life, hum, and then moved to Leeds to come to university, will be two and a half years now, hum, I'm studying English Literature and Language and with, sort of like a split evenly really, no real focus on either. Hum, what else...hum, I have a purple belt in Karate, hum, it's one of my hobbies, hum, I	-	Data-driven	Descriptive code	August, 2015	N/A

		also like to write quite a lot, hum, so, I take part in national novel write month quite frequently, which is when you have to write 50 thousand words in one month, well, yeah, it's fun though, it's fun. Hum, also like to read quite a lot, I also have a blog on youtube where I review books, hum, and talk about things like that. Hum, what else?					
Daniel	References to biographical data and to self-references about thoughts, feelings and behaviour.	I1_D(1): Yeah, no problem. I'm 23, studying mechanical engineering at Leeds. I first went to University, hum, oh, sorry, I first went to college and then dropped out of college, hum, worked for a couple of years in (city's name), and then, went to do an intensive access class in college. From there went to University, so technically classed as a mature student but, at 23, I don't think it's too bad though. And, yeah, and then three years at University, hum, mechanical engineering and, hum, just by chance decided, fairly last minute to start a placement. Hum, I originally got offered a job in (another country), hum, which I had accepted and then turned it down last minute, when I got, when I got an offer from (Sugar factory).	-	Data-driven	Descriptive code	August, 2015	N/A

