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Final Build? Imaging the Local-Global Landscape of Hewlett-Packard, Ireland

A thesis submitted to the Dublin Institute of Technology towards the award
of MPhil

By

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September 2005

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Abstract

This practice-led thesis constitutes a timely response to the absence of audio and visual representation of labour practices and post-industrial space in the context of Ireland's accelerated economic development during the past decade, resulting in its current status as the most globalised economy in the world. The significance of Ireland's global position is amplified by the fact that the South of Ireland never experienced the Industrial Revolution and has thus been propelled from an agricultural-based economy to one defined as post-industrial. In both its methodological design and implementation, the study stakes out new terrain through the combined use of photography, digital video and ethnographic methods, further engaging with the oral testimony of workers in the post-industrialised multinational location/fieldsite of Hewlett-Packard Manufacturing and Technology Campus, Leixlip, County Kildare.

The thesis comprises three chapters together with an introduction and conclusion. The first chapter situates Hewlett-Packard's presence in Ireland within an historicised and economic framework, while simultaneously providing critical readings of propagandist representations by the public and private enterprise sectors. The chapter's juxtaposition of these readings, together with disparate spatio-temporal labour practices, historical periods and the introduction of different theoretical paradigms, enacts a strategic textual device used throughout this chapter and the following two. The second chapter engages directly with methodological questions underpinning the research project, alongside foregrounding different fieldwork practices. The textual presentation of interview transcript material, photography and digital video is brought into dialogue with depictions of industrialisation from the late nineteenth century to the present. The third and final chapter both identifies and establishes theoretical and representational strategies at work in the rationale, design and content of the re-constitution of the research material in the format of an installation titled, 'The Breathing Factory'.

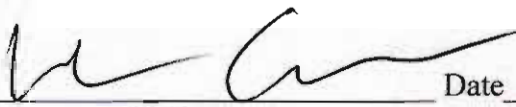
Declaration

I certify that this thesis which I now submit for examination for the award of MPhil is entirely my own work and has not been taken from the work of others save and to the extent that such work has been cited and acknowledged within the text of my work.

The thesis was prepared according to the regulations for postgraduate study by research of Dublin Institute of Technology and has not been submitted in whole or in part for an award in any other Institute or University.

The work reported on in this thesis conforms to the principles and requirements of the Institute's guidelines for ethics in research.

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Signature  Date September 30th, 2005
Candidate

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List of Acronyms

DIMO – Dublin Inkjet and Manufacturing Operation

EEC – European Economic Community

ESB – Electricity Supply Board (Ireland)

EU – European Union

FDI – Foreign Direct Investment

GDP – Gross Domestic Product

GNP – Gross National Product

HP – Hewlett-Packard

IBEC – Irish Business and Employers Confederation

ICT – Information and Communication Technology

IDA – Industrial Development Authority (of Ireland)

IFSC – International Financial and Services Centre

MNCs – Multinational Corporations

NIC – Newly Industrialised Country

R&D – Research and Development

Introduction

Alpha Build¹

Pictures of people working are strangely scarce (Ransom 1993: 4).

We are encouraged to believe **that we live in a** 'post-industrial' age, when in fact the industrial function has just been **globalised** (Sekula 2001: 27).

The attempt to make "polyphonic" (multi-voiced) texts suggests a writing and research practice that would embrace "artistic" forms in both content and style (Highmore 2002a: 169).

In March 2004 a small island on the western edge of the European Union was ranked as 'the most globalised economy in the world' (2004: 2); for the third year in a row, the U.S. based A.T. Kearney/Foreign Policy Globalisation Index placed the Republic of Ireland at the top of its list. The index monitors degrees of globalisation and global integration via four key criteria including trade and financial flows of global capital, movement of people across borders, international telecommunication traffic and internet usage and participation in international treaties. This annual report incorporates 62 countries accounting for 84% of the world's population and 96% of global gross domestic product. The significance of Ireland's global position is amplified by the fact that the South of Ireland never experienced the Industrial Revolution and thus has been propelled from a primarily agricultural-based economy to one defined as post-industrial (O'Brien 1999).

Beyond government reports and relatively scarce written scholarship (O'Hearn 1998 O'Riain 2000; 2004) addressing Ireland's accelerated economic development in the past decade or so, there is as yet no sustained practice-based research engagement with the subject. This study is a timely response to this omission and, in both its methodological

design and implementation, stakes out new interdisciplinary terrain through the combined research use of media technologies and ethnographic methods. Other than propaganda images produced by public and governmental bodies, together with the private sector and those housed in the personal archive, little material of significance has been generated in the realm of audio and visual media. Historically, it can be argued, this notable absence is reflected and further perpetuated through the continued neglect of, and public indifference to, a considered media representation of workers, labour practices and working conditions; the image of the worker, whether in an Irish context or viewed globally, has always been overlooked.



Figure 0.1; Irish Navvy, Manchester, England, 1890 (source: [The Men Who Built Britain](#), 2001)

The traditional image of labour, in an Irish context, is epitomised by the ‘Navvy’ (Fig. 1) – a term originating from the eighteenth century with the beginning of the construction of the commercial canal system in Britain, known as the ‘Inland Navigation System’. Located within a culture of out-migration resulting from the inability of the island to economically sustain its inhabitants, thousands of Irishmen went to work on the scheme and these canal diggers became known as ‘Navigators’, later abbreviated to ‘Navvies’ (Cowley 2001: 13). Initially, this was a title borne with pride as it meant being ‘a member of the new labouring

élite, at the cutting edge of the Transport Revolution...and elevated from the rank of common labourer' (ibid.: 14). This would be carried on into the construction of the railway system, as part of the Industrial Revolution, where 200,000 'Navvies' were employed. However, by the latter part of the twentieth century, the name had become synonymous with the role and plight of unskilled Irish labour (ibid.: 18). The nature of the work itself remained laborious, from tunnel building to roads, factories and new housing schemes and only in the early 1960s was the term officially removed from British statistical data (Cowley 2001).



Figure 0.2; 'Spaghetti Junction' (Irish road crew with local priest), England 1972 (source: The Men Who Built Britain, 2001)

In the early 1990s, a period identified as the beginning of the Republic's economic transformation, the overshadowing image of the 'Navy' and its derogatory connotations operated as a spectral backdrop to the rapidly evolving environment of the so-called 'Celtic Tiger Economy' (O'Hearn, 1998: 6). A massive migration of global capital into Ireland in the form of **Foreign Direct Investment (FDI)** resulted in the country's present 'globalised' status. Buoyed by infrastructural and development grants from the European Union, the Irish government succeeded in attracting international financial, biopharmaceutical and technology multinationals to establish **global sites of operation** in Ireland – an outsourcing base to Europe and the world. In return, **these multinational** corporations (MNCs) received

substantial grants, an educated English-speaking workforce and the lowest rate of Corporation Tax in Europe². A generation of Irish men and women who had been forced to leave also began to return home. For the first time in its history, a new generation was offered an alternative to migration, where the possibility now existed to remain and work at home. The profundity of this change is further reflected in the fact that the Irish government began to actively recruit migrant labour to meet the continuing needs of an increasing number of MNCs located in different parts of the country.

The concrete presence of the U.S. technology multinational Hewlett-Packard (HP) in Ireland can be arguably viewed as the embodiment of the country's post-industrial transformation and its successful development policy. HP has operated in Ireland since 1976, yet the scale of this operation mushroomed in 1995 with a ground-breaking ceremony on its massive green-acre site near the village of Leixlip in the east of Ireland. The geographical location of HP's present manufacturing and development complex or 'Technology Campus' and home of the 'Dublin Inkjet and Manufacturing Operation' (DIMO), represents a mutually constituted local-global field site for this practice-led study, representing a much needed and critical response to the absence of audio and visual knowledge concerning Ireland's new post-industrial economy. The study sets out to critique historical and contemporary mediated representations produced by governmental and private bodies through the application of practice-based research methods. Significantly, how and in what ways do such representations and their visual epistemologies resonate with the still and digital video research outcomes of this study, configuring everyday production processes, workers and material labour conditions in a complex such as HP? Through the ethnographic collation of

oral testimony and personal histories, how do workers in a transformed economic landscape perceive their involvement in processes of globalisation?

There are a number of core considerations underlying the integrated representational and textual approach of this study. Its adoption of a sustained reflexive ethnographic methodology is in response to, and an outcome of, postmodern critiques of representation and its construction during the past two decades (Clifford and Marcus 1986: Marcus and Fischer 1986). Representation, it could be said, is always in crisis, while the deployment of 'reflexive' strategies has become a central component of practice-based scholarship in the arts and humanities. This primary consideration at once acknowledges the subjectivity of the researcher in the construction of knowledge. As Hammersley and Atkinson write:

Reflexivity thus implies that the orientations of researchers will be shaped by their socio-historical locations, including values and interests that these locations confer upon them. . . [It is] a rejection of the idea that social research can be carried out in some autonomous realm that is insulated from the wider society and from the particular biography of the researcher, in such a way that its findings are unaffected by social processes and personal characteristics.

(1995: 16)

Reflexivity also acknowledges the fragmented nature of the everyday and the inability to fix and attach absolute meaning to that which is observed and recorded in whatever format. The various methods employed in the study's creative practice, including the regular maintenance of a field-diary, together with the juxtaposition of multigeneric texts, has sought to further reflect upon the multilayered and non-linear dimension of everyday human experience, acutely experienced in the daily work practices at HP. A key response to the 'crisis of representation' has been the struggle to produce 'polyphonic texts' (Highmore 2002a: 169), thereby invoking the fragmented experiences of both researchers and ethnographic subjects.

Yet as Darren Newbury cautions, qualitative research must 'be systematic, rigorous, critical and reflexive and finally, communicable' (2001: 4). The study's reflective multi-perspectival framework is therefore further evidenced, indeed reconstituted, in the critical context of an accompanying installation.

The thesis is divided into three chapters. The first chapter situates Hewlett-Packard's presence in Ireland within an historicised and economic framework dating back to the early decades of the twentieth century with the founding of the Irish Free State. Images of Irish nationalist propaganda surrounding the inaugural formation of an engineering project designed to provide electricity nationwide are semiotically read in conjunction with contemporary representations of technology and innovation propagated by the public and private enterprise sectors. The chapter's critical juxtaposition of such readings, together with disparate spatio-temporal labour practices, historical periods and the introduction of different theoretical paradigms, enacts a strategic textual device used throughout this chapter and the following two.

The second chapter engages directly with methodological questions underpinning the research project, while simultaneously foregrounding fieldwork practices and the production of photographic portraits of both the architecture of the HP industrial complex and its labour force. The textual presentation of interview transcript material, photography and digital video is brought into dialogue with depictions of industrialisation from the late nineteenth century to the present, which are further embedded alongside the work of documentary photographers and installation artists operating across different cultural contexts in both Europe and the United States.

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The third and final chapter both identifies and establishes theoretical and representational strategies at work in the rationale, design and content of the installation titled 'The Breathing Factory'. Selective research materials incorporating photographs, transcripts, video and fieldnotes introduced in chapter two are re-presented, necessarily positioned in dialogue with established conventions of representation in art practice and anthropological exhibitions.

Footnotes

1 I was made aware of the term 'Alpha Build' over the course of a dinner conversation with a software developer. It refers to the first stage in the development of a computer software package. This stage is followed by 'Beta Build', 'Silver Build' and 'Gold Build' with the last stage being described as 'Final Build'. The piece of software is then released to the market. Since a piece of software is constantly refined and updated, as the developer commented, 'there never is a 'Final Build'' (October 2002). I was also drawn to the term's resonance with genesis, ideas of rebirth and its linguistic relationship to manual labour.

2 These are the reasons repeatedly publicised in the annual reports of the Irish governments, Industrial Development Authority (IDA Ireland). See (2005) Annual Report 2004, IDA, Dublin. HP also state this rationale evidenced through the course of interviews including with the Vice-president and General Manager of HP Ireland, Lionel Alexander. See interview Friday, 21 January 2005 (Appendix 2). More recently, discussion has centered upon state support for these multinational corporations as 'Ireland remains at the top of the EU countries league in terms of the public money spent on subsidising sector-specific investments' (Gurdgiev 2005: 28). For instance, in manufacturing and services this accounts for 51% of all investment made in the country and is viewed as both unsustainable and possibly illegal according to the EU (Gurdgiev 2005).

Chapter One

Beta Build: Locating Hewlett-Packard

My subjects, a new era is about to dawn. I, Bloom, tell you verily
it is even now at hand, let yea, on the word of Bloom, ye shall
ere long enter into the Golden City which is to be the new Bloomusalem
in the Nova Hibernia of the future (Joyce quoted in Sheehan and Walsh 1987: 177).¹

In the autumn of 1925, East German excavators began digging amongst the fertile soil of the Shannon estuary in the West of Ireland. This signalled the beginning of the largest industrial engineering project ever undertaken in the history of the State. The scheme of electrification at Ardnacrusha involved 3,000 men and women and occurred three short years following the founding of the Irish Free State and the subsequent bloody and divisive Civil War. This was a State described as one virtually without industries. The project embodied a regime of economic nationalism which had been embarked upon and materially expressed the independent, self-sufficient character of the young nation in contrast to the outward-gazing and imperial inclinations of its former colonial ruler (Bielenberg 2002, O'Toole 1997). Postcards were produced, films commissioned and guided tours given of the site to promote the 'keystone of the state-building project' (Bielenberg 2002: 5). This concrete mass of modernity imposed upon the traditional landscape was a grand gesture, 'the dim candle of surviving medievalism in Ireland faded before the rising sun of scientific progress, where the State replaced the Estate as the locus of economic activity' (ibid: 134). Almost 200,000 people from all over the country would visit the site during the course of its construction.



Figure 1.1; Ardnacrusha, County Clare (aerial photograph, ESB Archive)

Shortly after the ground was broken on the project, the painter Sean Keating, travelled from Dublin to document the construction. He was subsequently commissioned by the Electricity Supply Board (ESB) as part of the programme to bring this flagship project into the public sphere. Keating was a nationalist and had a long association with the cause for, and visual representation of, Irish Independence. Keating's work reflected, in part, the ideals of Michael Collins who had negotiated the Treaty that created the Free State. Collins, inspired by Soviet Socialist Realism, believed that the Nation should be envisaged as the heroic rural idyll, epitomised by the West and the Aran Islands – 'native artists in the new Ireland would be more than the mere producers of verse and painters of pictures. They will inspire us to live as Irish man and women should' (O'Toole 1997: 99).

Keating had painted the Aran Islands and its islanders bestowing such virtues. However, in contrast, his images from Ardnacrusha are primarily landscapes, depictions at various stages of construction. The labourers remain small within the scale of the larger project at hand. In his image, 'Luffelbagger' (Figure 2.1), a group of men are standing in the foreground receiving instructions. They stand deep within the newly dug channel in the shadow of this large implement of industrial technology, the excavator. The men wait, while above small

plumes of steam escape from various locations within this machine, as if anticipating the future.



Figure 2.1; 'Luffelbagger' (source: ESB Art Portfolio Catalogue) Sean Keating

The locations for Keating's work are far removed from the urban and its associations with the Industrial Revolution. This was the new landscape, newly transformed, of the young nation, 'the activity of work is largely divorced from the awkward presence of workers and cities. We get landscapes – sky, earth, mountains – and we get machines. The actual workers are small, irrelevant details' (ibid.: 100). The images were also intended to convey a belief in technological progress towards the realisation of future aspirations. This included unfolding cultural potentials – 'it may be that Gaelic, backed by electrical power, will provide an explosive mixture strong enough to smash the old moulds and radically transform Irish mentality' (Bielenberg 2002: 136).

The Ardnacrusha project had been awarded to Siemens-Schuckert Berlin (now known as Siemens), the German engineering company, who provided massive generators and hydro-electrical technical expertise. Almost 700 technicians, engineers, and construction experts decamped from Germany and were installed in Clare. They would reside there for almost

four years until the project's completion. The awarding of the contract to a German company in the 1920s was not without controversy, added to which Irish labourers in fact murdered a German foreman, an incident attributable to the prevailing disparity in the very conditions of labour (McCarthy 2002). Ireland lacked the industrial infrastructure to undertake such a task and so most, if not all, of what was required was imported. To appease German employees' concerns, accommodation was built and provided as a condition of work. The same acknowledgement, however, was not bestowed on Irish labour. Many slept in ditches or paid rent to stay in farmer's barns on a wage that was minimal for the work undertaken, evidenced in a letter from 1926 signed by 'Man from Nowhere':

We are working for our chuck, and slowly starving to death on it...what is the labour movement, the republican movement and the Church doing to expose and do away with this infamy? I would warn all three to be up and doing...as their silence is roundly condemned by the workers in the huts after their day of slavery.

(ibid.: 57)

The human toll of this project would be witnessed in the records of the horrific fact that almost every day or every other day a worker was injured, maimed or killed (McCarthy 2004).

The project at Ardnacrusha is viewed retrospectively as providing 'the platform for the economic, industrial and social development of the country' (Crowe 2002: 4). While supplying electricity for a whole nation via a transnational undertaking, the project was not only of economic significance, but clearly instrumental as a symbol of cultural representation; it instantiates an early awareness and nationalist use of propaganda in the formation of nation building. As an expression of an ideology which forgets what it needs to, in particular, the role of labour, the project has since been described 'as a profound black

mark in the **States labour history'** (Schoen 2002: 72). Only recently in 2004 with the 75th anniversary of the contract signing in Limerick and several publications to accompany the event, has the emergence of a more considered understanding of Ardnacrusha begun to be acknowledged.

Ireland's contemporary global economic standing, described as the 'Celtic Tiger'² – a title inspired by the country's economic performance in the early 1990s in comparison to the 'Tiger' economies of South East Asia – would seem a long journey from the dire ditches and aspirations of economic independence manifest in the Electrification Scheme at Shannon. The Irish economy had become, and continues to be, a trans-global site of operation for finance, technology and biopharmaceuticals. It is precisely the post-industrial landscape of the 'Tiger' economy, specifically its manifestation in technology and manufacturing, that is the focus for this practice-led research project. While the developed or western world, including Ireland, is commonly defined as 'post-industrial' (O'Donnell 2001: 62), it is of crucial significance to acknowledge **the** fact that the south **of Ireland** never experienced the Industrial Revolution (O'Brien 1999) and, therefore, it **was primarily** never industrial to begin with. I now wish to provide a more detailed historical overview of the present Irish economic context, offering a critical review of propagandist imagery produced and promoted by both the State and private enterprise sectors.

Historical Background

In 1932 attempts were made to lay the foundations of an industrial economy through active State involvement and a policy of high tariff barriers and protectionism. However, due to the size of the country, its small market and a shrinking population due to emigration, these efforts achieved limited success (O'Toole 2003). It was not until the 1950s, in the atmosphere of market liberalisation of Post-World War Two Europe, that this protectionist policy of economic isolation and self-sufficiency was challenged. The State looked to the 'formation of connections to the global economy by attracting foreign high-technology investment [which] became the cornerstone of Ireland's industrial policy' (Shirlow 1997: 91) with a goal to 'promote real economic growth but in doing so...permit the importation of foreign capital' (O'Riain 2000a: 180).

T.K. Whitaker's 1958 White Paper, 'The First Programme on Economic Expansion', is recognised as the moment of breaking with the economic policies of post-independence Ireland and the beginning of the process of Irish modernisation (Kirby et al. 2002) officially titled 'Industrialisation by Invitation' (Arora et al. 2001: 26). The legacy of economic nationalism continued. This is reflected in the fact that as Ireland embraced a 'modernist discourse...the allegory of a collective past continued to be reproduced (by State bodies) in the face of a less than traditional future' (Shirlow 1997: 91).



Figure 1.3; (cover) Ireland of the Welcomes (Bord Fáilte (Irish Tourism Board)) 1964

The above cover image (Figure 1.3) from the Bord Fáilte (Irish Tourism Board) publication, *Ireland of the Welcomes*, dates from 1964. This was the same year in which the final protectionist measures of Ireland's economic policy were removed and a no rate of Corporation Tax introduced (O'Riain 2000b). In the image a young fashionable couple relax over a picnic on a warm summers day while laid out upon the rug, before them, are sandwiches, a flask, an array of modern Tupperware products and a camera. The setting is a green field with a traditional stone wall and thatched cottage behind. The image is filled with notions of looking forward and outward to the possibility of a modern future from the viewpoint of an acute awareness of the past, one situated in the landscape of the Irish idyll; the traditional co-exists with the forces of modernisation.

Less than 10 years later in 1973, Ireland joined the EU, or then European Economic Community (EEC), as its 'poorest member' (Murray-Brown 2004: 7). Ireland's burgeoning relationship with the global computer industry continued. Initial success in attracting

international investment in this area is evidenced by the fact that throughout the late 1970s and into the 1980s, transnational electronics and computer hardware companies began locating factories in Ireland. However, these were primarily low-level in scale with few links being developed with the local economy. Ireland was a solely 'export-processing zone' within the European Market. There was little evidence of 'integration with the core activities of the parent company, the activities being routine and relations hierarchical in nature' (O'Riain 2000(a): 180). As one commentator noted at the time: 'By and large, the foreign companies operate nothing more than assembly plants, attracted to Ireland by tax concessions...There is little evidence of any generation of local research and development...and do little more than provide jobs (O'Hanlon 1976: 247).

During the course of the 1990s Ireland would experience the greatest economic transformation in its history. With the advent of the globalised market, the advancement of information technology (Castells 1996) and a concerted economic development policy, realised by the Industrial Development Authority (IDA, Irish governmental economic development agency), and focused upon attracting 'Foreign Direct Investment' (FDI), Ireland redefined itself. It is now variously described as a 'global site of operation', a 'host site' and 'outsourcing location', an 'offshore location' and/or 'nearshore location'³. This economic policy gave rise to the aforementioned 'Celtic Tiger'. The policy was and continues to be one founded upon low rates of corporation tax on profits (the lowest in Europe), the country's location in and proximity to the European Union and the availability of a highly educated and English-speaking workforce (IDA, 2001).

We will win for Ireland, its people and its regions, the best in international innovation and investment so as to contribute to the continued transformation of Ireland to a world-leading society which is rich in creativity, learning and personal and social well-

being. We will work in partnerships with other organisations to enhance the best of Irish capabilities and talents and match them to the best of Global investment.

(IDA 2001: 2)

This policy would appear little different from the policies of the previous two decades other than in scale of operation. However, the economic context had changed as had the workings of the global economy. Ireland had secured, received and invested substantial infrastructural funding from the European Union. Globalisation was and is occurring at 'a greater and deeper scale than ever before' (O'Clery 2003: 9).



Figure 1.4: (cover) 'Achieve European Competitive Advantage in Electronics' (IDA) 1999

Ireland's aspiration to be part of the global technology economy is reflected in the cover of this IDA publication from 1999 (Figure 1.4), which employs images coded 'high-tech'. Two anonymous workers, uniformed in white suits, are busy with the job in hand. Both are silhouetted in the glow of the sun-like shape of a microchip wafer. The use of the primary colours green, yellow, red and blue, used repeatedly in the popular media, signify notions of technology and high-end development. This was, and continues to be, the economic image

presented to potential investors of FDI. The prime areas for this foreign direct investment have been finance, biopharmaceuticals and technology.

In 1989 the first phase of the International Financial Services Centre (IFSC) opened on the north quays in Dublin's inner city with the second phase completed in 2000: a European location for over half the world's largest banks and insurance companies and at present generating approximately 60% of the Republic's wealth (IDA 1999). This symbol of global aspiration and capital was the first banking district in the history of the State – 'driven by tax incentives, millions were spent to develop an international centre that would compare with The City in London or La Defense in Paris' (MacDonald 2001: 14). The underlying focus in its establishment was 'jobs to market...[mostly] 'back-office' functions such as administration and processing; however, the goal now is to establish higher value 'front-office' jobs...to ensure these companies stay here' (Brennan 2004: 33). The challenge of attracting and holding onto global capital investment are reflected in the recent cover headline of an Irish business publication, 'The IFSC – Finance Temple or Future Ghost Town?' (ibid.: 1)

The biopharmaceutical industry has also received substantial investment, primarily, in manufacturing. At present, Ireland is location for 31% of FDI in biopharmaceutical technologies for all of Europe (IDA 2003). The dependency on competitiveness for such jobs remains. As with the financial sector, it would appear the need to focus on knowledge-based employment is also the requirement to ensure longevity. Ireland remains a centre for manufacturing as reflected in its status as a Newly Industrialised Country (NIC) similar to those of East Asia and Latin America (Kirby 2003).

The other main area of investment has been technology, specifically, Information and Communications Technology (ICT). As indicated above, Ireland has had a relationship with the global technology industry for three decades now, beginning in the 1970s. The Digital factory in County Galway was a prime example of this and a forerunner to the present industrial landscape. A manufacturer of computer components, it opened in 1979 offering permanent employment until its closure in 1993 when the company pulled out of Ireland citing rising costs and falling demand⁴. This region of Galway, exposed to the full competitive forces of the global market, initially feared for its future, however, the jobs would be replaced. Fortunately, the closure occurred the same year in which the 'Tiger' economy began to take hold. Ireland continues to be a prime manufacturing base regarding ICT for multinational companies (MNCs).

The State is now the largest exporter of software in the world and three-quarters of jobs in this area are in foreign-owned companies with U.S. companies accounting for 65% of this employment (Central Statistics Office 2003). In the face of increasing competition from other global locations for this investment, and as previously referenced, a policy towards increased specialisation has evolved – to move up the value chain. This is centered upon the parallel strategy of continued manufacturing and an evolving role in research and development (R&D) in the creation of a 'knowledge-based economy'⁵. For example, in the area of microelectronics, an industry body supported by government and academic institutions has been established. This is titled MIDAS with the stated goal of 'realising a vision of Ireland as the Silicon Valley of Europe'⁶. This prospect remains to be realised, reinforced with the publication of a report commissioned by the Irish government Enterprise Strategy Group

titled 'Ahead of the Curve: Ireland's Place in the Global Economy' (2004). Echoing comments previously cited by O'Hanlon (1976), the report declared:

Ireland is a world class leader in operations and manufacturing, however, it significantly lags behind internationally in terms of internationally-traded services sector...where expenditure is **half of the European** average...Foreign-owned enterprises are accounting for **most of Ireland's exports**, and perhaps indicative of Ireland's present role...This sector **produces goods that** were designed elsewhere, to satisfy market requirements that **were specified elsewhere**, and are sold by other people to customers with whom **the Irish operation has little contact** and over whom it has little influence.

(2004: 14)

The **context** in which global manufacturing operates would appear little changed: 'Ireland remains a manufacturing base for Europe'⁷. However, this island off the west of Europe aspires, as stated by the Taoiseach (Irish Prime Minister) Bertie Ahern, to be 'at the centre of Europe'⁸, yet in terms of the global economy continues to be defined as an 'offshore location'. A mature economy is defined as one that moves from a manufacturing-based to primarily service-based economy (Fitzgerald 2004b). Ireland is the only economy in Europe in which employment in manufacturing continued to grow in the 1990s⁹. India and China are viewed as the State's peers and competitors on this global stage, 'the globalisation that brought foreign investment to Ireland, now puts us in competition with India and China' (McManus 2004: 7). This status, and the struggle to achieve a knowledge-based economy, is further illustrated in the IDA annual report from 2003. The country is now marketed as 'Ireland, Knowledge is Our Nature', the rationale being:

Competition for investment requires us to take a global perspective rather than a local view of Ireland...to focus on high skill, knowledge and innovation...jobs that will be from the top end of the value chain, research and development.

(2003:4)

The same report also forecasts that 'the more basic manufacturing – the commodity products – will migrate to low cost locations in Central and Eastern Europe, Latin America and Asia' (ibid.: 4). However, there may be obstacles in achieving this goal of a knowledge-based economy if one looks further afield. In a recent article concerning the 'high-technology' boom in the economy of one of Ireland's competitors, China, the director of the Hong Kong-based journal, 'China Economic Quarterly', wrote:

Chinese industry is lying on a low-technology bed and dreaming high-tech dreams...for 61% of high-tech exports come from wholly foreign owned enterprises, which means there is no transfer of technology to a domestic partner.

(Kroeber 2004: 9)

Meanwhile, the Dean of the Yale School of Management warns of 'sharing America's intellectual treasures with a foreign rival (China)' (Garten 2005: 12). Both sources foreground how the control of knowledge and the capital flows are integral to processes of globalisation. China aspires to evolve into a **more research** and development-based economy. However, the prospect of this without access to **certain** technology and ownership of knowledge appears limited in the least – 'information technology has provided the means to produce global networks of communication on a scale, that new sources of power, influence and control are available...Who **controls** these networks? Knowledge is power' (Castells 1996: 66). Without the transfer of knowledge, growth up the value-chain would appear restricted.

The nature and base of the economic development is not the only area receiving scrutiny in Ireland. More recently, attention has also been given to industrial output figures with much discussion concerning the quotation of GDP (Gross Domestic Product) over GNP (Gross National Product) when defining economic growth, the disparity between both described in

one headline as 'Elvis Lives in Irish Trade Data' (O'Hearn 1998: 37). GDP includes profits exported by multinationals and considering the corporate tax provisions in Ireland, this accounts for 20% of value added in the country each year (Fitzgerald 2004a). The GNP deducts this and therefore provides a more accurate reflection of the country's economic situation. The question, therefore, remains; is Ireland's economic growth sustainable on such a narrow base? Despite increases in service-based growth and evidence of knowledge spillover to indigenous industries, surely a sign of a maturing economy, how vulnerable is Ireland with its prevailing dependency on FDI, to global market fluctuations?

Hewlett-Packard (Ireland Limited)

Beyond the trees and to the left of the plant, facing the motorway, was a wide-open gravelled space, around nine acres a taxi driver told me later. As I crossed, I noticed the white marks at intervals, dashes here and there. I didn't know what the traces were for.

(Fieldnote extract, 25 March 2004)

In the shadow of the Plant stands 'The Wonderful Barn'. This tall, cone-shaped, kiln-like structure was constructed by the local Connolly family in the middle of the Eighteenth century. The design, inspired by an Indian rice store, is in fact a folly. At the time the local community of Leixlip was suffering from famine and the building provided much needed employment. The Barn would later be used to store grain. Its role now is solely as a local landmark of archeological significance. From the Barn, one can view the architectural structure of white and grey that stretches across the low-lying, undulating landscape of County Kildare that is the Hewlett Packard Manufacturing and Development complex or 'Technology Campus'. When HP announced its intentions in 1995 to build on this site, it referenced its historic neighbour. It stated how this philanthropic gesture was to be recreated

and repeated with a new employment-generating exercise undertaken in the tradition 'first initiated by the Wonderful Barn'¹⁰. The Wonderful Barn has stood on this location for over 260 years.

The HP complex was actually built upon the former site of 'Irish Meat Packers', an abattoir and meatpacking plant in which 'there was killing [of] cattle, sheep and pigs, boning and canned meats' (Lynch 2000: 33). At its height, it employed around 1,000 people and was one of the largest meatpacking operations in Europe and the single largest employer in North Kildare. It employed 'workers from all over the country, which brought an influx of people to the area' (Brangan & Sherry 2000: 56). The factory was established in the mid-1940s and continued operating until 1987 when it closed 'with a weeks notice' (Lynch 2000: 35). This would lead to a protracted and bitter labour dispute. The feelings of the time are reflected in the words of one former worker: 'The "payoff" was peanuts and as well as a bad smell in the air, it left a bad taste in our mouths and hearts. This was a terrible loss to Leixlip and the other towns and villages that depended on the Plant for work' (Bannon 2000: 12). A local TD raised this issue in the Dáil (the Irish Parliament), stating how such a closure was 'leading to continuing large levels of emigration from the area' (Power 1987 'Dáil Eireann' transcripts). This occurred just 17 years ago.

Dublin and its surrounding region is the global location for an Information and Communications Technology (ICT) cluster – a consistent and common industrial patterning formation to all such global locations, based upon the original ICT cluster in Silicon Valley, California (Arora et al. 2001, O'Riain 2000b). The cluster formation signifies both the inspiration and aspiration of Ireland to step forward and take its place on the global economic

stage. Leixlip lies 17 kilometres west of Dublin city and forms a significant part of this cluster, together with multinational companies Intel and SAP, situated further up the road from HP. For as the sociologist Sean O'Riain notes, 'the globalisation of the Information Technology (IT) Industry is seen to result not in a virtual economy but in a global industry organised around and through certain key places and regions' (O Riain 2000a: 179). Leixlip is such a place in such a region, a witness to the migration of global capital and technological flows. The anthropologist Marc Augé argues that contemporary places are defined in terms of 'intersection, centre and monument' (Augé 1992: 64) and Saskia Sassen has considered the compression of time and space when she defines the local as a 'microenvironment with global span' (2001b: 14). The grey and white monolithic structure that is HP, embedded in the green countryside of county Kildare, represents a local-global monument encapsulating the economic hopes of a grateful community.



Figure 1.5; Hewlett-Packard (Manufacturing Limited) Liffey Park Technology Campus, Barnhall, Leixlip, County Kildare (source: HP)

As an organisation, HP has had a presence in Ireland since 1976 when an overseas sales office was established in Dublin. However, the scale of it's operation fundamentally shifted in 1992 with the establishment of a manufacturing base as a 'start-up company' in

Blanchardstown just outside Dublin. This moved to the present site in Leixlip in 1995 (Figure 1.5). The construction of the plant was the fastest build from a greenfield location ever witnessed in Ireland. The frantic nature of its establishment is reflected in the comments of Una Halligan, Director of Government and Public Affairs, HP:

[W]hen you come here as a start-up company you literally make up the job as you go along. No two days are the same and you just kind of go with the flow and something happens and suddenly you are going in this direction – that doesn't work and you then go in that direction...You would be starting off and trying to get it up and running...ship the product...for god's sake get the product out.

(Interview with Una Halligan, 1 June 2004)¹¹

The present site of HP is defined by the following characteristics:¹²

- It is located 5 kilometres west of the town of Leixlip in the east of Ireland.
- The complex is 2 million square metres in size on a 200-acre site with almost 2,500 employees and a single corridor of almost one kilometre long running through the centre of it.
- It is one of HP's global manufacturing and research sites of which others are based in Puerto Rico and Singapore. Each global location is built to the same specifics and design with the exception of Singapore due to space restrictions.
- It houses one of the largest 'clean rooms' in the world where research, product development and product manufacturing is undertaken. HP commits 7.1% of its Irish budget to Research and Development.
- In 1999 HP expanded from a solely manufacturing function to a fully-integrated site and re-designated as 'The Liffey Park Technology Campus'.

HP states its reasons for choosing Ireland as:

- Availability of a highly-skilled workforce.

- The direct cost of employment being one of the lowest in Europe.
- Provision of only 10% corporate tax on profits (now 12.5%).
- The availability of non-repayable grants towards both fixed and people costs.
- Good industrial relations: 'Ireland is business and technology friendly'.

HP is considered an example of the type of ICT manufacturing industry invited to invest in Ireland as a result of the Irish government's development policy. This standing is further evidenced by the company's inclusion in the formation and development of government policy documents, for example, being nominated by the Department of Enterprise, Trade and Employment to provide ongoing input to the reports, 'Expert Group on the Future Skill Needs of Ireland' (June 2000 and July 2001), and its further inclusion on the board of 'ICT Ireland', a public and private partnership organisation engaged in the promotion of Ireland as a global ICT site of operation. HP is the largest ICT employer in Ireland. The image below (Figure 1.6) is one of 15 images illustrating a brochure published by HP titled 'Share Our Success in Ireland' (2001).

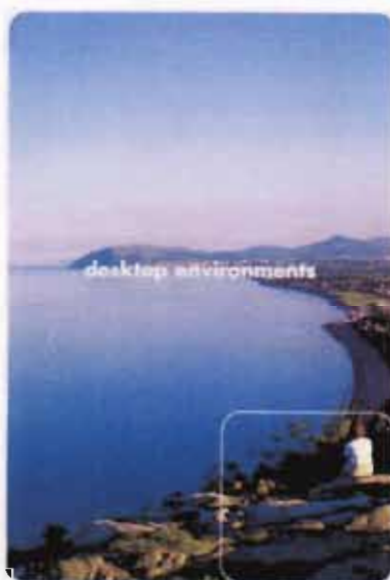


Figure 1.6; image from 'Share our success in Ireland' (HP brochure) 2001

Overlooking Killiney Bay south of Dublin, the image above (Figure 1.6) is a familiar one to an Irish viewer, noted for its supposed resemblance to the Bay of Napoli. Usually the haunt of courting couples, a lone female figure sits on a still summer's evening referencing the visual thematic of a solitary figure in the landscape, gazing towards the sea and away from the viewer. The seated actor surveys a scene of natural beauty but one now emblazoned with the title 'desktop environments'. She is herself an unwitting accomplice for she is enclosed by a white line. She sits in the bottom right hand corner for the benefit of a western culture accustomed to read from left to right. Various possibilities are signified ranging from the co-existence of nature and technology to the potential for expansion on a national and international scale. However, the she as the subject is never forgotten. It is one of only two images recognisably made in Ireland within this brochure.

While the image above arguably serves as a persuasive representation of Ireland's aspirational position in the global economy, the comments of Una Halligan concerning labour practices in contemporary Ireland inadvertently acknowledge the country's historical absence of an industrial past:

They [the workers] didn't come with baggage and neither did they come with a trade union background. I'm not anti-union, but they didn't come with 'this is the way it's always been done' . . . they came with 'I've never done this before but couldn't we do it this way'. They were looking for new ways of doing things. I think probably HP came to Ireland at a very good time and I'd say Intel would tell you the same thing and they would have been here a few years earlier. HP came at a very good time when you had very young graduates who didn't have any bad habits and were able to actually bring their enthusiasm, their flexibility and really devour it, you know – there was a wow factor for them too.

(Interview with Una Halligan, 1 June 2004)

At this point in the discussion and following Halligan's revelatory remarks, it is imperative that attention be drawn to theoretical interventions surrounding the questionable

transformation of labour practices as a result of technological developments in industrialised societies. In his monograph *Labour and Monopoly Capital*, the Marxist writer Harvey Braverman writes:

The social relations of exploitative technological societies produce the science and technology which are applied to the work process and increasingly subdivide, de-skill, routinise, brutalise and reify it until there is no craft, no meaning; and the goal of one of the pioneers of "factory discipline" is brought even closer; to make machines of men and women as cannot err.

(1974: 27)

Braverman has been defined as absolutist but the deduction here is not one of revolution but an understanding that 'capitalist ideology becomes a material force in the machines and procedures of work' (ibid.: 53). This resonates with, as referenced in the epigraph to the introductory chapter, Sekula's argument that 'in fact the industrial function has just been globalised' (2001: 27). Globalisation has intensified the material conditions of work. The German sociologist Ulrich Beck, for example, defines the new world of work as one of risk in which 'the capitalist and the worker alike are all exposed to risk...leading to an open, risk-filled modernity characterised by general insecurity and the spread of temporary and insecure employment, discontinuity and loose informality' (2000: 2). This parallels the general trend in Western societies from industrial-based work to service-based employment. The term 'post-industrial' has been used to describe this trend. It has been driven by the 'two interrelated transformations in the technical division of labour and the structure of the organisation' (Thompson and Warhurst 1998: 3).

Braverman contended in 1974 that 'new office technology and organisational methods were being introduced to control and standardise the office worker just as industrial technology had been employed in relation to, typically, assembly line workers' (1974: 63). This view is

substantiated in research conducted in the late 1990s demonstrating that simply because 'workers are now more highly educated does not necessarily indicate a higher level of knowledge inherent in the jobs in which these people are employed...with the content of much contemporary work remaining highly routinised as well as insecure' (Thompson and Warhurst 1998: 4). This is reflected, in part, in the words of Susan, a Logistics Manager at HP:

I can see it constantly changing but as a plant being stable 'cause there's always goin' be something else to come in and take over, take it's place. For production lines out there, they seem to always need less and less people to operate them. Every different production line we bring in, it has more capabilities within itself. Whereas the first one, we probably needed 12 and now we only need 6 people to run it, so technology is constantly changing and machines and computers are doing more work all of the time and you've got more tools to use on a PC so, life, work is being made a hell of a lot easier, I think.

(Interview with Susan Cronin, 9 October 2003)

In his ethnographic study of Irish software developers addressing the fragile nature of current work practices, O'Riain observes 'only occasional solidarity and little loyalty...where control of time is a critical resource' (O'Riain 2000a: 179). O'Riain comments on how the local/global landscape has brought about the structural transformation of organisations, whereby 'a Global Web corporate structure replaces a more rigid, hierarchical organisational structure...We have a shifting web of connections forged into a relatively fleeting alliances' (ibid.: 181). Does such an environment explain the recent promotion by the IDA of 'the most flexible and adaptable workforce (in Europe) when faced with new challenges?' (IDA Annual Report 2003: 4). A further study by O'Riain of Ireland's burgeoning software industry maps out a 'Flexible Developmental State' model of enterprise in which the State is actively involved, responsive and adaptable to the needs and demands of multinationals in its model of economic development (O'Riain 2000b: 157).

Ireland's acute vulnerability to global economic forces is highlighted in research published in 2003, based upon a 25-year study of the Irish economy, which concluded that multinationals are beneficial to the economy as long as they can commit to stay for a significant period of time. However, if need should arise, these same multinationals are 40% more likely to pull out of the Republic than indigenous firms (Görg and Strobl 2003). These sobering findings are powerfully conveyed in concerns expressed by Mark Doran, an HP Clean Room Process Shift Supervisor:

There's definitely concerns. I think they're here for tax reasons on one level and there's an element of localisation as well. They can produce a lot here and not have to store it in warehouses and transport it around the world and into a European market from India. So there are cost savings as well, but there is also the worry that inflation is making this job less and less attractive for people. I know Operators who will never own a house and they could work here till the day they die and they'll never be able to afford a house. So, I mean, is that a quality of life? HP are going to lose a lot of people to competitors if they don't start to financially reward people that are working here. But the catch 22 is . . . can they afford that or is it just cheaper for them to pack up and piss off to India. That's the bottom line, so we don't know that yet, you know. If you were back here in 5 years time you'd probably see something different.

(Interview with Mark Doran, 28 November 2003)

Footnotes

- 1 These words were uttered by Charles Haughey at the launch of the Custom Docks Redevelopment in June 1987.
- 2 In the early 1990s, the American investment bank, Morgan Stanley, first described the Irish economy as the 'Celtic Tiger' (O'Hearn, 1998: 6).
- 3 *Enterprise Strategy Group: Ahead of the Curve: Ireland's Place in the Global Economy* (2004) was commissioned by the Department of Enterprise, Trade and Energy, Government of Ireland.
- 4 As described from interviews with former workers at the Digital factory in Galway from the radio documentary 'Factory Lives' (2003), RTE 1 Radio, broadcast 29 October 2003.
- 5 The present focus and formal policy for the IDA is to create employment around investment that is higher up the value chain and the establishment of a 'knowledge-based society' (IDA Ireland, Annual Report 2003: 2).
- 6 'What Are the Opportunities in Ireland?' Available from <<http://www.midas.com>> [Accessed 17 February 2003].
- 7 George Lee, Senior Economic Reporter, RTE Television. Quoted from his report concerning the release of the Enterprise Strategy Group Report on '6:01 News', RTE (8 July 2004).
- 8 Quoted from interview on *The Eamonn Dunphy Show*, TV3 (24 October 2003). This interview took place just before Ireland was to assume Presidency of the European Union from January to June 2004.
- 9 This ongoing discussion concerning the quoting of GDP and/or GNP has received a lot of coverage in the weekly column of the *Irish Times* by the former Taoiseach, Dr Garret Fitzgerald, drawing upon both his own knowledge as a politician and his background as a trained economist.
- 10 Quoted from advertisement titled 'The Wonderful Barn', a Hewlett-Packard Recruitment Advertisement and subsequent winner of *the Irish Independent/Sunday Independent* ERA Award in 'excellence in Recruitment Advertising 1995'.
- 11 Transcriptions of interview material with ethnographic subjects have retained where possible a fidelity to varied dialects and colloquial use of language.
- 12 Statistics taken from *HP - Share Our Success in Ireland* (2001), Public Affairs Department, Hewlett-Packard, Ireland.

Chapter Two

Silver Build: 'Beyond The Pale'¹

[A] hedgerow between a nature reserve and one of Leixlip's cutting edge multinationals is the interface between the romance of the countryside and the most hi-tech industry in Europe. Surrounded by water, two rivers and the Royal canal, with open space and room to grow, Leixlip is poised at the forefront of Irish history, as it has been since the last Ice Age which ended at the top of the cliff behind the north side of Main Street and along the Rye River valley. The Ice Age. A Viking outpost. A Norman stronghold. An outpost of The Pale. Cyberspace (Leixlip Town Council, 26 February 2004).²

Reception Centre, Hewlett-Packard: June 2003

'No photography or use of image capturing device without the express permission of security' states the sign to my left. I give my name, identity of the institution I am affiliated with and that of the person I am there to meet to the receptionist at the main desk. These are duly noted and the time recorded. I receive an 'escort required' badge, 'to be displayed at all times', and wait for my liaison from the Government and Public Affairs Department. The reception area is non-descript in nature apart from some plants and the location of three portraits, Mr. Hewlett and Mr. Packard, who founded HP in their Californian garage in 1939, and Carly Fiorina, former waitress and English teacher, now CEO of one of the largest IT hardware companies in the world³. This large formal space ebbs and flows with movement and in the minutes that follow I hear French, English, American accents and some from various parts of Asia in brief sound bites between greetings and goodbyes. These moments are accompanied by the constant swish of the two large doors on either side of this area opening and closing as individuals move between buildings.

I am met by my 'liaise' (HP's term) who is to accompany me at all times and who is in possession of the 'camera pass'. This card is to be presented to anyone who queries our actions or presence on site. We proceed to our first card-swipe door. The use of the card enables security to log our position. The doors part and we proceed. As we walked along this corridor, the main artery of **the complex**, my liaise asked if I knew that it was almost three quarters of a kilometre long. **'Isn't that mad?' she said.** To gain access to this corridor had required a prolonged and **extensive** process of **negotiation** with HP lasting more than nine months in total.

As a result of my previous photographic project, **titled *Southern Cross***⁴, I was acutely aware of questions surrounding the negotiation of **access** to formal institutions. I had spent an extended period of time trying to gain access to numerous construction sites in and around Dublin at a time when particular government and media interest focused upon work safety practices within the construction industry. I was therefore only too aware that gaining access to such a sensitive space as HP would require a **determined** effort but as Hammersley and Atkinson state, 'much can be learned from the problems involved with making contact with people as well as from how they respond to the researcher's approaches' (Hammersley & Atkinson, 1995: 55). I was further attentive, drawing on past experience, to the potential of personal networks and their role in facilitating access to the gatekeepers of secure and closely guarded spaces. **A friend had worked for HP in its sales support office** in Dublin for several years. This office was HP's first incarnation in Ireland prior to its set up in Leixlip. When I called her, in early 2002, **she described** with awe the first time she visited the plant, even mentioning 'the corridor'. I gave her an initial outline of **the study** and she said she would get back to me with some contact details. I received the telephone number of the head of security

on site in Leixlip. I called him, mentioning my friend and her job position within HP, but he did not recognise her name, unsurprisingly, given the fact that HP employs over 4,000 people in Ireland. He suggested I should write a formal letter outlining my request and rationale. I did and waited. I received no response. After a month or so, I telephoned again and he said he would get back to me. Again I waited. Ultimately, it would be my personal network which enabled access. I never heard back from the Head of Security. However, some time later over the course of a conversation another possibility arose.

A close friend worked with 'The Digital Hub', a project focused upon the establishment of an international centre for research and innovation in technology, in the Thomas Street area of Dublin. As part of this project, the 'Hub' has had a longstanding relationship with HP through its philanthropic scheme. HP provides support for the project including the provision of computer hardware and the 'kitting out' of educational facilities. Through this established relationship, there exists a degree of trust. The main contact, as it so happened, was Una Halligan, Director of Government and Public Affairs at HP, a former senior executive with the Irish Employers Federation (IBEC), who oversees as part of her role at HP, the Philanthropic Scheme and its implementation.

From the outset HP's main issues regarding access focused on security and corporate branding; the globalised space of the manufacturing complex was deemed highly sensitive. I had a formal meeting with Una out in Leixlip in early 2003. This entailed a broad discussion about the study I wished to undertake and its rationale. Our meeting raised ethical considerations, questions about 'deception in negotiations' (Hammersley & Atkinson 1995: 72), and 'what those involved in negotiations are told' (ibid.). I stressed the need to create a

'document' of the industrial space of HP although was careful not to foreground mention of a 'document' that **would be necessarily** critical in its outlook. I was all too aware of 'the balancing act of **negotiating access**' (ibid.: 74) and the extent of voluntary information to divulge. HP and Una were aware of my credentials as a visual art practitioner; *Southern Cross* had resulted in a publication with national and international exhibitions of the work. I believe this background influenced the company's decision to grant access arguably in the hope that HP would derive positive publicity upon the conclusion of the research project. That said, a prolonged process of negotiation unfolded lasting nine months (see Appendix 1) in the form of telephone conversations, emails, written proposals, re-submission of proposals, meetings, until access was finally approved on site – a process described by one worker as analogous to 'getting into Fort Knox'.

Where should I stand?

How can the study of everyday life grasp lofty processes that transcend national boundaries? (Buroway et al 2000: 1)

Arjun Appadurai provides a framework for the cultural study of globalisation, its intensification and the changing role of 'place':

[T]he present is marked by deterritorialisation that requires an extensive reshaping of those contemporary critical discourses that remain tied to the persistence of specific **cultural spaces...a new global cultural economy, a complex, overlapping, disjunctive order** that cannot any longer be understood in terms of existing centre-periphery models.

(1996: 32)

For Appadurai, the methodological imperative is to engage with the specificities of the everyday and the 'local' as a way of examining global forces in our deterritorialised world

(Appadurai 2000). IIP as a 'local'-global infrastructure can be construed as an everyday site. The 'everyday' for Ben Highmore has been theoretically posited as an 'object of cultural analysis...a crucial interpretive category in its own right' (2002b: 7). Expanding on the value of studying the 'everyday', Highmore writes:

Instead of picturing the world as a drama of significant (and exceptional) events and people, set against the backdrop of everyday life, the relation between foreground and background needs to be reversed.

(2002a: 27)

The 'everyday' is at once complex and heterogeneous and 'those who venture into this labyrinth must be honestly forewarned that not all answers will be supplied' (Highmore 2002b: 250). For as Allen Feldman comments, 'a full ethnographic record is a myth, what one achieves is a fractured narrative'⁵. Similarly, 'ethnographies...are constructions involving selection and interpretation' (Hammersley and Atkinson 1995: 207) enabling the possibility for the creation of 'polyphonic (multi-voiced) texts' (Highmore 2002a: 169) in order to register the 'unregistered and [find] meaning in an impossible diversity' (ibid.: 174).

Within the field of visual ethnographic practice Sarah Pink challenges viewing ethnography as 'a linear narrative that represents the ethnographic experience as one in which ethnographers go to the field and then go home to analyse and write it up' (2001: 117). She references Marcus Banks' proposal (1995) for an ethnographic text constructed according to the principle of 'montage' or 'multivocality' (ibid.) – in other words, the multilinear textualisation of both ethnographic research and everyday life. This emphasis underscores the methodological potential for the generation of a polyvocal and multisensory text invoking the work of anthropologist Paul Stoller and his notion of 'sensuous scholarship', in particular, the 'flexible' agency of the scholar/researcher 'in which the sensible and intelligible,

denotive and evocative are linked', together with the researcher's 'ability to make intellectual leaps to bridge gaps forged by the illusion of disparateness (Stoller: 1997: xviii).

Pink further warns of the possible challenges of such a methodological proposal, foregrounding the role of media in both the construction of representation and its inherent perpetuation of ideological practices which in themselves have been problematised. Thus textual and visual practices designed to give subjects a voice may, in the end, 'only constitute a new textual construction in which the narrative of the ethnographer is just as dominant and those of the subjects subordinate' (2001.: 118). Pink, therefore, advocates a rigorous reflexive approach, acknowledging that the researcher's subjectivity is a central component to the conceptualisation and production of the research process (ibid)⁶. Significantly, this proposal is not without precedent as Rhoda Métraux wrote in 1953:

The research worker's account (should not) be a generalised account of his own experience but rather an account of the way in which others experience the world, organised in a particular way, i.e. through the medium of his own disciplined consciousness.

(1953: 357)

Métraux advocated a methodological approach that necessarily accommodated the sensory in the representation of research materials, echoing Stephen Tyler's concept of 'evocation' in which a text is read 'not with the eyes alone but with the ears in order to hear the voices in the pages' (1989: 136). In a globalised postmodern society the methodological and evocative representation of 'multivocality' reflects the fragile and fleeting nature of the contemporary global workplace. Such a methodological approach instantiates the application of a cross-disciplinary practice-based model employing photography and digital video, informed by an understanding of ethnographic methods in the application of a reflexive critical practice. For

as Allan Sekula argues 'a truly critical social documentary will frame the crime, the trial and the system of justice and its official myths' (1978: 122).

Constructing the Field

"The field" that is reported on the basis of fieldwork is not a pre-given natural entity. It is something we construct, both through the practical transactions and activities of data collection, and through the literary activities of writing fieldnotes, analytic memoranda and the like.

(Atkinson 1992: 5)

I was required to be accompanied at all times. This was with my liaison from the Government and Public Affairs Department; however, it often included another member of HP staff from the particular location we were visiting. All visits to the site were pre-planned; schedules were drawn up and then sent for approval usually per email. In the initial stages, a meeting was also required on location in Leixlip to review the proposed schedule. If not approved, these had to be redrawn and re-submitted. A schedule was usually drawn up one month to six weeks in advance. On two occasions, I was 'shut down'. Having arrived and in the course of completing undertakings that were planned for that particular day, I was halted unexpectedly and without notice. The first of these was particularly significant, as I believed the whole project might have been jeopardised. Both incidents were the result of a breakdown in communication regarding my presence between the Department of Government and Public Affairs and the relevant parties in the particular location. This occurred for the first time in August 2003.

While being accompanied by my liaison in Production Building 2, we were approached by two building engineers. She was called aside in what turned out to be an extended discussion. I

tried to make eye contact and smile, as it were, in reassurance. They did not make any attempt to make contact or discuss, with me, my intentions. She returned, apologetically, and said 'that's it for the day'. The Department of Government and Public Affairs had not informed the engineers of my visit. They, therefore, needed to see all the images I had produced and then a decision could be made. This was early in the image-making process so I finished, extremely frustrated and angry, concerned that this would put an end to the project, having patiently undergone extensive negotiations to enter this space, a lengthy process requiring detailed negotiation, only to be jeopardised by a breakdown in communication.

This resulted in a month long absence onsite as the bureaucratic cogs turned slowly over. I received a telephone call from Una Halligan during this period in which she said, 'I thought you'd have all you needed in a couple of weeks'. I had made my research requirements clear from the outset and she had agreed, on behalf of HP, so I understood this statement to mean she was experiencing pressure. However, subsequently and with great relief, in mid-September 2003 approval was finally given to return to the plant. On other occasions, if I arrived at the prearranged time and for some reason a person was not available to accompany me, this visit would not occur and I would have to wait until the next visit and/or try to reschedule.

Regarding the **interview process, the list of questions required pre-approval**. In the beginning these interviews involved the interviewee and myself (see Appendix 2 for a list of the interview questions). After several interviews, my liaison was directed by the Department of Government and Public Affairs at HP, to be present at all further interviews after they were

made aware of the process around the initial interviews – my liaison had not sat in during the course of the previous interviews.

The individuals interviewed included three Line Operators, two members of the warehouse staff, a Line Supervisor, a Clean Room Shift Supervisor, the Director of Government and Public Affairs and the Vice-president and General Manager of HP Ireland. The interview with the Director of Government and Public Affairs involved just the Director. It should be noted that not all those individuals working on the site are HP employees. The majority of the labour force is contracted through external employment agencies.

The final requirement for gaining access was the vetting of all material collated, including both photographic and digital video; hence the presence of my liaison in all interviews. This process of vetting was usually undertaken by the Government and Public Affairs Department and on several occasions by engineers working in a particular area and occurred in a number of ways. For example, I would leave the photographic material on site and retrieve it on my next visit or in the case of digital video, I had to screen the rushes to the Director of Government and Public Affairs and her aide. The specific details of the fieldwork conditions typically reflect, I would argue, the policing regime of Multinational Corporations.

Note-Making in the Field

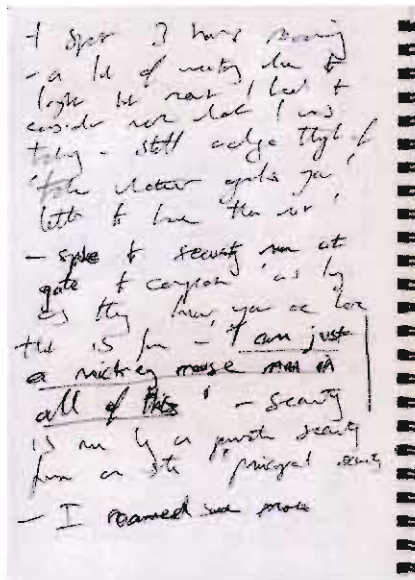


Fig. 2.1, page from diary, Thursday, 22 April 2004

22 April 2004, Leixlip: The bus finally arrived. The stop was directly in front of the plant, tripod bag over one shoulder, camera bag and recording equipment over the other. They arrived about once an hour. Everyone knew the schedule due to their rare appearance. Most people drove. There were about 20 of us. I had listened to conversations in French, Italian, Spanish and English, spoken between individuals with different 'mother tongues'. It was twenty past four in the afternoon after a productive, if tiring, day. I spoke to the driver while he had a cigarette before his departure time. He was from Pakistan but had lived in Canada not far from where I had. 'The winters were better in Ireland', he said. I struggled onto the bus, got a seat upstairs and began writing. That day I received clearance to photograph the exterior of the plant. Where to begin?

Darren Newbury has provided a critical review of the application of the 'field-diary' in the context of qualitative research in the field of art and design practice. He advocates the

inclusion of the diary as a central component of the visual research process, arguing that, 'there are no rules as to how research diaries or field-notes should be compiled, the prime consideration is finding a format and style that fits the needs of the research project, and which is found to be workable and useful by the researcher' (2001: 4). Newbury offers a number of examples, one of which draws upon the writings of Schatzman and Strauss who argue that 'the researcher requires recording tactics that will provide him/her with an ongoing, developmental dialogue' (Quoted in Newbury 2001: 5) and that these notes can be 'the vehicle for ordered creativity' (ibid.: 3). The 'field-diaries' used in the study have followed this model registering a regular account of, for example, contact with HP staff, and collectively constitute in their artefactual status, an ongoing reflection of the evolution of the research practice. This allowed for quick and ready access to vital information, further formalising the qualitative process.

Schatzman and Strauss have formulated the following tripartite headings inherent in the note-making process: 'Observational notes' – 'statements bearing upon events experienced principally through watching and listening. They contain as little interpretation as possible and are seen as reliable as the observer can construct them' (1973: 100):

Tuesday, 25 November 2003 (66B back to Dublin) post-visit:

Met Mark, a Process Shift Supervisor from Nutgrove and proceeded to his office area. I noticed a large number of family photographs and pictures of different children on the noticeboard of his desk. I enquired that surely they couldn't all be his children or did he have something to tell us (jokingly). He laughed and told me that he shares the desk with three other supervisors on a '4-shift, 4-week cycle' and so each supervisor has a family and hence 4 sets of family pictures.

'Theoretical notes' – 'represent self-conscious, controlled attempts to derive meaning from any one or several observational notes' (ibid: 101):

Thursday, 19 February 2004 (bus back, 5.00 p.m.):

A long day, many impressions...

Mark, interesting guy, another point of view, feeling of time going quickly, economic boom, spoke of high house prices, new technology, re-invention, high technology, new products, high technology, each time a new line, less operators required, technology putting technology workers out of work, flux, a lot of contractors, HP employees speak of 'family. HP can expand and contract...technology replaces the operators.

'Methodological notes' – 'statement(s) that reflect an operational act completed or planned: an instruction to oneself, a reminder, a critique of one's own tactics' (ibid: 101):

Thursday, 7 August 2003 (on bus back to town):

Frustrated, pre-arranged, arrived to be told could not work today as Una H. wants Irene, who is out sick with camera pass to accompany myself and Oonagh (Liaise) around Building 2 to point out what is possible and what no. This after I had agreed to vetting of image. Have to wait...O could have rang to save trip all way out but was apologetic. Must check now before every trip.

In an international symposium at the Tate Modern, London (September 2003) titled 'Notes on Fieldworks: Dialogues between Art and Anthropology', Michael Taussig advocated bringing the fieldwork diary into anthropological discourse. He argued that it possesses an ability to 'open up to radical transmutations of time and space and bodily knowing. Although it is ephemeral, unofficial and sometimes informal, the slipperiness of it, in it's refusal to be defined, may also be its strength' (Taussig quoted in Moffat 2004: 13). The use of fieldnotes has been, and remains, a central method of ethnographic documentation. Hammersley and Atkinson allude to their 'sacred' status to the point where 'the privacy of fieldnotes means that the novice rarely has models to follow, and there is remarkably little explicit advice available' (1995: 176). Yet they emphatically acknowledge 'their power to evoke the times and places of the 'field', and call to mind the sights, sounds, and smells of 'elsewhere'' (ibid.).

Thursday, 22 April 2004 (on bus back) Spent three hours roaming - a lot of waiting due to light but meant I had to consider more what I was making...spoke to a security man at the compound, 'as long as they know you are here that is fine, I am just a Mickey Mouse man in all of this'.

Interviewing the Workers

I had met Ger the week before in the warehouse area and in the course of our conversation agreed to have his portrait made. On my scheduled day for interviews Ger appeared as promised. Hammersley and Atkinson state how 'all accounts must be interpreted in terms of the context in which they are produced' (1995: 131). Ger, myself and the liaise sat in the Beckett Meeting Room in Building 1. All of the Meeting Rooms were named after Irish writers and included Joyce, Goldsmith and Behan among others. The room was a functional space in the form of a table accommodating six chairs and a single plant in one corner. Conversations were recorded on a mini-disc device, which I had positioned on the table. I was aware of the constructed nature surrounding the ritual of this procedure, my presence, the liaises' and the impact this would have on Ger. Having said that, an atmosphere which I would describe as relaxed, permeated the occasion:

My name is Ger Walsh and I was born in Dublin. My main duties in Hewlett-Packard are within the Logistics Department. I work for 'Process Control' and 'Materials Admin'. Mainly what that involves is the actual operation itself, controlling the processes so that the Warehouse is working to the correct 'process flow'. It involves writing and auditing them, any issues coming up through into the departments, it would be me going in, to have a look at those and see if we can solve them. Also the other aspect of my job is 'Health and Safety'. From a 'Health and Safety' point of view I am responsible for 'Supply Chain', so not only logistic but all parts of 'Supply Chain' which would be purchasing, planning, which is documentation, 'Materials Engineering and Logistics'. So it's for all of 'Supply Chain'. My main role there is a contact point within 'Supply Chain' for 'Health and Safety', carrying out safety audits, risk assessments, making sure any safety concerns are closed out. We have contractors

based, running the warehouse, so it is making sure that they are following the correct safety practices and that they are closing down any safety concerns raised. They're my main functions. There are obviously other bits and pieces that come along with it, so I'm involved in quite a few projects. So the project work seems to be quite heavy at Hewlett-Packard.

(Interview with Ger, 9 October 2003)

As with all interviews each person received in advance a copy of the questions I had forwarded to HP. This prior knowledge is evidenced in Ger's opening statement where he describes his job and duties without any prompting on my part.

Feldman, in his workshop discussion (2004) of ethnographic interviewing, speaks of the necessity 'to hear and to listen' and to be aware of 'both the said and unsaid'. There was flexibility within the interview process that afforded the opportunity for more general conversation to 'flow'. Although one could never get away from the fact that the situation was always beyond my control, I would argue, however, that this in itself was of value in understanding an organisational space such as HP in reckoning with the 'unsaid'. The interview method was the only means possible to generate personalized accounts of this local-global workplace. At times people were volunteered from particular areas while others resulted from our meeting on the floor. The material generated established fragmented personal accounts, labour histories of contemporary work practices within a large multinational organisation and elements of testimony and witness (See Appendix 3 for interview transcripts). I wish to draw attention here to particular subject positions as expressed in the following examples from interview extracts and their emergent thematics. The following extract of conversation with Ger provides insight into HP's employment practices:

M: So how long have you been working at Hewlett-Packard?

G: I have worked in Hewlett-Packard for 4 years in total. 3 years of that was as a contractor, so, as the lads would say, I've sort of "gone over to the Dark Side". So I've the experience of the contractor, but now I'm working for Hewlett-Packard and basically making sure the contractors are carrying out their work; sort of like a "Poacher turned Gamekeeper" type of position.

(Interview with Ger, 9 October 2003)

Rui, a Line Engineer from Building 2 and originally from Portugal, provides an overview of the changing role of manufacturing over the past 20 years in Ireland:

R: So going back 20 years ago, the industry in Ireland would be very labour intensive and I suppose in the last few years when we started to attract the IT companies, you know, computer industries, we have seen a shift more to machine operating.

M: So what then is your present role here at HP?

R: I came into HP as a Line Engineer, so, I have gone through a few different companies and I have noticed that companies that have labour intensive activities tend to disappear because of our high rate of wage compared to, you know, eastern countries – namely, India, China and Malaysia, you know, wherever.

(Interview with Rui, 9 October 2003)

In a further extract, Susan, a worker from the Logistics Department in the warehouse, responds to my question concerning her motivations for working in HP:

S: Well, I had heard a lot about, like, Intel who had been in Ireland for so many years before Hewlett-Packard and it was just, I just thought, it was a big industry, a permanent, stable job and it was good feedback I'd been hearing. I had known a couple people at the time who had been working here and...I just thought to make the change from what I was doing, I thought, yeah, I'll come into a big place where I know it's, it isn't going anywhere in the near future.

(Interview with Susan, 26 November 2003)

Across all interviews the conversations invariably looked to the future, in particular, to the long-term sustainability of the present economic climate in Ireland. Mark, for example, a

Clean Room Supervisor, was forthright in his discussion, acknowledging the challenges and also the uncertainty of continued outside investment:

MC: Do you think we have control over our destiny?

MD: As people?

MC: Yeah, or as a country? Or even say economically? In terms of a lot of companies here that we work for, salaries are paid by foreign companies, that sort of way.

MD: Alright, yeah, I think we need to be very cost effective to keep these people in the country. I mean we can keep throwing tax breaks at them but that's just, that will only go so far. It's a fool's economy or a false economy or fool's paradise or whatever you want to call it. I think we need to be more cost-effective and I don't think the way inflation etc. is at the moment that we really are. What we have got is a well-trained, well-educated workforce, so that's in our favour, but again time will tell whether that's enough. I don't see it attracting everybody, I think they'll always come in for the tax break and that's probably the main reason they're here for now. So I'm really not sure where this is going to be in 10-15 years time, you could have a lot of well-educated people walking down to the dole office, but like, I don't really know where it's going.

(Interview with Mark, 28 November 2004)

This is further reflected in a final extract from a senior management perspective, from Una Halligan (Director of Government and Public Affairs, HP). In the passage below addressing change in the Corporate Tax rate, she outlines the challenge as viewed by HP of EU legislation concerning the rate change and the global implications for Ireland. The relationship between the Government and Multinational Corporations is also illustrated:

M: I was just reading in the *Financial Times* about an EU-wide Corporate Tax level.

U: It's a big issue. Having said that, it's an issue for Ireland Inc. It's not an issue for HP because Ireland are saying we are going to hold this, over our dead bodies. Certainly this Government would hold it. I would have concerns that Labour would go that route. This Inkjet Manufacturing site is one of three worldwide, the other two are in Puerto Rico and Singapore and they have no Corporation Tax. Therefore, you are starting with a handicap. You might think 10% going up to 12.5%, the lowest in Europe, but it is not the lowest in the world and they also have **very** smart people. Therefore, if we want to do business in that kind of world economy, Ireland is a small country. If you put handicaps then Corporation Tax would be a big one. But as I say, both Charlie McGreevy (then Minister of **Finance**) and Mary Harney (present Tanaiste) would all be in favour as well as the **Taoiseach** (Irish Prime Minister) in keeping that low rate of Corporate Tax. Of course, **when** we have all this kind of talk in Europe – our U.S., we are a U.S. company, they **see that**, so they see the wider picture and they kinda' say, well, is this a real threat?

(Interview with Una, 1 June 2004)

Post-Industrial Stillness

'The photograph of the Krupps' factory tells us nothing about the conditions and relations within', remarked Bertolt Brecht to his close friend Walter Benjamin, regarding the vast panoramic image of the German company (Benjamin [1931] 1979: 255).



Figure 2.2; 'Krupp'sche Gußstahlfabrik/ innere Ansicht, 1865' (detail of three) 180° - Panorama, b/w photographs, Hugo van Werden

The images (Figure 2.2) are displayed in 11 fragmented rooftop perspectives. Commissioned by Krupps and dating back to 1865, all is in focus with a large depth of field, providing a panoramic view of the factory complex stretching out towards an evaporating landscape beyond, barely rural. The viewer is positioned within this complex configuration and all it promises. These iconic images by Hugo van Werden are imbued with the idealistic optimism of industrialisation, which places the viewer standing among the industrialised watchtowers surveying the kingdom below. Brecht was correct in that they convey little of the labour conditions within. I would argue, however, they say much not only of the nature of industrial relations and industrialisation itself, but further reflect on contemporary global work conditions and the role of the visual in the representation of these conditions.

Van Werden had positioned himself among the rooftops and pointed his camera in certain directions to make the above images. John Roberts has discussed this pointing and photography's power of ostension. He writes:

[To] point at things...showing someone something by drawing their attention to it [is] the ostensive medium par excellence. Its indexical relationship to the world of objects and events, is no more nor less a form of pointing; and pointing necessarily contributes to our knowledge of the world.

(1997: 28)

However, pointing and meaning is not the same thing, Roberts argues for a 'theoretically self-conscious practice' (ibid.: 9) enabling 'the photographic document [to be] not so much an inert nomination of things in the world, but a source of inferential complexity' (ibid.: 29).

Roberts also references the gesture in this process as Joanna Lowry argues:

[T]he very act of photography, as a kind of performative gesture which points to an event in the world, as a form of designation that draws reality into the image field and is thus itself a form of indexicality and that accepting the limit point of photography's documentary capacity...[look to] the act of photography itself as a moment of authentication.

(2002: 50)



Figure 2.3; 'Gowning Room 5, Building 7, 11.02 a.m., Monday, 10 November 2003' (Leixlip, Ireland) c-type print

The discarded robes of previous shifts (Figure 2.3) remain suspended. Will those bodies return? Floating, waiting upon the willing and abled. One size fits all. Boots dangle in virginal white, evoking a sterile, numbered, assigned and beautiful bleakness. Something quite ephemeral. ‘Do you really find that interesting?’ asked the Clean Room Supervisor, ‘whatever grabs your fancy I suppose, to each their own, but would you not want to get the lads working? On the line?’ The question of the supervisor acknowledged the obvious – to view and make images of the ‘lads working’. From the very outset, Una, in her capacity as my main contact at HP, specifically queried the use of the portrait. I will return to this point later in the discussion and its rationale. However, for now, the use of portraiture in this study is a response to questions of representation as outlined in the previous chapter, depicting individuals occupied, employed and made busy with the tasks at hand. Such images continue to be reproduced by public and private bodies.



Figure 2.4, image from IDA Annual Report 2004

The image above (Figure 2.4) from the most recent Annual Report for 2004 by the Industrial Development Authority (IDA) presents a white-coated black male-laboratory technician busy

at work, staring through a microscope. He is a part of the apparatus in an image coded high-tech, hands gloved in latex and vials readied. However, it is debatable whether this image was actually produced in a factory or laboratory setting in Ireland. Arguably its origins lie in a downloaded, pre-paid, web-based picture library. The presentation of a white background erases all specificity denying all reference to context. It could be argued that this image is also intended to allude to the changing multiracial composition of the Irish labour market as if conveying to foreign investors: Don't you know we are no longer just white?

I stepped back and viewed those hanging white robes (Figure 2.3). Some feet passed underneath the gowns from the other side. The camera was set to an 'aperture' of f4 and I 'bracketed' – 'overexposing' the film by '1 to 2 stops'. The 'depth of field' was shallow, giving a narrow field of focus⁸. The intent was to focus on, and thereby draw out, particular elements, traces of human influence and to look to these elements as allegories, evoking the materiality of this post-industrial factory floor. Simultaneously, my decision and subject position were also made apparent. This was not some objective record of the working space. The technique employed is also a response to a visual practice with an ascribed ethos of objectivity and the creation of typologies which are discussed below. I wish to first briefly acknowledge the role of allegory as a visual research strategy.

In his discussion of postmodernism Craig Owens foregrounds the role of allegory and its central ability 'to rescue from historical oblivion that which threatens to disappear' ([1984] 1992: 1057) and how allegory 'is consistently drawn to the fragmentary...isolated objects and images which have been stripped of meaning and returned to a purely material state'

(ibid.: 1052). Echoing these thoughts and with respect to visual practice, Justin Carville writes:

The allegory of the everyday, incorporating the use of everyday objects, banal and frequently arbitrary fragments [and in so doing] rescue those histories and narratives... where the image itself becomes a space to be re-negotiated, a territory where contested narratives can be articulated.

(2001b: 7)

This resonates with Elizabeth Edwards' position in terms of how 'photographs embody meaning through their signifying properties, and are deliberate, conscious efforts to represent, to say something about something' (2001: 17). Referencing Barthes' notion of the 'punctum', defined as 'this element which rises from the scene, shoots out like an arrow, and pierces me...a detail' (Barthes 2000: 26), Edwards describes the allegorical qualities of the photograph as 'that inexplicable point of incisive clarity' (Edwards 2001: 1).

On the day I found myself – my liaison never far away – among the hanging gowns in the Clean Room, photographing the empty vestiges of labour, a sense of history in the making was powerfully evoked; the gowns became an ephemeral representation of fleeting labour, an embodiment without the body of the here and now. For as David Green argues; 'the only possibility of reinventing the representation of history is using photography through allegory' (1994: 15).

I approached the post-industrial space of HP equipped with the knowledge of comparative visual practices undertaken in other global industrialised landscapes. The absence of an industrial revolution in the south of Ireland has resulted in a limited legacy regarding its photographic representation⁸. In other industrialised nations, as evidenced by the earlier

image of the Krupps factory, this has not been the case. In continental Europe, for example in Germany and France, visual practitioners have responded to industrialised spaces since their foundation. Echoing Atkinson's call for the construction of 'new ethnographies against a background of previous works' (1992: 5), I now consider, albeit briefly, such industrial representations and the employment of an aperture of f4.

In the early 1960s Bernd and Hilla Becher began making photographs in the Ruhrgebiet area of Western Germany – a location of great industrialisation dating from the mid-nineteenth century. Much had since been abandoned and the landscape had become a topography defined by 'monuments of loneliness and melancholy' (Liebs 1998: 106). In the context of post-war Europe and influenced by the philosophy of 'Neue Sachlichkeit' (New Objectivity) from the 1920s – an objective and neutral representation 'unclouded by sentiment or illusion, a representation suited to the technological age' (Moholy-Nagy 1922: 14) – the Bechers sought to map this terrain through an empirical cartographic practice creating typologies where the strictest objectivity could be a powerful statement on social realities⁹.

Structures, from artisan dwellings to an abandoned factory, were photographed from all sides, using a large format camera, thereby exposing as much detail as possible through the large negative and employing a large depth of field. The technique of the camera sought to reflect this objectivity.



Figure 2.5; 'Three Typologies of Lift 1973' (detail), Bernd and Hilla Becher

The Bechers headed the Department of Photography at the Düsseldorf Kunst Akademie (Art Academy) and would evolve a dogma that would become known as 'the Becher School of Photography' or 'The Düsseldorf School'. They would influence a generation, and more, of contemporary photographers.



Figure 2.6; 'Siemens, Karlsruhe, 1991', Andreas Gursky

The image above (Figure 2.6) is by the photographer Andreas Gursky, who studied under the Bechers. All is in focus and the colours almost blend into abstraction recalling the splashes of the artist, Jackson Pollock. The point of view is from above and workers labour among the instruments of technology on a vast scale. The human figures merge into this landscape of production. Gursky traverses the globe, with an objective sensibility, making images that reflect upon the human condition as manifest in urban, rural, cultural and industrial spaces. He denies any intention of this being a subjective event or his own subject position¹⁰, as I would argue is evidenced in the above image. However, Gursky has not completely subscribed to the strict objectivity of the Bechers and has incorporated digital manipulation in his practice. Gursky employs the largest depth of field available.



Figure 2.7; 'Lava 2, Building 2, 14.32 a.m., Thursday, 29 January 2004' (Leixlip, Ireland) c-type print

The stairway rises up and over the production line (Figure 2.7). The multi-coloured chains and floor-markings register restraint and restriction. The focus falls upon the bolted steps and falls off beyond. The stairs hold an architectural quality, the rise, the fall. No overt human presence but present nonetheless. The production line must always persist and so human

intervention must go over or around, nothing must stop, interfere or delay the forward motions of production.

Word had spread of my presence in the plant; 'So you're the guy taking the pictures'. Rui motioned to the middle of the wide thoroughfare of the vast manufacturing space in Building 2. 'Is this okay here?' 'Perfect', I replied. I had approval on the day to make portraits of workers willing to take part in the study. However, on this particular pre-scheduled day, I was not allowed to photograph the actual space itself due to the highly sensitive nature of the new production line, 'Lava'. I had one request of Rui which was to be as still as possible as there was not much light. 'No problem', he replied. I positioned the camera on the tripod. My liaison from the Government and Public Affairs Department stood to the side, quietly, with my camera bag over her shoulder. I was working exclusively with 'available light', the existing light in the space, avoiding the use of flash photography. The rationale being to represent the space as I found it. This required the individual worker to try and be motionless, to stop for a short while – most of the exposures were less than a second. The aperture on the lens remained set to f4, to give that shallow Depth of Field, I overexposed by two stops. Rui, Portugese by birth, married to an Irish woman and father of two adult daughters asked, 'Is it okay to smile? I normally smile, it is my way', he commented. 'Do whatever you feel comfortable with but don't feel like you have to smile'. Rui stood for a while, smiled and then went slightly straight-faced. He was wearing his identity card around his neck and to the front. This contained a portrait; yet another use of a portrait acknowledging a history I now wish to address.

The photographic portrait is in and of itself concerned with representation and possesses a critically disputed, divisive and problematic history. In the nineteenth century, following the invention of the photographic process, the portrait was employed as a means of surveillance, classification and record. At the same time, photography began its long association with anthropology (Edwards 2004). The portrait was employed for its 'potential as a recording device, to create data for analysis...the indexical trace' (ibid.: 34) and 'was equally instrumental in representing different bodies elsewhere, constructing a typology in anthropology and ethnography of racial and cultural 'others'' (McQuire 1998: 23).

John Tagg argues how the truth-value of the photographic image was consolidated as a practical technique functioning within 'an institutional paradigm of research, surveillance and control' (1988: 7). Tagg is particularly critical of the portrait as a 'monologic mode of address that represents the subject incapable of speaking, acting or organising for themselves...a mute witness to history'(ibid.: 11). Tagg's argument is grounded in a postmodernist critique of representation (Edwards 2004), one which challenges the alleged indexical nature of the image.

However, the photographic historian Steve Edwards has argued that the portrait should necessarily be seen as 'a dialogue in which there are a number of subject positions' (1990: 63). Similarly, Carville argues that in acknowledging 'the presence of multiple subject positions, the photographic portrait can be seen as self or co-authored, containing the reported speech of the sitter who **make their own** histories even if not in the conditions which they may choose'¹¹. Referencing Edwards, Carville continues:

[S]eeing the photographic portrait in this way has a considerable impact on the documentary image. Reading the documentary image in this way would allow us to work through how both photographer and the subject speak within the same construction. The photograph is an object but...portraits are the outcome of shared experience between the **photographer and subject, an experience** in which both speak to the viewer...speaking through the **mode of address**, the presentation of self to be photographed.¹²

The positions outlined by Edwards and Carville regarding the co-authorship of the portrait, I would suggest, can be traced back to the turn of the last century, illustrated in the work of two North American-based photographers. Lewis Hine and Milton Rogovin are part of a wider photographic tradition **witnessing** the advent of modernity, whose work can be defined as originating from within a 'humanist realism' practice.

In 1905 the teacher and sociologist Lewis Wickes Hine went to Ellis Island to witness the **largest** ever migration to the United States. **Hine began a series** of immigrant portraits, which he **would** continue until 1930. A year before his premature death in 1939, they were **described** as 'incontrovertible documents of the human meaning of history's greatest migration. The mass **aspect** of Ellis Island was left to the statisticians and social **cartographers**. Hine took care of the human equation' (McClausland quoted in Rayner 1977: 42).

Hine had met and befriended the wealthy **businessman Arthur Kellogg and, through his** patronage, began documenting change for '**The Charities and Commons Magazine**', later re-titled 'The Survey' (Rayner 1977). Hine used photography 'as a means to an end -- to call attention to social injustice, to campaign for change and to celebrate the dignity of working **people in the modern world**' (Panzer 2002: 3). **Hine would devote his life** to the portrayal of among others -- the plight of child labour, factory conditions, the role of women, tenement

living, veterans from the Civil War, disabled workers and the role of visible minorities. It is interesting to note that concerning access to factories regarding child labour, 'he pretended he was after pictures of machines...while one hand in his pocket made notes on ages and estimated sizes' (Trachtenberg 1989: 201).

I want to draw attention to Hines' subject position as evidenced in the format he employed. This relates primarily to a large part of what I would describe as his 'early work' from 1905 and up to, and including, 1930. Hine positioned his subject at eye level and in the centre of the frame. Whether individual or in groups, they presented themselves to the camera and the viewer. He maintained 'careful notes' of his encounters at all times and the work was usually accompanied by extended titles and captions (ibid.: 20). Hine was aware of the potential for allegory; 'a picture is a symbol that brings one immediately into close touch with reality' (Hine [1909] 1989: 207).



Figure 2.8; 'Willie Cheatham, 16 Years old, Western Union Messenger Boy, Montgomery, Alabama, October 1914 (Lewis Hine)

Willie Cheatham stares (Figure 2.8). He is 16 years old. A short tie winds itself around a roughly upturned collar, on his head the cap of a messenger and goggles. His car, or a car, waits in the background. His arms hang at his side in an open pose and he stares directly back at the camera with no hint of a smile. He is positioned with his back to the sun, a glare appears over his right shoulder. He looks older than his years; Hine had noted his 'hard face' (Panzer 2002: 88). As we look at this young man, certain histories and possibilities are posited, nothing is complete. One wonders the outcome of his fate.

The deliberate foregrounding of the individual subject as a technique continued to preoccupy Hine. The curator Beaumont Newhall would later describe Hine's working method as the 'only valid photographic style' (Quoted in Panzer 2002: 15). The subject faces the viewer and the viewer faces the subject; a confrontation of sorts and one invoking a response. Hine was aware of this potential. He coined the terms 'social photography' and 'interpretive photography' to 'describe photographs which combine publicity and an appeal for public sympathy...to create a photograph often more effective than the reality would have been' (Panzer 2002: 15).

Almost 90 years later another American photographer Milton Rogovin, in collaboration with the anthropologist Michael Frisch, published the book *Portraits in Steel* (1993). The modern world of Hine was becoming the 'post-industrial' landscape of the late twentieth century. Rogovin had made a series of portraits of workers in the steel foundries in Buffalo, New York in the late 1970s. As the American steel industry collapsed in face of the increasingly globalised market of the 1980s, he returned along with Frisch, to document this change. The result was a monograph, where portraits spanning almost 15 years appear alongside the

extended narrative of the testimonies as gathered by Frisch. The work by Rogovin lies within a realist documentary tradition. This is evidenced, in part, by his use of black and white film format, associated with and evoking traditional photojournalism and reportage. However, one senses the relationship established with Rogovin in the apparent openness of the individuals taking part. Without such complicity, such a project could not have been undertaken.



Figure 2.9; 'Joseph Kemp, Hanna Furnace' from Portraits in Steel by Rogovin & Frisch

Joseph stands (Figure 2.9) shovel in hand, bare-chested with a vertical scar. There is the obvious use of flash in an environment usually lit only by the fires of the furnace. Rogovin provides the means with which that is made transparent. The physical nature of this particular form of labour is revealed. Joseph is complicit in this undertaking in his stance and thereby completes the two-dimensional part of this meaning process. The completion of meaning will be undertaken by, and involve the complicity of, the viewer.



Figure 2.10; 'Joseph Kemp at home' from *Portraits in Steel* by Rogovin & Frisch

In his discussion of the role of images and text, Rogovin's collaborator on the project, anthropologist Michael Frisch writes:

[T]he book proceeds from a belief that all portraiture involves, at its heart, a presentation of self. It also does not deny that artifice, interpretation and even manipulation are necessarily involved in arranging the portrait session, rendering the images presented, and conveying them to others in some form or other...But portraits do represent and express a collaboration of their own between subject and image maker, a collaboration in which the subject is anything but mute or powerless, a mere object of study...Stories given, rather than taken.

(Frisch 1993: 3)

I had met Rui in the engineer's office, located behind large windows and within viewing distance of 'Lava' in Building 2. Rui floated between his desk space and the floor. He was in constant motion between meetings, project requests and responding to general supervisory requests from Line Operators in his section. Rui had agreed to take part in the study and I was interested in his experiences of having lived and worked in Ireland for the past 20 years. He arrived at a time when Ireland continued to be a net exporter of people prior to the boom of the 'Celtic Tiger Economy'. His presence was another particular labour history. I had

made some portraits with Rui at his workstation, however, I was also keen to photograph him where he spent most of his day, on the production floor.



Figure 2.11; 'Rui, Line Engineer, Tiger, Building 2, 11.43 a.m., Thursday, 29 January 2004' (Leixlip, Ireland) c-type print

The image above (Figure 2.11) presents Rui isolated, standing alone in the middle of one of the wide thoroughfares found among the production lines. The depth of field is shallow. The background is visible, just, sensing the surroundings while conveying a greater sense of him. A wall to his left can be identified, blue containers and brown boxes behind him to his right and metal clings to a ceiling pock-marked with lights. Rui stands in grey and black, hands by his side, in openness, presenting himself to the camera, not smiling, not sad, just straight-faced. His dark features and the clothes he wears are in contrast to the over-exposed daylight balanced lightness. In a different register, Banks argues:

[V]isual research is actively, and perhaps inherently, a collaborative project between image maker and image subjects as: one is humanistic, that subjects are not just experimental subjects and, secondly, analytical...In order to do good social research, a researcher has to enter into that process self-consciously, not pretend that they can somehow transcend their humanity and stand outside, merely observing.

(2001: 112)

Rui stands for a while in Building 2. 'Is this okay?' he asks. 'Great', I reply, 'do you mind if we make a few?' 'No, work away, as many as you like'.

Post-Industrial Movement

My methodological intention had always been to consider the inclusion of digital video as a research method and intervention¹³. However, to what end remained unclear until the research work on site began. For as Hammersley and Atkinson note 'features that previously seemed insignificant may come to take on new meaning' (1995: 180). Locations that had previously been photographed at the plant threw up new possibilities. Beyond its ability to be yet another intervention in the industrialized space, the application of the moving image provided a further means to critically reflect upon my primary medium – still photography and their possible relationship. The fieldnotes bare witness to this methodological development as the research process unfolded:

16.25 p.m., Monday, 10 November 2003, on train to Connolly Station

Photographed rows of gowns hanging, boots hanging.

Possibility for video piece as people pass behind, would be worth following up.

9.52 a.m., Thursday, 27 November 2003, Bus 66B, outside Conyngham Road Bus Depot

Have been cleared for digital video work for next Monday in Building 8.

Need to instill a sense of 'in place' – to evoke.

Reference the photograph.

Meditate on still space imagery.

As a strategy should have tried before this stage? (time); may be idea in the new year.

Use of the extended 'shot' – let the camera just roll.

A meditation on time and space.

A particular strategy – to evoke/ evocation.

9.41 a.m., Monday, 1 December 2003, Bus across from Heuston Station

Beyond the confines of time/space – idea of time passing but in a subtle sense.

To dwell, but in a moving sense, in the spaces of these industrial areas/spaces.

In her discussion of the possibility of stillness within the moving image Laura Mulvey references Barthes' notion of the 'punctum' and the potential for allegory within the still image. Mulvey considers whether there exists within the moving image the possibility for the 'non-movement of narrative and [provide a point where] the flow of the story can give way to the presence of the document' (2003: 119) in order that the 'spectator is enabled to reflect upon and experience the kind of reverie that Barthes had associated with the photograph, the punctum' (ibid.: 117).



Figure 2.12; 'Lava' (still), Building 8, 12.04 p.m., Monday, 1 December 2003 (Leixlip, Ireland) Digital Video (looped)

My liaison watched on, standing still. I touched the red button and the digital video camera began to record. The camera perched upon this tripod is directed towards the large blue grey section of plastic. A vertical gash up its right side, a suture made of tape (Figure 2.12). Behind, men and women labour to install the new line; inaudible voices and movement in the direction of here and there amongst the high-pitched, sonar-sounding reminders of other production lines at work. They hiss and expel bloated exasperations, compressed air as they push ever on. A sway of plastic, a membrane-like structure, and then, very slowly, almost

unaware and yet somewhat suddenly, it expands, ebbing forward only to retreat gently. Objects behind, formerly draped in blue are suddenly, re-engulfed, surrounded, masked. And then it starts all over again and the line to our left gasps.

I made 'on the spot' decisions regarding the production of such material. This resulted from both the ongoing review and reflection of my research data, but was also defined by issues of access and time constraints. Each section of digital video took the form of 24-minutes and was intended as a direct reference to the number of hours in the day. Each section was made in one complete long-take from a fixed position intended as further evidence of my presence, while simultaneously referencing still photography whereby that which lay within the frame was open to the same readings of allegory. Three core considerations informed my use of the long-take¹⁴. The first being the 'critical geography' where the camera defines the geography within the frame and what is foregrounded. Secondly, 'the persistence of the physical', whereby the physicality of the background is always present, a confrontation to some degree in the form of the 'obtuse presence', and finally, 'the dimensions of personhood', a recognition of a contextualized human identity. It is important to note that acknowledging the constructedness of the 'long-take' does not imply its non-mediation for it does, however, employ the edit as a narrative structuring device.

I want to briefly reference the work of two practitioners, one a filmmaker and the other a video installation artist. Both have on occasions employed the 'long-take' as a constitutive part of their media practice. In her film and installation *From the Other Side* (2002), the Belgian filmmaker Chantal Akerman, foregrounds undocumented immigration across the US–Mexican border. Akerman's film interweaves still images of the landscape, urban and rural, alongside interviews with individuals from both sides of the border.



Figure 2.13; still from 'From the Other Side', Chantal Akerman 2002

The young man (Figure 2.13) sits to our right framed by his walled backdrop. The screen is divided by the doorframe. The 'other' space is a bedroom unmade, but a comfort nonetheless, as the sunlight brightens the space. His demeanour is less comforting; a young face peers out from oversized clothes, hands older than his years. He occupies the present and behind, a possible past or indeed future? Akerman's deliberate framing device references the still, a freezing of time and space that is not the past. The inherent movement in the media deployed and the act of viewing implicates the present, the ever present.

In a related context the video installation artwork of David Claerbout is of relevance. The visual theorist and writer David Green, reflecting on Claerbout's practice, notes how the still image remains inherently defined as the past while the moving image invokes the present, arguing that the work of Claerbout challenges this established if not conventional distinction between photography and film (2004). Echoing Mulvey, Green posits how the 'past-ness' or Barthes' 'there and then', and 'present-ness', the 'here and now', somehow meet and co-exist

(2004: 37) This, Green suggests, occurs due to the ‘filmic reflexivity’ within Claerbout’s practice (ibid.).



Figure 2.14; ‘The Stack, 2002’, (Installation) Digital Video, David Claerbout

Viewed from below among the gravel and rocks discarded to make way for the structure, a large image is projected (Figure 2.15) depicting the motorways of modernity. Haven’t these been described as ‘the new cathedrals’? The brightest part is in the left hand corner; the sun throws its shadows across this promised land of transport utopia, a new arcadia? I am suddenly aware of the projector’s low muffled sound and then, a slight movement in those shadows and slowly, a streak of sunlight breaks through. The shadows move, strong lines, epic, monumental. Beneath, however, lurks the unknown. Claerbout’s installation brings to mind Roberta McGrath’s assertion that ‘photographs are not merely illustrations but places to think’¹⁵ invoking Barthes’ ‘supplementary’ role where ‘at the level of signification the visual is suppressed and yet it necessarily returns as a presence that fills the field with force’ (Lowry 2002: 51). Green, in his discussion, concludes that ‘this is what the work of David Claerbout’s faces us with, in the possibility of a photograph that unfolds in time (but is not a film) and a film that is stilled in time (but is not a photograph)’ (2004: 41).

The use of digital video continued in tandem with still photography. I returned, accompanied, to Building 8 in late January 2004. We stopped at a number of locations where I had made photographs in this building the previous month.

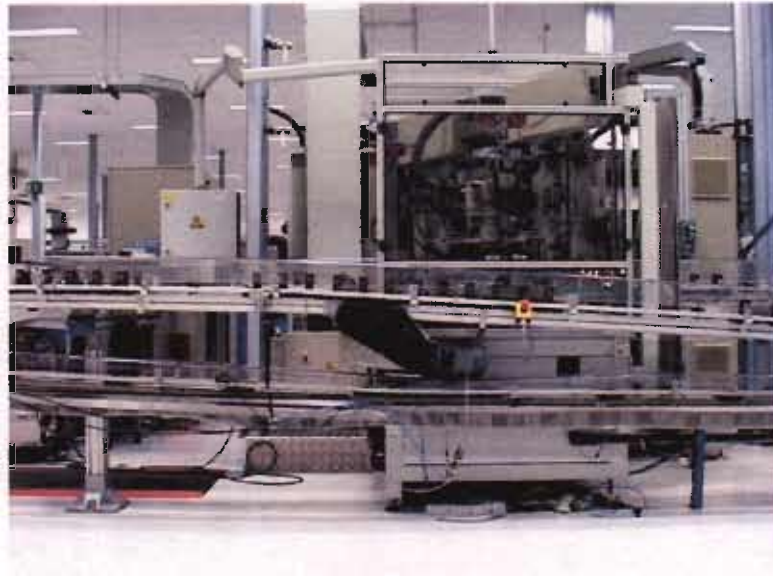


Figure 2.15; 'Tiger' (still), Building 8, 10.08 p.m., Tuesday, 27 January 2004 (Leixlip, Ireland) Digital Video (looped)

The still image from the digital video titled 'Tiger' (Figure 2.15), is divided almost in thirds referencing the formalist code of vertical lines whether read left to right or top to bottom. The red button to the right of the mid-point becomes a focal point from which the eye can travel over the image. This is temporary as the two lines in the foreground move. The upper, with inkjet cartridges in place, travels from right to left while that below moves in the opposite direction. The image is weighted in terms of machinery to the right in the context of a culture where images are read from left to right. In the background, the automaton, moves, removes and discards the inkjet cartridges to some other undisclosed locations. A scene of constant motion and sound; the viewer's attention is constantly divided. 'Tiger' points to that which lies outside the frame, the ceaseless flow of global capital in its varied intensity and multi-directionality.

The Work Room: Postproduction

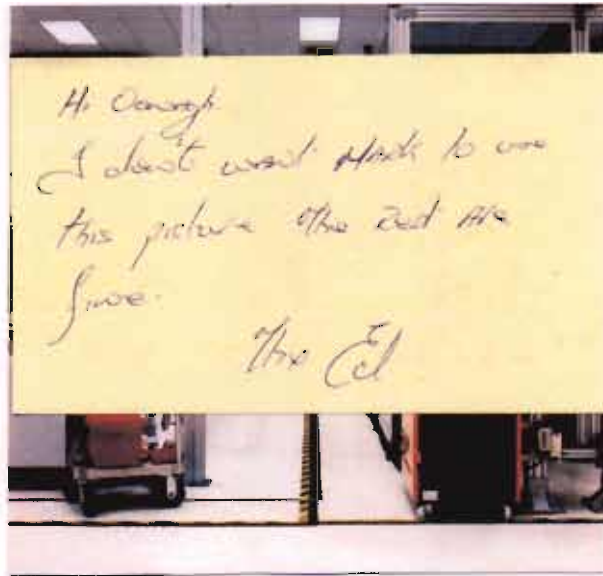


Figure 2.16; vetted image, September 2003

I stare at the yellow 'post-it' note covering the small image I have just removed from the brown envelope (Figure 2.16): 'I don't want Mark to use this picture, the rest are fine'. I lift the note to view the image beneath. It is a non-descript type image of the space in Manufacturing Building 2, 'Lava' – an alleyway between two automatons encased in glass-fronted containers. Simply a document, it is of no particular interest visually and I would not have chosen to use it. I proceed to remove the note and then stop myself. The significance of the image is transformed through the conscious intervention of a line engineer and a simple 'post-it' note, charging this 'document' with a newly acquired narrative.

From the outset, the policing and vetting of my movement had become a pivotal component in the evaluation of the research. I held in my hand an 'image' that made that surveillance explicit. I do not know for certain what it is about the image that prohibited its use; perhaps it alluded to a health and safety issue, my non-engineering background denying that

knowledge. The significance here is how this image covered by a 'post-it' note was transformed through its re-presentation and subsequent artefactual status.

This episode represents a single event during the postproduction phase of the still and moving image material, conducted subsequent to each visit to the plant. In the remainder of the chapter, the discussion will foreground the time-consuming process of re-viewing the still photography generated in terms of its analytical strength and narrative potential. While there is an established literature, indeed acceptable literacy on the subject of postproduction in film, similar discussion, however, in still photography postproduction remains somewhat rare.

This phase usually began with the processing of all the exposed colour film in a professional laboratory and the creation of proof prints, 5 x 5 in size. At this point, an initial 'rough edit' occurred involving a hand-trawling review of all images made, each single image, one by one. This 'rough edit' was informed and its analysis defined by the following criteria:

- The implicit text of the image in terms of what the image portrayed – the subject matter within the frame.
- Formalist considerations; the formal appearance of the image, the aesthetic¹⁶.
- The inferential; the potential for allegory.



Figure 2.17; unused from Building 4, IIP, June 2003

The above image (Figure 2.17) dates back to the beginning of the study in June 2003. It is one of the thoroughfares in Building 4 and was edited out of the process and remains unused. Its primary function was to check light conditions and their effect on film type at this early stage of the research process and as a document of the space. The image presents the hall and polished floor and the viewer's point of view is slightly off centre. This perspective was a direct result of my liaison directing me to stand to the side of the walkway so as not to present a fire hazard. In the distance two small figures are walking and a chair hovers over the yellow and black line. I placed the tripod and made an exposure. Beyond the above requirements, no thought was given to formalist considerations and to particular details. It should be noted that an argument for an allegorical reading exists within the image regarding the placement of the chair over the line evidencing a human intervention and presence in the rigid demarcation of the production floor. However, this reading was not one which I chose to employ in the extended narrative of the still images produced. Therefore in the final edit of the photographic research material it was discarded – remaining a 'snapshot'¹⁷.

Two months later on 12 August 2003 I had requested, and been given clearance, to photograph the exterior of the complex. Figure 2.18 is one image from the work that was produced that day. Having hand-trawled through the images made, this was of particular interest. The blue-grey façade is evident in large parts of the architectural structure in Leixlip. Strong lines fragment the perfect surface of the wall meeting the imperfections of the concrete and tarmacadam; almost a fluid sensibility in spite of their fixed credentials. This image was placed on my workroom wall.



Figure 2.18; unused from Building 2 (exterior) HP, August 2003

Other images were positioned on the wall as a further step in the process of ongoing analysis. These images remained in situ for an extended period of time and were usually placed, to begin with, under the heading of where they were made. For example, all images made in Production Building 2 were put together, while all images from Building 7 clustered together and so the process continued. Over the course of the subsequent weeks and months, these would be moved, shifted, removed, replaced, returned, positioned closer together and moved further apart.



Figure 2.19; workroom, Dublin, January 2004

This process of moving/removing occurred in a number of ways. For example, while spending an extended period of time perusing the images or on the ‘spur of the moment’ – when I needed to locate something in my workroom and something would focus my attention. There was also the conscious awareness of the intertextual literacy of two or more images together, alongside the possibility of serendipity. However, ‘one must establish the right conditions for serendipity’ (Hammersley and Atkinson 1995: 162). I came to define this process as ‘living with’, forming a crucial and reflexive multilayered element of the review process and the development of an evolving narrative structure. Sporadically, I would return to the initially discarded imagery and review the material yet again. This could be understood as deconstructive in nature. For as Sekula notes, ‘the construction passes into critical deconstruction’ (1978: 122), a process vital in the representation of the ‘other’ and one ‘having an unrelenting metacritical relation to the documentary genre’ (ibid.: 124).

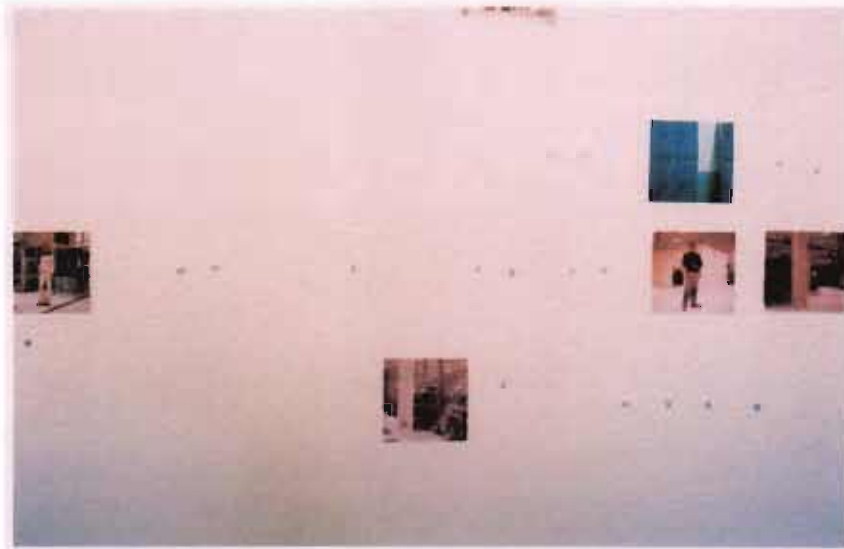


Figure 2.20; workroom, Dublin, June 2004

In tandem with this process, I began to make analogue prints or handprints from selected proof prints. The colour-printing process is a time-consuming exercise; however, it affords a level of reflection as one works on a particular image for an extended period of time – a slow and critically reflective process. This part of the process can easily be circumvented through the application of digital technologies. As an integral component of the research practice and testimony to my critical engagement with the material, the production of analogue prints was a fundamental part of the postproduction process. Referencing the work of Rapport (1997) on the merits of creative humanistic anthropological representation, and one which throws light on this part of the process, Pink writes:

Rapport has argued in favour of a recognition of the individual as “a seat of consciousness, as well-spring of creativity, as guarantor of meaning” as opposed to “the dissolved, decentered, deconstructed individual actor and author as he or she appears in Durkheimian, Structuralist and Post-Structuralist schools of social science”. This suggests that while it is likely that individuals will reference known visual forms, styles, discourses and meanings through the content and form of their own visual images, this does not mean that they have internalised and are reproducing those formats...Individuals draw from personal and cultural resources of visual experience and knowledge. They thus compose images that they intend to represent particular objects or meanings; moreover they do so in particular social and material contexts.

(2001: 27)

I would further argue that the image, in itself, is also transformed from the small proof prints to these final prints. In a phenomenological sense, they attain another layer of meaning as Edwards notes, ‘thinking about photographs is increasingly inflected with phenomenological concerns, a “being-in-the-world”, saturated with intentionality, inter-subjectivity and existential immediacy’ (2005: 40). Having produced final prints, I now turned to digital technology and these images were scanned. The application of technology at this stage of the post-production process also afforded the later opportunity for the construction of a maquette or ‘dummy book’. These scanned images were incorporated with an extensive and integrated range of textual and visual material – including field-diary pages, on-site schedules, propagandist images and selections of the workers’ testimonies. Thus constituting in itself a further poly-vocal re-presentation of the research process and ethnographic reflection.

On 26 August 2003, I returned again, with clearance approved, to photograph the exterior of the plant. I, along with my liaison, headed to the southern side of the complex and began to make images.

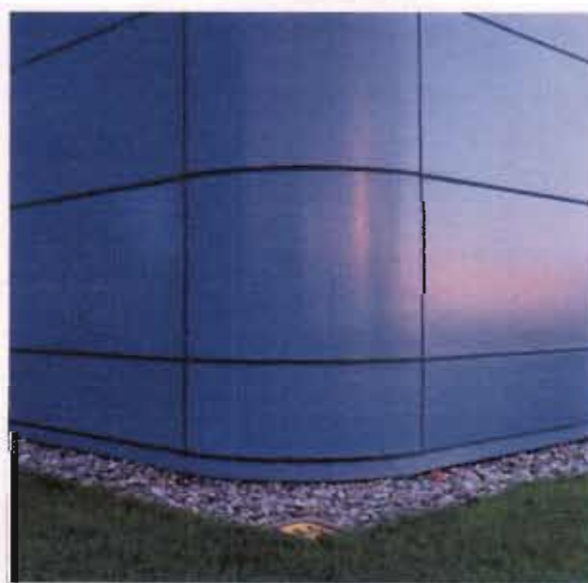


Figure 2.21; ‘Lava 1, Building 2, 14.35 p.m., Tuesday, 26 August 2003’ (Leixlip, Ireland) c-type print

The gridded form of the factory façade confronts the viewer (Figure 2.21). Head-on, all is aligned. Its V-like structure contains, maintains and dictates the landscape. And now this great blue-grey bow cuts a wave towards the shoreline of my point of view.

Footnotes

1 The term 'Beyond the Pale' is used as an English Idiom. I refer here to Hugh Maxton from his 'Introduction' to the works of the Irish Poet, Austin Clarke. Clarke had written an anthology of poetry with a title of the same name. Leixlip would have been located at the frontier of The Pale:

Beyond the Pale...meaning a place or topic which lies outside the securely known, implicates both a sense of adventure and risk involved and (for an Irish poet) a deeply ambivalent relation with what remains inside the Pale. The dangerous movements involved, from external dramatic survey and action to melancholia and silence...The Pale was a district (ill-defined, for it was constantly shifting in range) around Dublin in the Middle Ages the English Authorities could claim to control.

(1991: 10)

2 See Council website. Available from: <<http://www.kildare.ie/leixlip/history/future.asp>> [Accessed 26 February 2004].

3 Carly Fiorina was the CEO of Hewlett-Packard until February 2005 during which time HP published record profits. Fiorina had also been the instigator of an HP takeover of its main rivals Compaq in 2002/3. It would appear not all on the Board agreed with this decision then or now and she was subsequently ousted. Her successor, Mark Hurd, was announced in the broadsheet press (*The Irish Times*, 24 February 2005).

4 *Southern Cross* focused on spaces of development and finance in Dublin and its surrounding region. The intention was to visually survey these spaces as a means of critically mapping the profound economic changes occurring in Ireland. The work engaged with, among others, ideas concerning the representation of labour and the nature of the architectural transformations of this newly globalised landscape. The work was implicitly informed by a critical practice, as referenced in an accompanying publication of the same name, but explicitly photographic in its exhibition. It was commissioned by the Gallery of Photography, Dublin in 2000 as recipient of the first Development Bursary and presented as an exhibition in 2002. The publication included an essay by Justin Carville, lecturer in visual theory and critical studies, and a poem by the poet, Philip Casey. The intention for the publication was to create a space for a critical dialogue between the textual and visual. The nature of exhibition publications are usually to laud the practitioner, however, the goal here was a critical response. It has subsequently been exhibited internationally, most recently in Lyon and Cologne.

5 Feldman delivered a week-long 'Ethnographic Clinic' workshop in the School of Media, Dublin Institute of Technology (18 March 2004).

6 Pinks' conceptualisation of 'reflexivity' and its relationship to ethnographic representation is informed by the influential publication *Writing Culture: The Poetics and Politics of Ethnography* (Clifford and Marcus 1986).

7 The following are technical definitions:

Aperture: circular opening within the lens, usually variable in diameter and controlled by a diaphragm calibrated in f – numbers.

Depth of Field: distance between the nearest and furthest parts of the subject, which can be imaged in acceptably sharp focus at one setting of the lens.

Bracket: In exposure, to make several versions of an image giving different levels of exposure.

Stop: Historical term still used in connection with lens aperture settings, and changes in exposure.

F – numbers: International sequence of numbers, expressing relative aperture, i.e. lens focal length divided by effective aperture diameter. Each change of f – number halves or doubles image brightness.

(Langford 2002: 323–332).

8 A notable exception in this regard is *The Heart of the City* (1988), a collaboration between the writer, Ronan Sheehan, and the photographer, Brendan Walsh, who draw on social, economic and political factors in their presentation of a community, having ‘to live with the destruction of Dublin on account of atrocious planning’ (1988: 78). This work focused on the district of the north inner city area of Dublin, now a large part of the International and Financial Services Centre (IFSC), Ireland’s banking district. *The Heart of the City* presents an extended narrative in the form of the anecdotal, interviews with local residents, social and economic observations and written text by Sheehan. Accompanying these are the photographs of Walsh, which in large part are portraits. The significance of *Heart of the City* resides in the fact that it was published at all. The incorporation of text and photographs was unusual at the time as was the nature of the project, illustrated by the fact that the book is printed in a ‘novel-size’ format on normal print–paper. The usual outlet for images in an Irish context was limited to photojournalism, illustration and picture books for the tourist market. The book’s publication is set against the backdrop of pre-Celtic Tiger Dublin when the ground was being prepared for foreign inward investment. In 1987, Taoiseach Charles Haughey had launched the Customs House Docks scheme with a view to developing a shopping and residential complex around an international conference centre. This would ultimately fail but did lead to the development of what became known as the IFSC.

9 From the exhibition ‘Objective Spaces: Photographers from Germany’ (press release) shown at Waddington Galleries in Cork Street, London (30 April–24 May 2003). A commercial space, the work displayed presented a survey of practitioners from the Becher School including the Bechers themselves. Others included Candida Höfer, Thomas Ruff, Thomas Struth and Axel Hütte.

10 From an interview with Andreas Gursky in the documentary ‘Gursky World’, part of ‘The Arts Show’ series broadcast on Channel 4 television (November 7th, 2002).

11 See Carville (2002).

12 See n. 11.

13 A reference point early on in my consideration of using digital video was 'Man With The Movie Camera' (1929) by the Soviet filmmaker Dziga Vertov, described by David Bordwell in his insightful commentary on Vertov's work as:

[A] trip through Moscow from dawn to dark, the film is as much an essay on film as a tour of the city...It is a dissertation on the relation of film to reality...glimpses of everyday life bracketed by reminders of the apparatus of cinema at work.

(1972: 4)

The viewer is presented with glimpses of everyday life in an urban setting, the rituals of rising every morning, navigating city traffic and a day at work are interspersed with images of the editing room and cinema. Vertov employs close-ups, long-shots and at times the camera is directed towards the viewer. We are reminded repeatedly of the apparatus of the media. The filmmaker enters the frame repeatedly at the height of the influence of Soviet Constructivism. 'Man With The Movie Camera' is in part a meditation on the ability of film to transform reality and an 'autocritique' of the filmmaking process itself, exploring 'film as art, artifice and artifact' (ibid.: 5).

14 My understanding of the 'long-take' was informed by a seminar titled 'Visual Ethnography' given by Áine O'Brien, School of Media, Dublin Institute of Technology (30 April 2002).

15 Roberta McGrath lecture titled 'From the Wreckage to the Inadmissible: Memory, Migration and the Photographic Archive' (2003) at the Irish Film Institute, Dublin (13 February 2003).

16 David Levi Strauss (2003) has posited how the use of aesthetic strategies combined with political intent present new forms of visual presentation possessing the potential to subvert rather than distract. Historically, aesthetics has been problematised concerning its role in representation. I would argue that in the context of a broader reading of the image and as part of a critically reflexive practice, it has a political role to perform. It affords the viewer a way in, an initial reading in its appearance giving way to other readings. As Strauss writes:

[A] new way to reinvest images with believability...to recover the image from obscurity into which it has been cast by the turpitude of political elites, the moral indifference of Western publics and the sensory onslaught of contemporary media.

(2003: 17)

17 The term 'snapshot' is referred to here as a way of referencing the motivation, reason and rationale underlying the making of an image described by Susan Sontag as the 'utilitarian way' (1977: 16). The image of the thoroughfare (Figure 2.17) was conceived as a 'utilitarian' document to demonstrate light conditions and their possible affect on film type. Images not in the category of the 'snapshot' are arguably embodied in the words of Barthes, those which 'suggest a meaning – a different meaning from the literal one...Photography is subversive not when it frightens, repels, or even stigmatises, but when it is *pensive*, when it thinks' (2000: 38).

Chapter Three

Gold Build: 'The Breathing Factory'¹ Installation

Reality changes and in order to represent it, modes of representation must also change (Brecht quoted in Highmore 2002a: 62).

I find myself standing in the 'Beckett Meeting Room' out in Leixlip with a videotape in my hand. Una, the Government and Public Affairs Director, has just viewed the digital video material I wish to use in the installation of the research project. 'That's fine, shouldn't be a problem there', she said. I then hand her a copy of one of the schedules regarding access, which I would like to include in a possible publication. The schedule features and was determined by the names of the individual manufacturing lines – 'let me think? No that should be okay, I was just concerned about the names, but they will all be gone by the time this comes out (Fielnote extract: 21 January 2005).'²

Inaugurated by poets, filmmakers, writers, painters and anthropologists, the Mass-Observation Project which began in the North of England in 1936 was a major survey of the national everyday and evolved, in part, out of simple curiosity coupled with a critique of anthropological practices with a view to bringing 'anthropology home and to understand the everyday life of my native culture' (Jeffrey 1978: 20) where 'everyday life became the privileged scene for ethnographic investigation' (Highmore 2002a: 88). An ambitious and complex undertaking, 'at once irrational and objective' (ibid.), it has since been problematised as liberal voyeurism in the observation of the working classes. At the time, the aspiration was to create 'a mechanism for non-elite voices to be heard that would give accounts of everyday life and everyday responses to social and political events...while also focusing on the ephemera of everyday life' (ibid.: 85). It therefore proposed an approach in which fragments of everyday life are rendered meaningful. Drawing upon the methodological use of participant observation, interviews and questionnaires among other methods, a massive archive of material was collated. However, the sheer vastness of material

accumulated would become in and of itself problematic in terms of its public dissemination, compounded by the subsequent outbreak of the Second World War. The methodologies employed have been described by Clifford as 'Surrealist Ethnography':

If Surrealism included a vague adherence to the work of psychoanalysis joined with an aesthetic practice based upon the principle of montage, and an anthropological approach (ethnography) focuses on the macro-analysis of the meanings and experience of a culture, then their combination would be characterized as a practice of understanding society as a "totality of fragments": the montage of incidents seen as symptomatic of repressed forces.

(Clifford 1988: 142)

My focus here is not to provide an in-depth discussion of the Mass Observation Project. Rather, this innovative project situated 'between science and art' (Highmore 2002a: 86), draws attention to the potential of critically informed surveys and systems of representation and their public dissemination. Influenced by the theoretical and methodological frameworks of Surrealist Collage and Soviet Constructivism, together with their response to mass media representations, the Project appropriated the editorial strategy of 'complex montage' where 'one charged fragment detonates another, which in turn produces a reaction' (ibid.: 93). As Highmore argues:

[T]he potential of montage [relates to] the production of a representation in which fragments of the everyday life aren't welded together in the service of an overarching framework, but neither is the idea of a 'totality' abandoned in favour of endless fragments. Rather a critical totality of fragments is possible that attempts to see the world as a network of uneven, conflicting, unassimilable but relating elements...putting into question the illusions of representation.

(ibid.: 95)

The reconstitution of my research material into an installation format reflects critically on the 'totality' of everyday audio and visual fragments collated in the post-industrial space of HP. For as Pink notes, 'reality is, in fact, continuous and subjectively experienced, at best,

ethnographers can only reconstruct fragments of a subjective experience of reality, representations of knowledge are never complete' (2001: 167). The research fragments, constitutive of the installation, are presented in the form of a metacritical narrative, designed to demonstrate the study's emphasis on an epistemology of the evocative (Tyler 1989).

Politics of Presentation: An Overview

The isolation of each object from its neighbours, the provision of suitable background and above all, a position in which it is to be readily and distinctively seen.

(Barry 1989: 307)

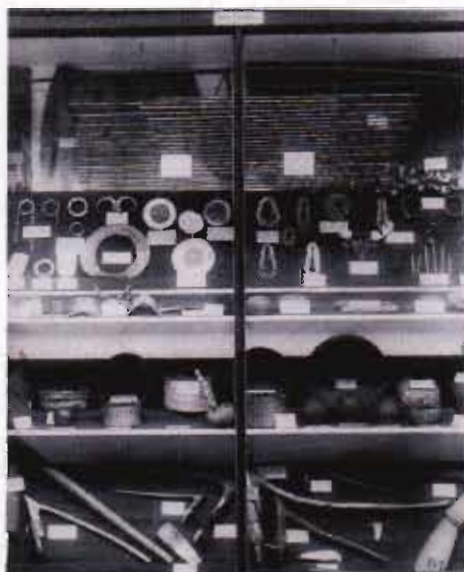


Figure 3.1 Display, Auckland Museum, New Zealand c.1890

While the discussion in chapter two foregrounded practice-based issues concerning production and postproduction, in addition to a theoretical engagement with modalities of still and moving image representation, the focus here is to lay the conceptual groundwork for the accompanying installation as a social and performative document: 'The value of images is not limited to the worth they accrue as representations seen (or consumed) by individual

viewers. Instead images also accrue value through the social processes of accumulation, possession, circulation and exchange' (Poole 1997: 11).

Barry's epigraph above describes an intricate display of anthropological material (Figure 3.1) dating from the 1890s typically characterised by the 'Victorian fetishisation of the domestic object and the design of specific cabinets enclosed in glass' (ibid.: 309). The widespread exhibition of such fetishised and 'exotic-ised' objects, as Edwards notes, was 'active in the making of meanings about cultures' (2001: 39). The discipline of anthropology and its historical formation has been the subject of much critique surrounding its construction and representation of cultural and racial differences. From its earliest undertakings both the museum and the national archive became complicit sites in the representation of the 'other', forged in the context of colonial domination³. Photography was instrumental in the service of anthropological representation as both a document and documenting device and in its ability to reproduce and be reproducible. Therefore its inclusion in exhibitions and publications and as a source of exchange, 'flowing ceaselessly around their networks...photographs closed the space between the site of observation on the colonial periphery and the site of metropolitan interpretation' (ibid.: 31). The historical role of the 'lantern slide'⁴, a precursor to the cinema theatre, is illustrative; images 'left the study and became active performers in the dissemination of anthropological meaning' (ibid.: 44), and were employed throughout Europe and the **United States as part of a wider culture of presentation** to a growing audience – individuals were seated in dark spaces, having stepped in from their 'lightened everyday' and entered the space of the 'exotic', an illuminating and entertaining display that now reached beyond a solely academic gaze.

In the **early** part of the twentieth century the locus of anthropological investigation, in terms of its 'theoretical...character' (ibid.: 48), returned to the university and with it began a decline in viewing images as emanating from a centralising source. Anthropology experienced 'shifting evaluations concerning the nature of the production of evidence and the changing modes in the transmission of that information' (ibid.); the disciplinary foundations were being laid for a less complicit collusion with institutional practices. With the advent of post-colonial and postmodern discourses in the 1980s problematising questions of representation and ethnographic practices, a reflexively spirited anthropology emerged, one that has further suffused the field of art practice. For example, in her **discussion** concerning **contemporary museology**, Mieke Bal writes:

Part of this self-critical interest from humanists in museums is in turn due to an impulse coming from critical anthropology as a social discipline that, more obviously than others, emerged out of a political practice no longer acceptable – that of imperialism and colonialism – anthropology is today the most self-critical discipline.

(1996: 201)

Furthermore, in an art practice context the curator Bruce Ferguson engages with the rhetoric of exhibitions:

Ideas around issues of representation are at the centre of what characterises the relations between postmodern **theory** and art. In particular, the politics of "representivity", meaning who is **represented**, how and in what ways...An exhibition is a strategic **system** of representations, whose aim is the wholesale conversion of its audiences to **sets of prescribed values to alter social** relations.

(1994: 178)

The degree of critical enquiry emanating from anthropological representation and postmodern critiques of art practices and their institutional facades, has shaped my positioning as a practice-based researcher and its intersection with my role as a visual art practitioner and its performative outcomes ⁵. I now wish to consider the exhibition work of

two practitioners whose combined mixed media outputs have served as a reference point for the installation, 'The **Breathing** Factory', both of whom open up 'subjective spaces' (Edwards 2001: 194) enabling the viewer to enter into and witness innovative and multilayered frameworks of representation.

Consett, England

There was a time when to be from **Consett** was to be almost a celebrity. Catapulted into the media spotlight, we were **photographed and interviewed** by every kind of journalist, analysed by economists and **sociologists**, became the subject of television documentaries and academic studies. **Now** the vast steelworks site, grassed over and landscaped, awaits council inspiration. **Of** the proposed schemes, which have included a Category A prison, the most **bizarre** has been a tourist park for the elderly entitled "The **Coming Of Age**".

(Germain 1989: 8)

The book *Steel Works: Consett, From Steel to Tortilla Chips* was published in 1989 to accompany the exhibition of the same title. Funded and presented by the Side Gallery in Newcastle, the project, by the photographer **Julian Germain**, was a study of the town of Consett in the North of England, once home to the largest opencast mine and steelworks in Britain. With its closure in the 1980s and the subsequent transformation of the site the steelworks were completely dismantled involving the largest demolition project ever witnessed in Europe. Germain employed diverse **strategies** of representation of the town and its community in order to re-present, if not re-assert, a sense of this once vibrant community.



Figure 3.2; from *Steelworks*, Julian Germain

The page (Figure 3.2) turns to reveal a two-page, collage-like spread: the holiday photo-booth, a couple bedecked in sunglasses, the family and the family dog in the parent's backgarden, groups of workers standing and sitting for the photographer, a smoke break, a tea break, and small samples of texts, 'the factory lassies from Lancaster' including 'P. O'Leary'. The images appear haphazardly in display and somehow 'speak' to, of and about each other. The sense is portrayed of a living community. However, all are black and white and the clothes look 'different'. It is not now.

Germain presents individual testimony, anecdotes and interviews alongside his use of visual materials. We are invited to partake in familial memory by recourse to personal archives and family albums, together with images by Don McCullin for the *Sunday Times* in the 1960s, in addition to the work of the local photojournalist Tommy Harris, who covered the local community in the 1950s and 60s. Harris's use of a square format camera meant he included details that would be later cropped. Yet, 'it is these chance elements in Tommy's uncropped photographs that make his work so revealing'⁵.



Figure 3.3; from *Steelworks*, photograph by Tommy Harris

The project also included Germain's own work from the late 1980s.



Figure 3.4; from *Steelworks*, Julian Germain

Through the 'x'-marked glass (Figure 3.4) a man with a carpenter belt shades his eyes and peers outwards and in so doing, consciously or unconsciously, implicates himself – in the glass, in t/his reflection, in the past or in the future?

The work, collated by Germain, surveys a period from 1910 until 1989 and has since been described as a 'postmodern visual history practice'⁶. In a location where all physical traces of an industrial past have been removed, Germain reconstructed a social document from the remnants and fragments of this local community's visual and oral histories.

Dubí, Czech Republic

I returned to the motel over and over again and I spent a lot of time just sitting around in a bar waiting together with the girls. This time is reflected in my diary notes, basically things I could not film. They are now represented as text or as snapshots...so I ended up with tons of material, but it wasn't until I had the exhibition...that I started to think about what was really important and how to display it all, to formulate the work for an exhibition context.

(Sidén 2005: 17)

The Swedish visual artist Ann-Sofi Sidén spent almost two years revisiting the small town of Dubí, 'a dismal parade of bars, clubs and hotels receding into the forest' (Sidén 2002: 5) on the border of the Czech Republic and the former East Germany. Dubí had been a successful resort town but in the aftermath of the collapse of communism, the 'Velvet Revolution', economic instability transformed the town into a centre for the sex industry. It continues to be a location for prostitution and the trafficking of women. Centering upon the women themselves, Sidén's project critically documents their plight through multiple subject positions, including the men who frequent and use them – customers, the local mafia, pimps, police commissioners, the motel owners and a former waiter.



Figure 3.5; video stills from *Warte Mal!* Ann-Sofi Sidén

Warte Mal! Prostitution After the Velvet Revolution was first presented at the Hayward Gallery, London in 2002 in the form of an installation with an accompanying publication. The title was inspired by the desperate calls for clients, ‘Warte Mal!’ (‘Hey Wait!’). The publication includes extended transcripts from interviews with participants in the project, extracts from Sidén’s diary, images in the form of photographs and stills taken from digital video material. The subject matter for the images include portraits, landscapes and snapshots – images conveying a sense that they were made quickly without thought or time regarding their composition. It remains unclear whether this was intentional or not; that is left to the viewer to decide. For example, in Figure 3.6 below, the point of view is located from inside. Nothing is in focus and looking out, two women appear to be in mid-conversation huddled together obstructing the view of the exterior, obstructing the viewer – elements of the road are visible – these two women, arms linked.



Figure 3.6; from *Warte Mal!* Ann-Sofi Sidén

‘Dramaturgically the piece is still a maze’ (Sidén 2002: 4). The installation included a set of rooms in the form of ‘cubicles/booths’, each containing video monitors replaying the interviews and testimonies of those involved, floors lined in red carpet. Large-scale projections onto perspex portray various scenes, including those of a rural landscape, the acoustic backdrop of noise from the local bars, accompanied by wall projections of written extracts from Sidén’s diary.

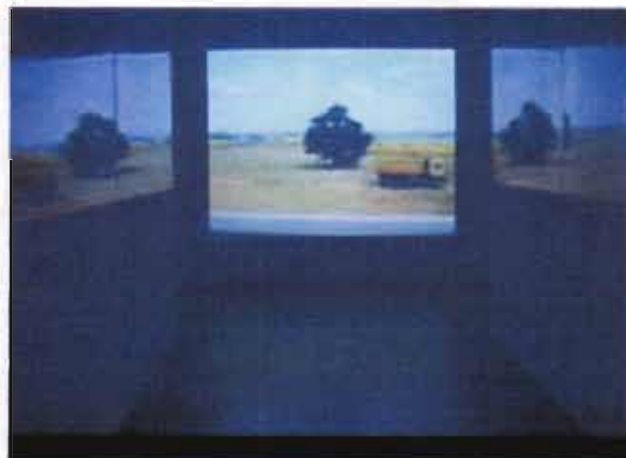


Figure 3.7; Installation, Hayward Gallery

With further reference to the installation, Sidén states:

The exhibition architecture reflects the claustrophobic motels and bars where the girls work and the open spaces, the rural landscape, I encountered in between. The viewer moves the story forward from different perspectives. You can't really choose what to listen to in a particular moment; it's all edited for you, it's like moving around in an open and accessible archive.

(ibid.: 4)

The overarching effect of Sidén's installation resonates with Tyler's notion of 'evocation'. In the words of one reviewer: 'Is this the "truth" behind the façade? The installation totality argues against such a pat reading. [It] conveys a sense of immersion in a fantastically complicated micropolitics' (Whiters 2002: 89). Sidén thus presents the viewer with a three-dimensional experiential 'totality' of fragments, while attentive to the 'camera's partial vision' (ibid.).

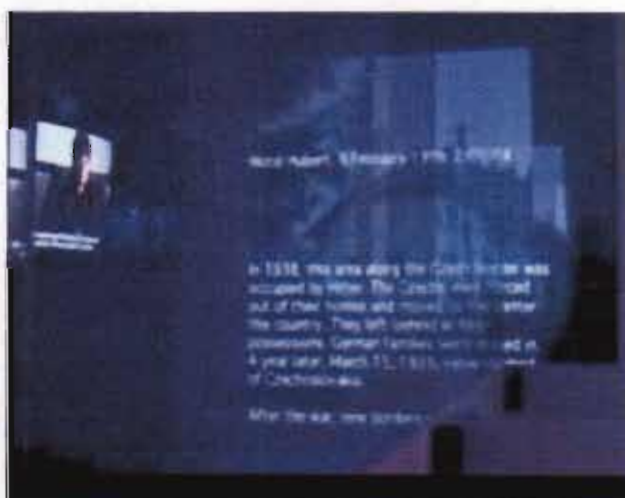


Figure 3.8; Installation, Hayward Gallery

It is significant to note that the specificities of the exhibitionary settings for the presentation of Sidén's installation – in European art spaces such as the Kölnischer Kunstverein, Cologne

and the Moderna Museet, Stockholm, among others – reflect upon the particular architectural narratives of each of the institutions.

Re-Presentation: ‘The Breathing Factory’

Entering the passageway of this ‘offsite space’⁷, the viewer is made aware of a low, hissing, breath-like sound. Having passed the title on the exterior wall by the door, the pamphlet will now be in hand. This square publication, an object, an artefact, title on the front and to be unfolded, later possibly, revealing layerings of text; segments of bilingual English and Irish transcripts, ‘localised’ for the constitution of this specific installation – testimonies which, when fully unfolded, lead in and out of each other, ‘labouring’ perspectives: As Hine notes:

For to perceive, a beholder must create his own experience...meanings are “imaginatively summoned” by the material artwork, challenging the recipient to the performance of a like act of evocation and organisation. Through perception the work completes itself...in a performance, an undergoing in the imagination of the experience represented.

([1909] 1989: 225)

Alan Trachtenberg describes how for Hine, ‘the social act lay in communication...developing methods of presenting his pictures as mute monuments seeking a voice in the viewer’s imagination, a voice in dialogue’ (1989: 203). Ahead, the viewer is greeted by the sway of plastic, suspended and floating above the floor. Fragile. The sutured membrane. The viewer has the possibility to navigate the piece should she or he choose. Shadows rise, fall, fall upon, – an awareness of their presence upon this projection space. Their presence, implicated in this industrial history.



Figure 3.9; 'Lava' (still), Building 8, 12.04 p.m., Monday, 1 December 2003 (Leixlip, Ireland) Digital Video Projection

In her discussion of the representation of landscape, the curator Rebecca Solnit writes: 'Installation itself insists on a more bodily, diffuse experience, on the possibility of ongoing creation and transformation, on unframed, unresolved contextuality. It may be that landscape has become environment, politically and phenomenologically' (1993: 232). In other words, 'architecture of any sort is in fact the inevitable background, support and frame of any work' (Buren [1975] 1996: 319). The decision to re-configure my research materials into an 'offsite' installation – a topographical evocation of industrialised labour – invites the viewer to supplement meaning, reading outside the conventionally prescriptive settings of a museum or gallery.

'The Breathing Factory' space possesses an **atmosphere**, darkened and unfinished, bared walls, slightly cold, no windows, eyes drawn, initially to those illuminated artefacts. The shadows matter, providing a narrative space in and between the objects amid the soundscape. As Van Assche remarks, 'that which lies outside of the image, however, can be conceived as a more mental terrain and remains to be explored' (2003: 97), echoing the words of Brian

O'Doherty who, in his critique of the notion of the art space, advocates the need for meaning on the part of the viewer to be formulated through 'mental projection' ([1981] 1999: 333).

The installation space should, therefore, ideally provoke a reaction, a response from within to a 'three-dimensional volume' (Van Assche 2003: 94), an opening out rather than the closing down of meaning:

[I]nstallation responds to a psychosocial demand; it gives the spectator an active role to play in a work in which he or she becomes one of the parameters...the work becomes itself a theatre in which the spectator is "co-performer".

(Van Assche 2003: 94)

Possibly, the viewer decides to look to the right (or not, this time) noticing a table, light overhead, what appears to be a book? If they move closer, a fieldwork diary, opened at particular pages and illuminated: 'I am just a Mickey Mouse man in all of this...I roamed some more'.

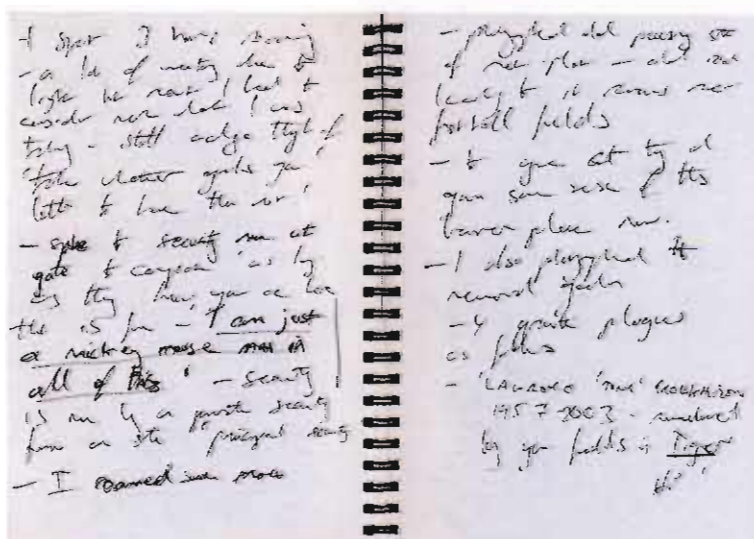


Figure 3.10; pages from field-diary

The table stands isolated in this large section of the installation space, lit only by a light suspended from the ceiling, a single light, its totalising effect instantiating multiple subject positions. Above the table, on the wall and facing the viewer is a small image, box-framed, untouchable, behind glass.

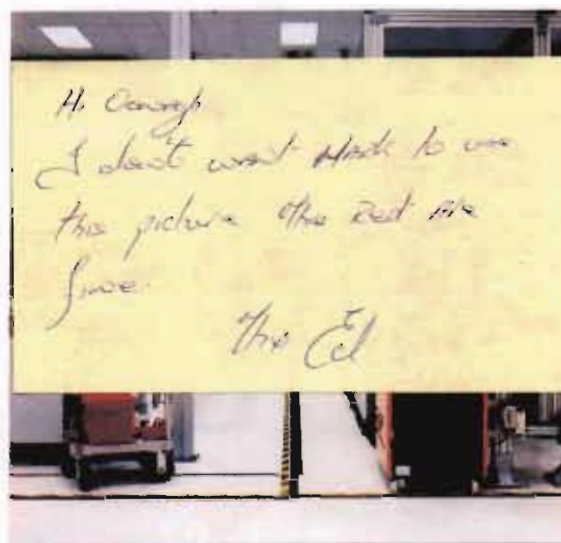


Figure 3.11; vetted image, September 2003

Looking back over the viewer's shoulder towards the far wall and directly opposite the table is Ebelonga, clad in white. Siegfried Kracauer was critical of photography's iconic status and how 'it possesses a perplexing ability to resemble the world it depicts but also to render it strange' ([1926] 1997: 25). However, he conceded that, 'the photograph may act as a trigger, rather than prevent, a momentary encounter with mortality, an awareness of history that does not include us' (ibid: 26). In its estrangement photography may open up new imaginative possibilities, histories made visible in which viewers are always implicated.



Figure 3.12: 'Ebelonga, Clean Room Operator, 10.22 a.m., Thursday, 20 November 2003' (Leixlip, Ireland)

The portrait of Ebelonga (Figure 3.12) is sited on a cement wall. Her presentation, unfinished. Passing the projected plastic, a shadow possibly cast. Her portrait, on inkjet paper – material employed for a woman working at HP's Dublin Inkjet and Manufacturing Operation (DIMO) – one metre by one metre in size and rough around the edges. She is spotlighted from above, her presence foregrounded, hanging, simply, merely by bullclips, by a thread and still the breath-like sound. Pink comments how, 'no image or photographic practice is essentially ethnographic "by nature", but the "ethnographicness"...is determined by discourse and content' (2001: 50). All images, it would appear, are defined by the contexts in which they are made and the imposition of competing theoretical discourses on their meaning. This arguably is precisely the very strength of images, their resistance to absolute meaning and an all encompassing meaning. As Liz Wells argues:

The photograph slips away from grasp, endlessly refusing the embrace of particular theoretical concerns and always pointing to the limits of systematic analysis in ways which remind us not only of the diversity and dispersedness of photographic practices but also the nebulosity of image-encounters.

(2002: 19)

Standing back from Ebelonga, looking left into the main section of the space and located on the far left wall are three portraits. Behind, the source of breathing continues. Perhaps the viewer looks back, the blue-grey sway of plastic. The first portrait is Matthew, freshly shaved, goggles in hand, the red wristband, confident, his eyes greeting the viewer.



Figure 3.13; 'Matthew, Clean Room Operator, 09.15 a.m., Thursday, 27 November 2003' (Leixlip, Ireland)

Further along this same wall and side by side are Mark and Elizabeth.



Figure 3.14; 'Mark, Clean Room Shift Supervisor, 09.32 a.m., Thursday, 27 November 2003' (Leixlip, Ireland)
'Elizabeth, Clean Room Operator, 10.26 a.m., Monday, 11 November 2003' (Leixlip, Ireland)

At this or any point the viewer may gaze at these portraits (Figure 3.14) in search of meaning: ‘What is a Mickey Mouse Man?’ ‘Mickey Mouse Men?’ ‘Working in Leixlip, in Ireland, in 2005’. ‘White uniforms covering bodies?’ ‘A vetted picture?’ ‘A table in an open space and a single light?’ ‘Bits of plastic forward and back?’ ‘Breathing sounds?’ Pink discusses the potential for such ‘open-endedness’ in the presentation of research material and the challenges it presents, acknowledging that linear, bound, written and ‘finished’ submissions of ethnographic research are limited due ‘to their capacity to represent a reality that is in fact continuous and subjectively experienced’ (2001: 167).

In the far right-hand corner stands a lone computer monitor. It emits no sound. Looped, a vision of endless repetition. The viewer may be reminded of Chaplin’s ‘Modern Times’ (1936)⁸. ‘How is this different, has nothing changed?’ And thus the alienation and trauma, tinged with humour and melancholia, invoked through the character of ‘The Little Tramp’, is re-visited. No ‘Tramp’ among the machinery, only the silent automatons of global capital.

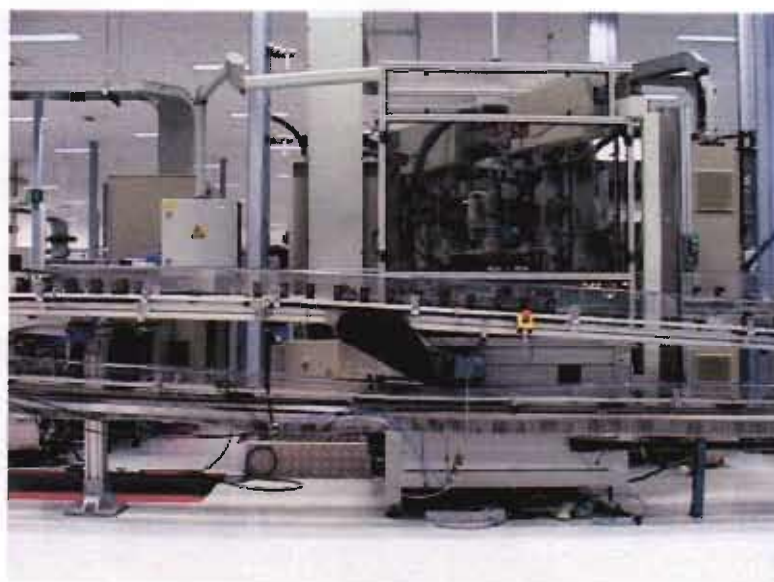


Figure 3.15; ‘Tiger’ (still), Building 8, 10.08 p.m., Tuesday, 27 January 2004 (Leixlip, Ireland) Digital Video (looped)

The breath-like hiss continues. The viewer may stand back, look left to a light emanating from behind a wall. Moving forward, a narrow passage is revealed. At its very end, suspended gowns.



Figure 3.16; 'Gowning Room 5, Building 7, 11.02 a.m., Monday, 10 November 2003' (Leixlip, Ireland)

There is no exit. The viewer must return through the space, pamphlet in hand, pages turned in on themselves. She or he may decide to glance through the text, to the written testimonies, to a conversation between myself and Lionel Alexander, Vice-President of HP Ireland:

- M: How does Ireland ensure the longevity of what has been a profound economic transformation?
- L: The first step they've made which I'm really pleased about is, don't tie investment to jobs. Do not always ask if I want to get a grant, "how many jobs is this going to create?" The paradigm shift from just job-creation to job-preservation has to **happen. And for job-preservation** you then get the support to create business models **that best support** the competencies of the organisation. At the end of the day, **no multinational** has any emotional attachment to Ireland, or Singapore or China or India. It's business, right, and if there's no business reason to be in a country we will not, we will leave tomorrow.

The viewer may now decide to leave the space, testimonies in hand.

Footnotes

1 The term 'The Breathing Factory' is inspired by the economic management system espoused by Peter Hartz, the present CEO of Volkswagen. This system, seen as a response to the requirements and demands of the global market, is envisaged as spreading beyond the factory floor. As Hartz notes:

[F]ollowing the pulse beat of the market and can change over to six or seven days of production overnight, uses market opportunities and risks optimally to create value. The break-even point in capacity usage remains low and market peaks can be taken as well. When the production process becomes flexible, then working hours and working conditions must also become flexible. Not only on the factory level. The new "breathing rhythm" must also make headway at the social level: the time rhythm in society, the labour market, the educational system and the remaining institutions of the welfare state. The target is a "breathing factory".

(1996: 73)

2 This incident occurred in the Beckett Meeting Room, Building 1 in Leixlip on 21 January 2005. I had just completed an interview with Lionel Alexander, Vice-President and General Manager of HP Ireland. I spent over an hour with Una Halligan, Director of Government and Public Affairs at HP and her assistant in discussion about my use of images, together with a review of the digital video material made on-site

3 See Edwards (2001) for an expanded discussion on the relationship between anthropological representation, empire and colonialism.

4 In the mid-nineteenth century when a slide projector was called a 'magic lantern', a 'lantern slide' was the source of the projected image (Baldwin 1991). Originally an image painted on glass, it became photographic in the 1850s with the use of an albumen, or later collodion coating on one side. To protect the fragile image, this coated side was then covered with a second, same-sized piece of glass. The lantern slide was also used for home entertainment.

5 Quote from text that accompanied the exhibition, 'Tommy Harris: Photographs of the County Durham steel town from 1949-1979' (Side Gallery, Newcastle, England, 2003).

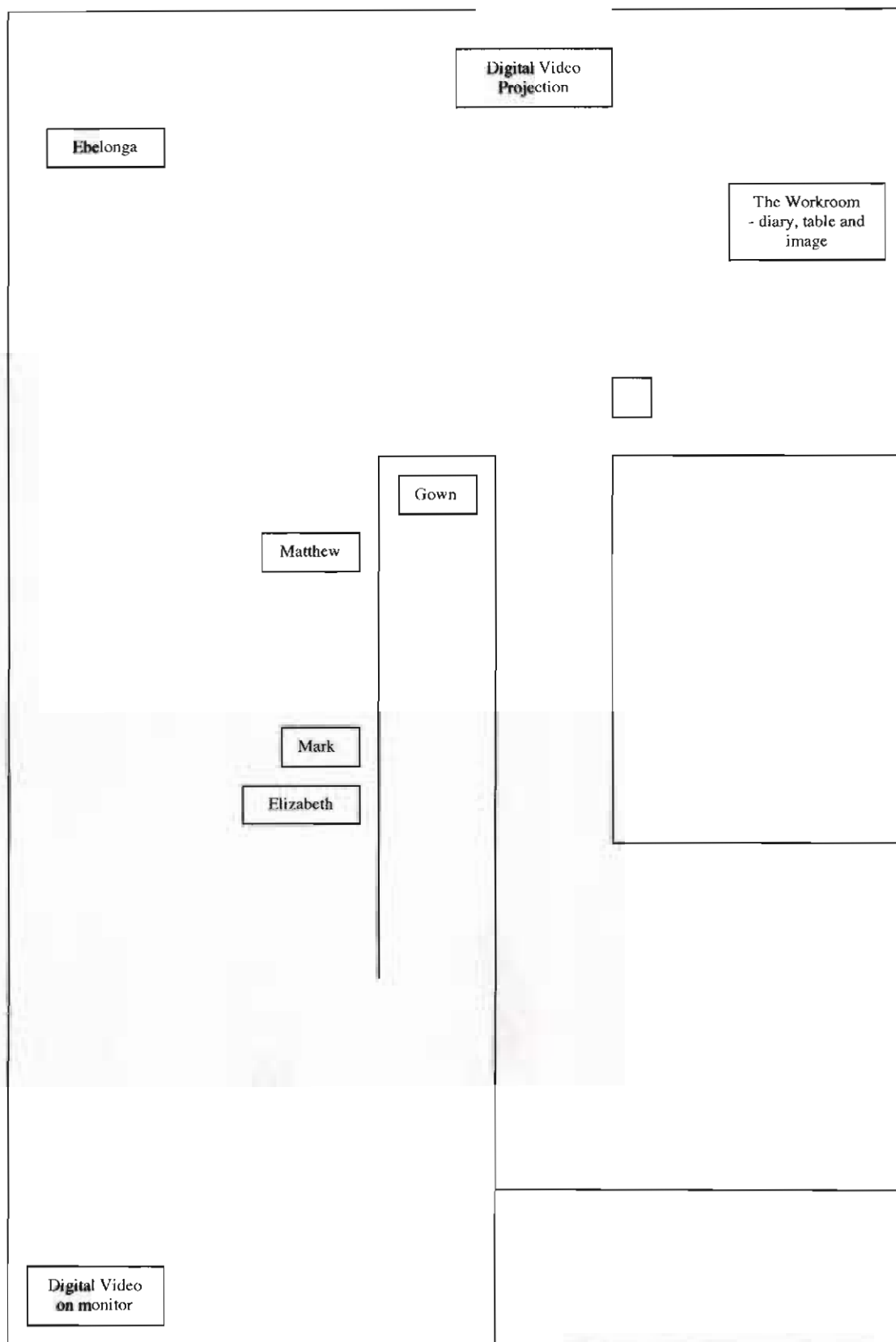
6 Described as such in a brochure accompanying a conference titled 'Work'. This inaugural event was organised by the International Photography Research Network (IPRN), an initiative of the University of Sunderland, England (9-11 September 2005). Germain was present as a guest speaker.

7 An 'offsite space' can be defined as an exhibitionary space whose primary function is not the presentational context or location for visual art such as public or private gallery.

8 'Modern Times' was written, scored, produced and directed by Charlie Chaplin and released in 1936. Production on this silent film (although sound was available) began in 1932, on what would be the last outing for the character Chaplin had created, 'The Little Tramp'. In one scene, the President of the factory where Chaplin works is shown a new aid to boost productivity. The sales pitch for a feeding machine is delivered by a mechanical salesman on a vinyl record and the text card between the scenes announces the following:

A practical device which automatically feeds your men while at work. Don't stop for lunch. Be ahead of your competitor. The feeding machine will eliminate the lunch hour, increase your production, and decrease your overhead.

A Map of installation (proposed): DIT, Aungier Street, Dublin, December 2005.



Conclusion

Final Build

In January 2005, following seven months of ongoing attempts to interview the Vice-President and General Manager of HP Ireland, I finally came face-to-face with Lionel Alexander in the 'Meeting Room', located in Building 6. Born and raised in Singapore, Alexander trained as an engineer, obtaining his first job with HP in the early 1980s. At the time, Singapore was booming; six months later, however, he lost his job as described in his own words:

HP were very prudent about who they picked at that time – finally got the job you know, and within six months I lost it, because the business I was...they hired me for...decided they were going to move everything elsewhere, you know. For a young age, just starting, not a very pleasant experience, but it happened.

(Interview with Lionel Alexander, 21 January 2005)

In July, Hewlett-Packard's new CEO, Mark Hurd, announced that HP would be cutting 10% of its global workforce amounting to some 14,500 people (HP Press Release 2005). The fate of those workers in the Leixlip plant has yet to be made public. With an uncanny degree of resonance, Arjun Appadurai, in his discussion of the research imagination in relation to the optics of globalisation, succinctly defines the characteristics of global capital and its relationship to the individual and the state:

Global capital in its contemporary form is characterised by strategies of predatory mobility (**across both time and space**) that have vastly compromised the capacities of actors **in single locations even** to understand, much less anticipate or resist, these **strategies. Though states...vary** in how and whether they are mere instruments of **global capital, they have certainly** been eroded as sites of political, economic and **cultural sovereignty.**

(2001: 18)

Irrespective of HP's ominous announcement, workers at the plant continue to work and operate within a climate of insecurity.

This practice-based research project has drawn attention to the audio and visual representational neglect in Ireland of workers immersed in the global capital flow of the Information and Communication Technology sector. In this late modern era characterised by 'fleeting alliances' (O'Riain 200a: 181), the research undertaken in this study posits the need for a transdisciplinary and multifaceted methodological response to representations of Multinational Corporations such as HP. The reconfiguration of the research materials into an installation format is testimony to the evocative, fragile and ephemeral labour conditions of the contemporary local-global workplace in the newly industrialised Irish landscape. This study is by no means a definitive and exhaustive representation of an ICT multinational operating in Ireland in much the same way that 'there never is', as one software developer commented, 'a final build'.

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Appendix 1: Selection of Correspondence in relation to accessing Hewlett-Packard

A – Letter to Una Halligan, Director of Government and Public Affairs, HP, (March 2003).

Mark Curran,
44 Longwood Avenue,
Dublin 8,

ph:(01)4738240/
087-2779881
email: markjc1999@
hotmail.com

March 19th, 2003

Dear Una,

I am writing regarding the proposal we discussed. The work I wish to undertake is the substantial part of my research for my Mphil./PhD. in Visual Media/Photography at the School of Media, Dublin Institute of Technology. This is the inaugural year of this post-graduate project. My supervisors are Anthony Haughey (Senior Lecturer, Dept. of Photography, D.I.T.), Martin McCabe (Senior Lecturer, Dept. of Photography, D.I.T.) and Dr. Alan Grossman (Government of Ireland Post-Doctoral Scholar, School of Media, D.I.T.).

The work I am proposing involves the visual exploration and documentation of the landscape of New Technology. Ireland has been experiencing the greatest economic transformation in its history in recent years. A significant contributor to this change has been the massive investment and development in new technologies. This has profoundly changed the economic and physical landscape of the country. By the presence of companies such as Hewlett-Packard, Ireland is now a member of the global technology economy.

The visual documentation of this process has, outside of official government bodies, been limited. I, therefore, propose the following:

- to make, with the individual's permission, portraits of the people working in these environments.
- to photograph the space in which people work. (note: concerning security, much of the space/landscape-type imagery I make is non-geo-specific and rather abstract by nature. The intention here is poetic and draw your attention to the accompanying catalogue of my work.)
- to photograph the exterior spaces of these locations. Again I would draw your attention to the note accompanying the previous point.
- As I am aware of security and branding concerns, I am also not averse to the vetting of images or being accompanied at all times while at these locations. In previous work on construction sites around the city, this was the practice. The copyright of images would, however, remain that of the image-maker. This is not outside normal practice.
- to interview and record people's experiences as participants in this huge transformation. (note: this would not be company specific in terms of specific work practices.)

- To record the environment of work i.e. the sounds of the space.
- to make several visits to each location. This is very important in terms of establishing a familiarity with staff and hopefully, their trust. It also affords an understanding of work practices and the space in which these practices take place.

I have enclosed supporting material in the form of images. These date from the 1500's to the recent past. These illustrate what has been a long tradition of documentation and representation of the changing industrial landscapes. The mediums of representation include painting and photography. In an Irish context, the work of the painter Sean Keating and his 'Ardnacrusha series' is important here. Keating documented the construction of the one of the largest engineering projects in Europe at the time i.e. the building of the Ardnacrusha power plant, and the largest undertaken by the young Irish Free State in the 1930's. Keating was not commissioned to document this project.

I have also enclosed material regarding my own work. This includes the catalogue 'Southern Cross' from my exhibition at the Gallery of Photography which explored the changing Ireland through the spaces of development, the construction sites, and those of finance, the IFSC. There is also media that it received including industry trade publications.

If you require any further information or clarification, please do not hesitate to contact me. Thanking you.

Regards,

Mark Curran

**RE:PROPOSED ACCESS TO HEWLETT-PACKARD, LEIXLIP,CO. KILDARE
MARK CURRAN**

The following is a detailed outline, as requested, regarding access to undertake the project discussed in my conversation with Ms. Una Halligan, Public Affairs Manager, at Hewlett-Packard in Leixlip on Friday, March 21st, 2003.

As stated in my previous letter, the work I wish to undertake is the substantial part of my research for my Mphil./PhD in Visual Media/Photography at the School of Media, Dublin Institute of Technology (D.I.T.). This is the inaugural year of this post-graduate programme in practice-based research and, if successful, will be the first post-graduate award in Visual Media/Photography in Ireland.

My project is a multi-media exploration and documentation of the landscape of New Technology. Ireland has been experiencing the greatest economic transformation in its history in recent years. A significant contributor to this change has been the massive investment and development in new technologies. This has profoundly changed the economic and physical landscape of the country. By the presence of companies such as Hewlett-Packard, Ireland is now a member of the global technology economy.

The access requested would be as follows:

- Access would be requested for a period of 6 months not starting until June, 2003 in consideration of the recent/present global security situation.
- All access would, of course, be pre-planned and cleared with relevant parties.
- Access would be requested to begin with weekly visits of one day. I foresee this then subsequently reducing as work proceeds to perhaps bi-monthly visits.

The nature of the work I wish to undertake is as follows:

- to make, with individual's permission, portraits of the people working in Hewlett-Packard in the particular place/area they work in.
- to photograph the space in which people work. (note: concerning security, much of the space/landscape-type imagery I make is non geo-specific and rather abstract by nature. The intention here is the poetic and draw your attention to the catalogue titled SOUTHERN CROSS I produced.)
- to photograph the exterior space of the site. Again, I would draw your attention to the type of landscape imagery I make.
- to interview and record people's experiences as participants in this huge transformation in Ireland. (note: this would not be company specific in terms of specific company work practices.)
- to record the environment of work i.e. the sounds of the space and therefore create an archival soundscape of the workplace.

RE:PROPOSED ACCESS (cont'd)

Mark Curran

- the request for longer-term access being made as it is very important in terms of establishing a personal familiarity with staff and hopefully, their trust. It also affords an understanding of work practices and the space in which these practices take place.
- as I am aware of security and branding concerns, I am also not averse to the vetting of images produced or being accompanied at all times while on location. In previous work on the construction sites around the city, this was the practice. The copyright of the images would, however, remain that of the image-maker. This is not outside normal practice.

Regarding access to specific areas within Hewlett-Packard, I would request the following:

- I would request to begin in the cartridge manufacturing area on site with the possibility to make images of the space, portraits and sound archives. I would also like to interview individuals working in this area, with their permission, whether those on the floor and those supervising the operation.
- I would also request to make images of the exterior of the site. Perhaps this could occur simultaneously while working in the manufacturing area as this also becomes weather-dependent.
- I would then request access to the 'clean room'. I would undertake a similar approach as outlined above. I am aware this may take some organising due to the nature of the space but it would be a key area as demonstrates explicitly the changing work practices within Ireland.

At present, these are the key areas of access but would ask for the possibility to make further requests as with any area of research or work, occasions can arise that one is not presently aware of.

In conversation with Ms. Halligan, who I should say was extremely helpful and forthcoming, I would appreciate the possibility to be briefed in the high-end printing technology available through Hewlett-Packard. In photographic practice, much work is completed using such printing technology, specifically in 'proofing' work, making dummy books/maquettes and the exhibiting of work. The intention at the end of my research is to produce a publication regarding the work and exhibition. Perhaps there would be the possibility to show the work I have completed regarding Hewlett-Packard on site at a later stage.

Ms. Halligan mentioned the possibility of linking in with a work-placement student from the University of Limerick as my liase while undertaking this research and I would express an interest in this possibility.

I thank you in advance for your time and consideration regarding my request and proposal.

Mark Curran, April 25th, 2003

PROCEDURE FOR PHOTOGRAPHER (MARK CURRAN) VISITS TO HP

Subly 4

NITRO: (Jim [redacted])

- ✓ High Tech area i.e The New Magma line- there is a possibility that he would be permitted to photograph this area
- ✓ He will be able to provide 2/3 people (not yet decided) who will be willing to pose for portraits, and be interviewed .

TIGER (Building 4) (NITRO): (Brian [redacted])

- ✓ He will be able to provide the people from both Nitro & Tiger
- ✓ He will be able to provide up to 6 people from both areas- who will be a mix of gender / age/ levels – some operatives, technicians, and engineers.
- ✓ They will also be able to provide someone to accompany him on his visits

Brian also commented on the possibility of Mark perhaps giving a talk to employees on how people in his profession view the quality of printing technology, available to them in the course of their work. HP gives courses on imaging and printing quality to their staff, (in conjunction with Martin [redacted])

WAREHOUSE BUILDING 3: (Liam [redacted])

- ✓ They will be able to provide imaging controllers (for portraits) who can be positioned at their desks, or in the warehouse etc.

LAVA (Building 2): (Ed [redacted])

No photographs are to be taken in this area, given the sensitivity of the production lines in question. However, portraits can be taken in this particular area if Mark so wishes.

- ✓ He will be able to provide us with names for portraits – These people will be, again, a mix of gender/ age / level. /

- ✓ He will also allow employees a maximum of 1 hour in the interview i.e employees have this length of time put aside on the scheduled day of portraits.

[Handwritten scribbles and notes in the left margin, including a large circular scribble and several vertical lines of scribbles.]

Proposed Project Schedule for Hewlett-Packard, Leixlip, Co. Kildare

from:

**Mark Curran, Mphil./PhD. Research Project,
School of Media, Dublin Institute of Technology (D.I.T.)**

Supervisors: Dr. Alan Grossman (Government of Ireland Post-Doctorate Scholar, School of Media, D.I.T.), Anthony Haughey (M.A., Senior Lecturer, Dept. of Photography, School of Media, D.I.T.), Martin McCabe (M.A., Senior Lecturer, Dept. of Photography, School of Media, D.I.T.)

The following is a proposed timetable regarding access to areas of the Hewlett-Packard Plant in Leixlip. I propose to provide a schedule beginning the week of September 29th until the week beginning November 10th, 2003 as I am away for a substantial part of September. I will then provide a subsequent schedule until the end of January 2004 (I may have accumulated enough research that this length of time may not be necessary).

- Week beginning September 8th, 2003**
- Week beginning September 15th, 2003**
- Week beginning September 22nd, 2003**
(away over these three weeks)

The proposed schedule is as follows:

Week beginning September 29th, 2003:

Tuesday, September 30th:

- access to Production Building 2 and 4 and Warehouse Building 3 between the hours of 11.00 a.m. and 2.00 p.m. to photograph the space.
- After this session, I perceive to have enough photographic work of the space in this area completed.

note*:

I would now request to make portraits, with individuals agreement, in this area at date(s) that can again be prearranged?

Thursday, October 2nd:

- access to Phase 3B Production Building 8 and Phase 3A Production Building 8 between the hours of 11.00 a.m. and 2.00 p.m. to begin photographing the space.

Week beginning October 6th, 2003:

Tuesday, October 7th:

- access to Production Building 2 and 4 and Warehouse Building 3 between the hours of 11.00 a.m. and 2.00 p.m. to make Portraits
- access to Production Building 2 and 4 and Warehouse Building 3 to make a sound archive of the area between 2.30 p.m. and 4.00 p.m. (i.e. to record the sound of the space)

Note*:

from experience, this process, once people agree, should only take a few minutes, usually 5 at the maximum. I say this as with previous places where I have photographed, I am aware of not getting in the way of people's work or task at hand. I would like to state my complete willingness to cooperate with HP in achieving this goal and being responsive to your protocol in this environment. I would say, however, that it is vitally important to this project and as a document that this possibility exists. I again refer you to my previous undertakings in my original proposal.

- office space ?

*- plus of new portraits
- sound archive*

Proposed Project Schedule for Hewlett-Packard, Leixlip, Co. Kildare (cont'd)

from:

Mark Curran, Mphil./PhD. Research Project,
School of Media, **Dublin Institute of Technology (D.I.T.)**

Week beginning October 13th, 2003:

Tuesday, October 14th:

- access to Phase 3A and Phase 3B Production, Building 8 to photograph the space between the hours of 11.00 a.m. and 2.00 p.m.
- access to Phase 3A and Phase 3B Production, Building 8 to make sound archives of the space between 2.30 p.m. and 4.00 p.m.

Thursday, October 16th:

- access to Phase 3A and 3B Production Building 8 to make portraits between the hours of 11.00 a.m. and 2.30 p.m.

Week beginning October 20th, 2003:

Tuesday, October 21st:

- access to Production Buildings 2 and 4 and Warehouse Building 3 to make portraits between the hours of 11.00 a.m. and 2.30 p.m.

Thursday, October 23rd:

- Interview day? time and place to be confirmed?

Week beginning October 27th, 2003:

Tuesday, October 28th:

- access to Phase 3A and 3B Production Building 8 to make portraits between the hours of 11.00 a.m. and 2.00 p.m.
- access to Phase 3A and 3B Production Building 8 to make sound archives of the space between the hours of 2.30 p.m. and 4.00 p.m.

Week beginning November 3rd, 2003:

Thursday, November 6th:

- access to Production Building 2 and 4 and Warehouse 3 in the evening (time to be approved) to make portraits*

note*:

the motivation for evening access is to again document the continuous nature of activity on site that reflect not only the local needs but also the requirements placed upon HP on a global scale.

Week beginning November 10th, 2003:

Tuesday, November 11th:

- interview day? tbc?

Thursday, November 13th:

- access to Phase 3A and 3B Production Building 8 in the evening (time to be approved) to make portraits?

note*

I would like to then begin photographic-based work in the office areas and the clean room on site which again is open to negotiation and pre-clearance
This is a proposed schedule and is therefore open to negotiation and review as is needed.

Mark Curran, September 1st, 2003

E – Correspondence regarding changes to proposals (November–December 2003).

We have one session scheduled for next Thursday, the 13th November in Building 8. Here, he is going to take some photos/ portraits/ record sound.

Des [REDACTED] will be our guide in this area.

On Monday 17th, he is taking some photos of the exterior site again, from 10.15- 1pm.

On Thursday 27th he proposes to enter the 'Clean room' changing room area to photograph the space- I have just received permission from Seamus [REDACTED] to go ahead with this.

Sebastian [REDACTED] will be our guide in this area, and he will also be doing one of the interviews, along with Sharon [REDACTED]

Also, one Thursday early in December, Mark would like to take 2/3 portraits of senior mgt personnel. He would also like to interview perhaps 2 of them.

He would like to take some portraits in an office space, (Building 1 being the obvious choice). He would like to take as many portraits as possible, and have a mix of gender/ cultural background/ age.

I thought the Bank would be very suitable for such a requirement, since there is a very apparent cultural mix there.

{ Una, can you advise me on the Building 1 requirement and the senior mgt one?? }

Hi Mark,

Our schedule for the next few weeks looks something like this:

Thursday 27th- 'Changing Room' of the Clean Room area from 10.15 - 4 o'clock

Monday Dec 1st- Digital Videoing of the Building 8 from say, 10.15 -1 (time to be confirmed by you)

Thursday Dec 4th- Photography of Bank in the morning (10.15- 12.30), and then the interview with Senior mgt from 1 until say, 2/2.30?

Una's schedule is tight at the moment, so 1 o'clock on the 4th was the best she could do really. I was thinking perhaps if you wanted, to come in earlier in the morning of the 4th, say be in here for 9 o'clock, and we could have more time in the bank??

Will you let me know if this sounds ok to you??

Regards,

[REDACTED]
Government & Public Affairs Dept.
Tel: 0035316158591

Appendix II: List of vetted Interview Questions

Interview Questions Mark Curran

- What is your name?
- Where were you born?
- Could you outline the duties and responsibilities of your current job position in Hewlett-Packard? How long have you worked here?
- What is your previous work experience and where else have you worked, in what other information and communications technology companies or organisations, for example.
- How, if at all, has the nature of your work changed in the previous decade or so? Can you provide any examples?
- In what ways do you think the ICT industry in Ireland has changed in the last decade? Can you illustrate with any examples?
- Would you consider yourself part of this change? How, for example, has this change affected your working conditions, motivation and your areas of expertise?
- Outside of work, are you able to identify tangible effects that this change has made on aspects of your everyday life?
- Do you think that changes in this industry have shaped or influenced the ways people in Ireland view this country and how outsiders think about contemporary Ireland?
- In your own areas of work, what future changes or work practices would you like to see in place? What components of your work environment would you like to remain intact?
- How do you see the future of the ICT industry in Ireland?

Appendix III: Selection of Interview Transcripts

A – Interview with Rui Albuquerque, Production Supervisor

Hewlett Packard, 9 October 2003 (Brendan Behan Meeting Room, Building 1, 11.00 a.m.)

Present: Rui and Mark

Rui: Okay, my name is Rui Albuquerque, eh, I was born in Lisbon, Portugal in 1959 and I came to Ireland in 1984, in January 1984, so I have been in Ireland now nearly 20 years now. It has been a great experience, eh, throughout this 20 years, eh, when I came to Ireland first, the job situation was very precarious but eh, I was able to get, em, into the company Packard Electric at the time and...eh...

Mark: And what was the nature of that, Rui?

RA: So the nature of the job was **we assembled** the looms for the Opel cars, the electric harnesses and was very labour intensive, em, so going **back 20 years** ago, so the industry in Ireland would be very labour intensive and I suppose in the last few years when **we started to attract the IT companies, and the, eh**, you know, computer industries, you know we have seen a shift more to **machine operating...**

MC: And what was your role at that time in, in Packard **Electric**?

RA: So, I started as an operator and I got then a promotion two years on, eh, as a supervisor and I have been a supervisor since...so

MC: And that is your present role here at HP?

RA: That is my present role in HP, **so I came into HP as a** production supervisor, so, I have gone through a few different companies and I have **noticed that companies** that have labour intensive activities, eh, tend to disappear because of, em, our high **rate of wage compared to**, you know, eastern countries – namely - India, China, Malaysia, you know wherever

MC: Would this also include Eastern Europe? Is that also a factor these days or is it further, farther afield?

RA: I think, em, **from** my experience it is further afield...one of the reasons that my first job closed was, em, you know we **started** a plant in India where **people got 33 pounds a month** which was very low, low wage, you know in Ireland we were on nearly 200 **a week. So that was a big difference.** So we see, I have noticed, Ireland has devoted a lot of effort into educating **our young generation and that is how** we are doing so well, I, this type of industry that we have here at the moment, you know, our level of knowledge and development technology

MC: And how long have you been here at HP?

RA: I am here 3 and a half years

MC: Okay, okay, and do you live locally, Rui?

RA: I live 30 miles away, it is a 40 minute drive away, handy enough...but it is worth it, HP, you know I see it **as one of the leaders, eh, one of the companies that is the leader in, em**, having an open policy, as regards each individual. So each individual is a contributor, eh, and that is one of the, I think, advantage to give the upper hand to HP, em, plus people feel that they are part of the company, they just don't feel they work...

MC: So they build an idea of a family, almost, eh, a community, (R: Yes), so it would almost be, (R: Yes), a community in itself? (R: Yes), And do you travel a lot with your work Rui?

RA: No

MC: In terms of, a lot would be on site here?

RA: Yes, myself personally, I haven't travelled yet but, eh, there is constant travelling 'em you know, in business, in other people, for example, we are setting up a new product so there has been a few people gone to the States for training and getting all the package to bring over then to Ireland

MC: And do a lot of people then come here? Em, on site, would a lot of people, I get the sense that there is a lot of people from all over the world coming to Leixlip, they sort of come to seminars, to get tours of the plant, because I know you are a, one of the global distribution sites

RA: So we get a lot of people, em, and also, eh, because we have very good results, em...in some of the areas that we need to work on, em, so people from other plants, you know, come in to see which way we operate, so you know they can transfer our operation...operation, eh, systems into theirs okay, so it's kind of, we just don't do it here, whatever good we do here, we'll spread (M:sure, okay) and vice versa

MC: Because I know there are a number of sites, locations around the world, I think, and so would you get people from, from where would they come? The people that come that you are obviously sharing information with

RA: So...they have come from, could come from, em, Singapore, eh, Puerto Rico, the States, so that is mainly the three areas that we get visitors from

MC: Okay, em, and yeah, so you have touched upon it absolutely briefly, was, in terms of, well, what way do you think the ICT industry in Ireland has changed in the last decade?

RA: Well I think because, as I said earlier, because there was great investment on peoples education...I think it has attracted, em, a lot of these companies into the country, eh, and because we have...delivered upon the objectives...eh...you know, set by the big international companies, I think that keeps attracting, you know, more and more people and, we don't have, kind of a, a lack of knowledge and of manpower that, em...they can say well that it is probably not attractive because they are exhausting their limitations, you know we keep investing on the education and you know, even within HP, eh, we have a lot of courses, that we facilitate people that are interested on taking i.e. technician course or IMI courses for supervision, so we have constant, constant development as well within the company not just ...national level

MC: But on a very local, on the floor, shall we say, level, and can you talk about, a little bit, the nature of work, earlier you mentioned about 'em, when we weren't recording, was the nature of the management structure, how you think that has changed? You mentioned a little bit about what you thought was very healthy

RA: So, em, going back from the time that I started, eh, there was very strong unionised companies, eh, and that kind of kept a distance between management and workers, I have noticed that within the new companies forming, the old ones closing and the new forming, that there is more of a eh, interaction between management and workers and every persons opinion is valued and taken into consideration for the equation, of course, you know some of the corporation decisions are made at the corporate level but anything...any level can influence, you know, their voice is heard and eh taken into, and we actually reward people that, you know, that come up with ideas no matter what their function within the company

MC: And can I ask, in terms of the type of reward, would you, would it be financial, would it be monetary, would it be, what sort of format would, say, type of rewards take?

RA: So we have a huge, em, amount of different types of, eh, rewards, so, em, we have every, if I am not mistaken, every three months, we have what we call *The Ace Award* so its...its em, its like a certificate of achievement, and we have coffee talks, our Managing Director here, Lionel Normally, presents these awards, you know, with a full audience, you know, these people are appreciated by, there is another rewards, with vouchers or bonuses, and there is also the informal reward of a supervisor or manager and calling that person aside and thanking them, you know which will go a long way as well

MC: Okay so it is tied in with that communication you spoke of earlier

RA: Yes

MC: Yeah, would you consider yourself part of this change in how has this change, for example, affected your work conditions, which I know you have talked a little bit about...and motivation and your areas of expertise...but how would you consider yourself part of this change?

RA: So one of the things that, em, I have noticed...is that, eh, as time, eh, progressed I found myself, em, wanting to learn more about other subjects that...before, you know, I knew what I knew for what I needed to do...these type of companies that we have now in Ireland, you know, encourages you to develop, you know, because there is a constant development of ideas, improvements here, improvements there, quality, you know, costs, whatever...it actually encourages you to study or to develop and you know...that is one of the things...you know, so what I did for it...so I...I am part of that and I encourage other people to do, so I tend to kind of that work directly with me, to develop themselves, eh, I give them the tools...encourage them, facilitate them...you know, time off or whatever

MC: Great, can I ask do you think the changes in this industry have shaped or influenced the way people in Ireland view this country and also how outsiders think about contemporary Ireland? Also considering your 20 years experience involved in this, you would have (R: Yes) witnessed a lot

RA: So, when I came here first, eh, I was saying to you earlier before we start taping, I felt just...I integrated very easily...eh...now the percentage of foreign people in Ireland 20 years ago was not as high as now...eh...I think we have seen in the last 2 to 3 a big influx of foreign, foreign workers and, eh, I think there was a kind of a shock for the nation, you know...so people don't...you know, all of a sudden they have thousands upon thousands coming in so I think people got a bit, you know, afraid or whatever...em...but I have never noticed, you know...em...prejudice or nothing like that, you know, 2 years on being in Ireland, you know, I got a supervisor promotion and you know, I have been a supervisor ever since so me being foreign has never been an issue

MC: And how do you think it has shaped contemporary Ireland, these changes?

RA: Well I think it has...em...helped because, eh, people from different cultures have different views of the world, of life and...eh...even ways of doing things and you know yourself, if you don't diverse, you know, you'll never go much further so, for as little as a contribution of somebody might be, you know, it has an influence and...eh...I think its all good...but in Ireland, you know, here in HP, we encourage diversity so...we wouldn't have that...eh...you know, the mentality that foreigners are, you know, just seen as HP employee

MC: Do you think that ties in with the fact that HP is, you know, is based all around the world so, I suppose, it must reflect on the fact that it is based all around the world, do you think that's part of the reason that it encourages such diversity?

RA: So it could be one of the factors, em, but, eh, I think the basic policies of, of...eh...HP...as they call it...*The Rules of the Garage*, you know is, is to take each individual as they are for their contribution with, for the company independently...what religion, sex, colour or background they have...okay

MC: Okay, yeah, you mentioned *The Rules of the Garage*, is it like a set of principles?

RA: Yes, now don't ask me to name them all off hand (*laughter*) ...eh...but eh...

MC: Can you give me a general idea of, of what those principles? You have mentioned obviously one

RA: Okay, so I tell you one so...*share your tools*...so nothing should be locked, em, *work as a team*, you know, because, you know, these would be very big descriptions, you know, I can't, but these would be something like that, you know...so it is really to say we work as a team and have respect for each other...and that so

MC: In your own area of work, Rui, what future changes or work practices would you like to see in place? And what components of your work environment would you like to remain the same?

RA: Em...so that is a very complex question, so, first of all, I like to work with people, directly with people, so I wouldn't like to change that...so that would be something that I would always like to have...eh...direct contact with people...(long pause)...to change, it is...it is a bit...it is a bit more difficult to answer, what would I change...(another long pause)...em...its em...(pause continues)

MC: Yeah...emm

RA: I can't think of anything now

MC: I suppose even in the 20 years since you first started working here at Hew...Packard or in Packard Electric and then, say, to where you are now, I mean there's obviously been a huge, massive change...in those...practices...so, maybe it ties into sort of, you know, another question would be, sort of, how do you see the future of the ICT industry in Ireland?

RA: Well I think we have...

MC: Maybe that ties in a little bit with that

RA: Alright, so I think we have great potential, eh, to maintain and increase probably the amount of...companies that we have in Ireland, one of the things that would be great for Ireland to actually get would be development...em...development of new products generation, (M: research?), research, generation of new products...eh, so that would actually be...and actually that's one of the DIMO, DIMO which is Ireland here, one of our aspirations is to kind of

MC: DIMO, is that the name of?

RA: DIMO, yeah, its one of the aspirations here, its kind of, to research and development within Ireland as well

MC: Is DIMO an abbreviation? I haven't heard this word before; that is why I am wondering

RA: It's an abbreviation but don't ask me what it is...I can't (laughter)

MC: But is it literally D-M-O...DMO? (DIMO is abbreviation for Dublin Inkjet Manufacturing Operation)

RA: Yes, yes

MC: Okay, okay...and...but is, is one...because I know you have one of the largest cleanrooms in Europe is based here (R: Yeah, yeah) so obviously research and development is a huge ...yeah?

RA: Sorry, it is...I can't think of the D...but it is Ireland Manufacture Operations

MC: But it is that, that that would be key to Ireland's future in terms of the ICT would be development and research, (R: Yeah, yeah), okay...okay...and the possibilities for that do you think, in your own opinion?

RA: Well, we already have a group working, eh, towards that, you know, so, I don't know how much of a stake we can take within HP of that or not...so...

MC: I have a final question for you, actually Rui, was just in terms of obviously coming from Portugal, eh, how does it feel or maybe you have covered that already but just in terms of how things are in Portugal can maybe compared to Ireland? I presume there is also movement to maybe to, obviously to, increase investment in a country like Portugal to build up the economy, I am sure tourism is obviously a huge component of (R: yes, yes) the economy there also but is there also movements in ICT in, in Portugal, for instance? Are you aware of that?

RA: Eh, I am not really aware that, they're really...not that they are not interested but I think because the labour is so cheap in Portugal, I think they still maintain a lot of the labour intensive companies...em...and then as you said the tourist industry is, is a big focus for Portugal...I don't know...em...you know, I don't really, I have contact with Portugal but I don't really kind of, be living there to have that, eh, close knowledge

MC: So you are not aware if there is any, sort of, ICT activity going on in Portugal?

RA: No, no, well not, well there probably is but I would say it's at a very smaller scale comparing to...Ireland...so they still be, kind of, more into the car assembly and you know, things like that

MC: So, a lot of manufacturing?

RA: Yes...yeah

MC: And lastly...why do you think Ireland has been so successful? I know you mentioned, about...

RA: About education?

MC: Education, but are there other reasons why Ireland has been leading to this amount of people moving here?

RA: Well, okay, I don't know if I am right in saying this, (M: in your opinion), but I think, in my opinion because, eh, Ireland has such close ties with the States, and most of the IT companies in Ireland are American...em...so I think that, that plays a part...also they were going to have to be somewhere, so, to be in Europe, you know... Ireland, so Ireland would be, you know, a way for them, for any company to be within Europe because of all of these European...you know, the world trade agreements and all that, so, also I think as far as I know the Corporate Taxes, you know, they've, Ireland gave great concessions to international companies, eh so I think that's...

MC: It's a combination then? Also location in terms of it's, do you think the fact that it is an island is a negative aspect to it?

RA: Could be a deterrent because, you know, transport costs but I think if you have everything else right and...if you have the right frame of mind within management and the team for cost reduction so you know you are going to suffer on transport but if you can work your way that you can reduce on other costs, you know, by making improvements on production, you know, qualities...and all that...I think, you know...it pays to...if you can get your...satisfied customer...it pays, you know, the extra few cents or whatever

MC: Again...another final question was on a personal level, do you see yourself staying in Ireland? I know you have been here 20 years...do you see yourself remaining in Ireland?

RA: Oh...I probably die in Ireland (*laughter*) yeah, no, my daughters are Irish and, you know, I like Ireland, so, I would prefer the Portugese weather, you know, but you can't have everything, you know...but I like it here...Ireland has been good to me...I don't think I would have had the standard of living in Portugal that I have in Ireland...and...I find the people nice too, you know...I feel myself an Irishman...you know, I don't see myself as a foreign person, you know...so

MC: Because there is, and this is another, and feel free if you don't feel like answering it, that is okay...there is, now a huge, dare I say it, trade, of contract labour now coming to Ireland...I know, working in the North and working, and that relationship between Portugal and Ireland is, it's kind of what it always has been, this historical link but in terms of, more recently, labour-wise, that there is...do you have any opinion on that? Or what people think about that? Like there seems to be now in some of the manufacturing plants in Northern Ireland and in the South, not in ICT, but the use of, dare I say it, contract labour from Portugal and I know it is not the well or best paid, (R: Yes, yes), do you have a sense for that in Portugal? Do you?

RA: Well you see Portugal always had a very high percentage of emigration and, that basically because...the main developed areas are the main cities, you know, countrywide, you know, the development was very poor and there was no kind of...em...region...regionalisation of factories to go over to smaller...populated areas, so...that meant that Portugese people would emigrate and they always have...we actually have seen a lot more now coming to Ireland, mainly before would be Spain, France, England, Germany and States, now we see a lot more coming into Ireland...em...(pause)...I don't know...if its...because people now are in the EEC and they have, you know, the EU...and they have the facility of travelling so they can actually, okay Ireland is booming, so lets go to Ireland...you know

MC: As the Irish would have gone in the past...they would have gone to other countries

RA: So before, you know, before Portugal joined the EU, you know, actually before I came to Ireland...you needed to find a job and then you needed a green card and a work permit and all this so there was a lot of restraints...nowadays it is kind of easy for people to travel and, you know, it is human nature, you go where you can get the best but I think the 99% of the people would be emigrating just to get a few bob and return back to Portugal so that wouldn't be my case

MC: And when did the EU, when did Portugal join the EU? Just as a matter of interest, can you recall?

RA: I don't really know the exact date...but it would have been on the early Nineties

MC: Okay

RA: Okay

MC: Thank you very much Rui

RA: You are very welcome

**B – Interview with Una Halligan, Director of the Government and Public Affairs,
Hewlett-Packard, 1 June 2004, (Cafeteria, 11.30 a.m.)
Present: Una and Mark**

Mark Curran: Una, if you don't mind, starting at the beginning, your name and title?

Una Halligan: Starting at the beginning', (laughter), absolutely, my name is Una Halligan and I am the Government and Public Affairs Director for Hewlett-Packard here in Ireland

MC: And can I ask how long you have been working for HP?

UH: Basically, since HP came to Ireland with the Inkjet Manufacturing, just over 8 years ago, 8 and a half years ago now

MC: And before that?

UH: Prior to that I worked with IBEC, the Irish Business Employers Confederation, I was an Executive Negotiator with them, I came to HP, initially, to start off working on their PR and Community Relations and then that grew into PR, Community Relations and Government Affairs and now it's more, I do some PR but mostly Government Affairs, Philanthropy, Community Relations and PR for the manufacturing side

MC: Can I ask you, if you don't mind, to tell me a little more about the Government Affairs side?

UH: Yes, I will...yes so Government Affairs is very much, a lobbying, basically if we look at what the objective is, .if we look at why HP came to Ireland in the first place...we came...low Corporation Tax, highly skilled workforce and, em, stable economy, national pay agreements, making sure you don't have huge inflation, so my job is to really make sure, going forward that HP works in that same kind of a climate...so that I work with IBEC, with the American Chamber of Commerce, with ICT Ireland, groups like that and very directly, also with the Department of Enterprise, Trade and Employment, so basically if we have got issues around whether it's R and D (*Research and Development*) whether it's tax and investments and that kind of stuff, these are the areas that we would lobby on...lobby at Brussels level, I actually report into Brussels and lobby at the local level as well

MC: So also on an EU level as well?

UN: So EU as well...actually a lot of the stuff...in fact...doing business in Ireland is actually relatively...I won't say relatively easy...but...it's...it's a very good environment in which to do business in, it's a very open economy...there is a real sense of 'Government of Can Do', of wanting to make you successful...and obviously we have 4,200 employees here in Ireland at the moment...1,800 in the manufacturing side here (coughs)...and we are growing that investment, (MC: okay), we are growing it on the R and D side...up the value chain...and we are doing some, em, collaborations with Science Foundation Ireland and Universities...that's the area I get involved in...an basically it is to try and make sure that we protect the investment we have and that we grow it and the only way you can do that is making sure that the climate continues to be competitive and Industry/Business - Friendly...so that would take up the vast part of the job I do

MC: And is that difficult? At the moment, there is...I was just reading in the Financial Times around ideas, for instance...even ideas around an EU-wide Corporate Tax level, these sort of things...inspired from France and Germany

UH: It's a big issue...yeah it's an issue...well having said that...it's an issue for *Ireland Inc.* it's not an issue for HP because Ireland are saying we are going to hold this...over our dead bodies...em...certainly this Government would hold it, I would also think Fine Gael would hold it...I would have concerns that Labour, because Pat Rabbitte has said publicly that he thinks we should go that route...I think it would be a big problem and I will tell you why...this Inkjet Manufacturing site we have here in Ireland is one of three worldwide...the other two are in Puerto Rico and Singapore...they have no Corporation Tax...therefore, you are already starting with a handicap...you might think 10% going up to 12 and a half%, the lowest in Europe but it is not the lowest in the World...and they also have very smart people...therefore, if we won't to do business in that kind of a...world economy...Ireland is a small country...you still have the logistics of getting the product from here into the European or Worldwide distribution from an island so therefore you've already got infrastructural costs...you've also...would also have...em...salary costs, wage costs would be higher here that Puerto Rico or Singapore...having said that we do business very well here and we are very successful here...the people and the calibre of people would be extremely high...and we would have no problem continuing to do business here...and as I said grow that business in various ways but obviously if you put handicaps and blockages to that...and that would be the biggest one...Corporation Tax would be a particularly...eh, eh...big one...but as I say...the Department of Enterprise, Trade and Employment and in fairness both Charlie McGreevy (present Minister of Finance) and Mary Harney (present Tanaiste)...would all be in favour...and the Taoiseach...in keeping that low rate of Corporate Tax...so...from that perspective it's pushing an open door, but, of course, when we have all this kind of talk in Europe...our U.S., we are a U.S. company...they see that...so they see the wider picture...and they kinda' say, well, is this a real threat? And I...obviously... we can only lobby...well, we can lobby everywhere...but our main lobbying is in Ireland...going over to Germany to lobby on a Corporation Tax in Ireland, you are not going to get too far...therefore, from that perspective...some of the lobbying is very local, some of it then, we need to raise issues into the European level

MC: Then can I ask, in the context of all that, is the whole, you read Government reports...the whole move towards R and D and this idea of Specialisation to ensure longevity, so here we are in the context of a manufacturing plant...how does that sit? How does that fit?

UH: It fits very well, basically what happened here is basically...a typical example of a manufacturing site anyway, first of all the manufacturing...you'd know a bit about this as you've seen it...the manufacturing site here is very *high-tech*, so we have a huge number of engineers here, what we have done here is...we've sent the *low-end* manufacturing...so the first product -lines that came in here are now down with contract manufacturers in Galway and Waterford and what we did was...we took the *Low-End technology*...that became routine, became just, as I say, Low-End, we took it to contract manufacturers and the High-End IP end, International Property end...comes back in here, (MC: Okay), so we now, now we have got worldwide responsibility for the new product line that is coming out and we are also do a huge amount of product technology, eh, development here so we have now gone from the Low-End up to the High-End and we are going to the next level again and looking at this site as being that...because it is the only European site taking a lot of that R and D work and that technology development is coming on site

MC: On this site as well? (Una: On this site as well) So it co-exists?

UH: Yes it is actually happening

MC: So can I ask as well, in the context of an expansionist Europe...and new accession countries...I am sure you have come across this question

UH: Yeah...it is not an issue for us now, really it isn't...this install base here is huge...the amount of investment in this country here is huge, we're very happy with what where we are doing it at the moment, we also...importantly too and I wouldn't underestimate it...okay you're right, em people in the other, in the East European countries and I think probably more China rather than actually East European...I'd see more threats coming from there, there are certainly are threats but we would see as being, good for...where Ireland was 20 years ago...China maybe even further, now they are closing the gap but the first thing we do have here are the huge advantages...we are English-speaking, we work for an American Multinational Company which is predominantly English-speaking...therefore we would have a '24 hour, 7 day a week, 365' day....you'd often find some of our engineers would pick up the phone to somebody in Singapore about an issue rather than wake up somebody or an operator or technician rather than wake up somebody who is in bed at 4 o'clock when they can get them, so, it's a global company, English-speaking is important, also...we spend a lot of, a lot of, money on developing our people, they are bright people, they are smart people, they're young...technically very qualified workforce...so we actually don't see a threat, I am not saying in 10 years time it won't be threat but I think in 10 years time you'll probably see a very different HP in Ireland

MC: Okay, so it is a process of evolving

UH: Yes it's evolving and keeping ahead, keeping ahead...I think that's true...and that's going to be true of all...of all manufacturing sites and not even manufacturing sites...but of anybody...even service providers...because in a global world...em, with a global economy...you can do all of your support from the other side of the world, it doesn't make any difference

MC: And your R and D in India? And stuff like that?

UH: We do, we have labs in India, we do, em, and you know, they do very well but we're big, we have a lot of products, a lot of areas, inkjet is one small part of it but it happens to be lucky for Ireland the part that is in Ireland and to actually move that, that technology transfer would be huge and we have bedded down so many of the processes here now that we're, would feel ourselves to be very substantial leaders in the inkjet technology world for HP

MC: So part of that local/global landscape isn't it?

UH: Yes it is, it is, that's right

MC: Em, can I ask a more general question, how do you think the nature of your work has changed in the previous decade?

UH: Mine has changed completely, in terms of, when I came here there was nobody doing Government Affairs and partly too because the MD at the time was an American and he didn't understand a lot of the legislation side of stuff, I'd come from IBEC...I had both the EU background and the local legislation, so I started in fact in getting involved in social policy issues...the 'working time director' which was a typical example of something that was coming down the tubes at that time, nobody, cause the HR community didn't have that background...nobody had it so I started the social policy stuff for it and then that grew and then I got very involved...actually, I lead the relationship with the IDA (*Industrial Development Authority*)...so the IDA/Forfas and that area, then I was appointed by Mary Harney on a number of boards in relation to innovation, in relation to education/skills awareness and stuff like that, so it actually evolved very much from a PR where I kinda' took a watching brief to very little PR now, just literally for the site here, I have always done the Community Relations and the Philanthropy, and that is a big part of the job that I enjoy very much because it puts a lot of money into Philanthropy

MC: Is that then the local? The Philanthropy, can you talk a little about the Philanthropy?

UH: It's local and it's, it's local, Leixlip and Celbridge are very lucky, they've got Intel here before us and ourselves, there isn't a child, I'd say, in this community that doesn't have PC...therefore we do, we do, we've just recently sponsored two big projects in the local community, one is the Leixlip Parish Centre and the other one is up in Captain's Hill, a Parish Centre up there...that both Intel and I have given funding to, HP have given funding to but the biggest thing that we have done actually...or to me the most strategically biggest, maybe not in money terms, but certainly strategically the best thing that we have done is the Digital Community Centres in the Inner City in Dublin, so, about 4 years ago, got involved again through other areas that I was involved in, with the *Digital Hub* in around the Media Labs...but also HP are also huge partners of media, of MIT (*Massachusetts Institute of Technology*) in Boston and Media Lab here, Media Lab Europe is part of that, so we are also partners of that and we gave them a big grant, donation of equipment when they came here but around the time that they came here, 4 or 5, maybe 6 years ago now, would have started, 5 years ago anyway, I was involved literally with just looking at some schools in that area under the Dublin Inner City Schools Computerisation Project...called DISC with the Dublin Institute of Technology (DIT) and Dr. Tommy Cooke who looks at their Outreach Programmes, we get started by putting some equipment into some Inner City schools and one of the things I was looking at, was the whole...redevelopment of the Digital Hub and the whole idea that here we are going to have a really high-tech community, 9 acres that the Government was going to invest in and I said why don't we try and target this area so the people in this area, the indigenous population are the ones getting the jobs, the IT jobs, not sweeping the floors and making the sandwiches, these guys and girls will actually get real jobs, so we started doing a lot of work in the schools and through that we actually decided to do Digital Community Centres in their area...so we put the first 3 as a pilot into Fatima Mansions, St. Theresa's Gardens and Bridgeford Street flats, we actually got Dublin County Council to give us apartments cleaned out, we put the equipment in, we worked with the DIT to put the, the trainers in, train the trainers, Microsoft came on board, Eircom came on board...the Dublin Inner City Partnership came on board...anyway to cut a long story short, we now have 11 of them up and running, HP have done 11 of them, we have provided them with a full-time Project Manager to actually go out and get the people to come in and do it, we have I think 13 graduates to date who are working, so the idea of having jobs paid off and we're looking at how we can, probably rather than expand it right now, how we can..I think my, my...and I am actually going to San Francisco at the end of this month (June 2004) to talk to HP about this...because we have these projects around the world but this is a particular one, this one, just kind of grew really and it has been very, very successful so they have asked me to present on it next week but, em, so my, my actual thoughts on it are, rather than expand on it, we should dig down with it, we should try to get, get more value into it, we should attract more people within those areas...upskill within each of those areas so now that the people that have gone off and done the Microsoft Academy certification, they, that is accepted as a module in the DIT if they want to go to college and the other one that I want to look at is the schools, how many kids can get into third level? So that's the kind of, if we use those 11 communities, that would be the way forward, that would be a huge part of the work that we have done in the last few years

MC: Okay, okay...it seems a real outcome

UH: Yes it is, it is

MC: Em...well this may seem self-evident but I will ask it anyway but do you see yourself as part of this change? I presume obviously you would

UH: Yes I would, I would consider myself a driver of the change really...because I'm fairly good at, at seeing things that need to be done and getting up and doing them, I don't like doing, once you get something and you do it and actually a lot of it comes about from projects that we started with and networking with people where you get an idea and one, another one we did was the Back To Work Scheme for the long-term unemployed...and we kind of took that in a number of various areas and brought that to a next level too, so, I think it's...yeah, I would, I would see myself as somebody driving

MC: And where do you see, I mean, Ireland...in this? I mean how do you think Ireland is perceived abroad, for instance, you go to America a lot?

UH: Oh...very dynamic, in fact, I had a colleague of mine from Nabia, who does Government Affairs in Israel and she came here to shadow me for two days because she is just literally new to the job and she, looking at the model we have here, and even when she arrived in Dublin Airport, she said...

... 'I can't believe this city, this city is alive, it's so buzz, the atmosphere' and I had her staying just on the Stephen's Green and she, she, just couldn't believe it, now I suppose when you know, when you are coming from Israel, it's not quite the same...apples for oranges but I mean I think there is a very strong perception and not just perception, perception really is reality...that this is a dynamic country, a very good country to do business in, the average age of our employees is 27, very young, very dynamic, want to make things happen, want to, want to leave their mark, want to make a difference, so that makes a huge difference to have a...an employee base like that

MC: And so obviously, again may be self-evident but work practices have changed, the work environment, the material...sort of environment that people work in has changed

UH: Emm...yes and no, I'd say HP has always had a very, very laid back approach to managing people, very much empowering...and it has been managed by showing and talking, we're not big into legislation and nobody clocks in and stuff like that, so does work practices to a large extent haven't, I suppose what has changed and in my case I'd see it more than most is...em, because when you come here as a *start-up company*, you kind of, everybody is making the job, you literally...you literally...make up your, the job as you go along, no two days are the same and you just kind of go with the flow and something happens and suddenly you are going in this direction...that doesn't work and you go in that direction...that has...that pace has slipped down which is better, therefore you're probably doing, whereas you might be doing loads of things and some of them pay off now you are probably focusing on the things that really do work and I know that would be very true of the manufacturing site as well, whereas you would be starting off and trying to get it up and running...ship the product...for god's sake, get the product out, you know, it has to be, obviously quality right, everything had to be right but now we can up that another level so therefore your work practices would change because of that...but I think it is more *bedding down* rather than, I don't think the culture has changed, no I wouldn't say the culture has changed

MC: Well I was going to say, you will read literature that will use terms like *post-industrial landscape* and other ideas including that Ireland, well, the South of Ireland never experienced the Industrial Revolution (UH: yeah, no we didn't, no) so this is such a, we are now officially *the most globalised economy in the world*, it is...

UH: Yes but as well as that...when that happens, the people and because...their age group is...actually shows this to a large extent as well, it's synonymous with it...because they didn't come with baggage, they didn't come with *trade union* background...I'm not anti-union...but they didn't come with *this is the way it's always been done*...they came with *I've never done this before...but couldn't we do it this way*...you know and they are kind of looking for new ways of doing it and that's why I say by empowering...if you have too many rules and regulations and you have a lot of people, people will follow the rules and regulations because...quite frankly, I've always said...you work to your manager, your manager is your boss, if your manager manages you well, that's it, it doesn't matter what HP says, if your boss is actually going to be, do it my way, that is your experience of HP but if your manager is trained and we spend a lot of time training managers to make sure that they get the best out of people, by allowing them to be flexible, adaptable and, eh, resourceful, so I think that, that is the difference but I think it would probably, it probably is, and I think probably HP came to Ireland at a very good time, or even a few years before that because I'd say Intel would tell you the same thing...and they would have been here a few years earlier, came at a very good time when you had very young graduates who didn't have any bad habits and em, were able to actually bring their enthusiasm, their flexibility and really *devour* it, I kind of, you know, there was a *wow factor* for them too

MC: And can I ask, in the context as Intel is just up the road, you know was that by design? As you are struck immediately by these two large facilities?

UH: I suppose not really, well yes, by the design only in that HP wanted to be near Dublin, we had to be near land-ports and sea-ports because we ship out product, we ship in raw material...we fly in, we ship in all that good stuff, therefore we had to be near the ports, we also decided to be near Dublin as opposed to any other port like Limerick or, or Galway or whatever, logistically, we would have to be on the East coast...I suppose anyway for, because all of our product, most of our product goes to Amsterdam and that's our distribution centre for the products here, therefore the East coast would have made sense but it was also important being close to Dublin because about a third, slightly less than a third, about 28/30% of our employees are back in continuous education, therefore going back to university, going back to colleges, again if you are down in Ballydehob, that's not there, as well as that if you have a young population, and a lot of our other businesses and some of our people here too, apart from being young, they would be a multinational workforce...

...they wouldn't all be even EU, they want to live in a capital city, they want to go down Temple Bar, they want to be on Grafton Street, they don't want to be in Ballydehob so you know, nothing against Ballydehob (*laughter*) but quite frankly if you are trying to attract the top graduates, and as I say, a lot of them doing Masters, a lot of them back in college, a lot of them doing degree programmes...they want to be where the action is and that is Dublin

MC: And...okay...the future? Or what do you think?

UH: No, I have no problem discussing the future with you, I'd say you'll see a very different future for us, of course, I can only, it's all, obviously, manufacturing we are talking about and not HP in general as that's what your project is about

MC: But even with HP in Ireland, that sort of thing?

UH: Yeah, I'd see very definitely...em...digging, digging

MC: As you must get an overview? As someone in your position

UH: Yes I do have a very good overview, I see very definitely HP, getting more and more embedded, getting more and more involved as I say we are working with Science Foundation Ireland, we have a number of capability grants, R and D grants, from the IDA that we have, for the last couple, number of years, we're certainly showing HP, em, globally, that we are capable of doing it, ah, we are very lucky with our management and with Lionel here, our GM, who is very anxious to get more and more and more and more...fights for, and we can show that we can do it so I would be very optimistic that HP will be very successful here...in the long-term

MC: But in the context of, say, competition, in the context of...say...the fluctuation with the dollar, currencies, talking with people and savings they have to make and these can be wiped out with a single currency fluctuation?

UH: It goes up and down if you think about it...over the ten years, this is the first time that we have the, eh, in fact the Euro, it's the first time the Euro has been high, eh, so we really did very well, so we just look on that and you can't (MC: You look at the long-term) that goes up and down, that goes up and down

MC: Listen Una, thank you very much, that was very useful

C – Interview with Susan Cronin, Logistics Co-ordinator, Warehouse

Hewlett-Packard, 23 October 2003 (Samuel Beckett Meeting Room, Building 1, 15.30 p.m.)

Present: Susan and Mark

Mark: Can I ask you what your name is?

Susan: It's Susan Cronin

MC: And where were you born?

SC: The Rotunda Hospital in Dublin

MC: Okay...and do you still live in Dublin?

SC: Yes, for now

MC: And can I ask you Susan, eh, what your duties, responsibilities, eh, in your job at HP are?

SC: My duties are to export

MC: (interrupts)...sorry, maybe your title actually first, I am just thinking

SC: It's Logistics Co-ordinator, Traffic Co-ordinator; I would be responsible for shipping all our palettes of *FGI*

MC: *FGI*?

SC: 'Finished Goods Inventory'

MC: Okay, okay...and when you say shipped, where are they shipped?

SC: We would, we ship them to four destinations...one in Singapore, one in the U.S. and two in Europe

MC: Okay...great...and what is your previous work experience, where else...eh...have you worked?

SC: I have worked here for 7 years and while here (*coughs*) I am in my third job, role, so I am changing each time, gradually going where I want to go, prior to Hewlett-Packard, I was teaching sailing, canoeing and rock-climbing and all that kind of stuff

MC: Okay, that is quite a change?

SC: Yes indeed

MC: How come?

SC: Well I did my course for two years in college, as...to get instructorship on all of these outdoor activities and I worked for four years and then I just thought...the weather is not great, the money wasn't too good either and it was very seasonal so I just thought, hey, I need to go and get myself *a real job*, em, so I started off...and when I came to Hewlett-Packard and I started off as an operator on the production floor

MC: And, so what were the motivations, you'd say, for coming to HP? What were the reasons?

SC: Well, I had heard a lot about, like, Intel who had been in Ireland for so many years before Hewlett-Packard...and, it was just...I just thought it was a big industry as...permanent...stable job...it was good feedback I'd been hearing. I had knew...I had known a couple people at the time who had been worked here and, I just thought to make the change from what I was doing...I thought, yeah, I'll come into a big place where I know it's...it isn't going anywhere in the near future

MC: Did you know anyone else working here? Prior to coming to work in HP?

SC: I knew one person, really and that was it...so, eh...I just applied and that and...here we are

MC: Okay...em, and what way do you think the ICT industry has changed in the last decade? Can you illustrate with any examples? If you can but how do you think it has changed?

SC: (*softly*) What's ICT?

MC: 'Information and Communications Technology'

SC: Okay, okay, right, well, I don't really know, I just know that in here, what we do is we're making inkjet cartridges and when I started here 7 years ago we were making a product, one type and now 7 years on, that product is no longer...it's obsolete, people don't want to buy it anymore, we no longer make it and we've gone on to making 15 other different products that are now in demand and gradually you can see that they're, falling down by the wayside and every single month or every six months we are bringing in a new product and...it's constantly, constantly changing...yeah

MC: So there has been a huge, it's a constant mode of change and development...and re-invention, as it were?

SC: Yeah, I think Hewlett-Packard...I think they have a huge team out there working on what are we going to do next, they don't even know what it is, but they know that the inkjet business is not going to be around forever...people are going to be wanting new, smaller, better things, quicker, brighter more colourful...

...you know and they know it is not going to be around forever and I think they put a lot of work and effort and time and money...into looking out into the future

MC: That is quite interesting so, and it ties in with this, how do you see this as having changed Ireland? Or how we view Ireland? The role of the IT industry, how do you think that has changed Ireland? In your opinion

SC: It's offering so many different jobs and...higher...more, like, I...kind of, wouldn't have a very professional job in here but I can see that they're looking for, they'd often have posted up on the board and they're willing to give somebody a hundred and...no...one thousand five hundred pounds if they know somebody who is like, eh...really technical person in...I don't know what the job titles are but they are pretty high qualified people in the various IT software industries...so there's people out there...companies battling to get these guys just out of college, you know...they want them to work here, they want them to work in Intel and they are willing to pay good money to get these people, so there's a huge amount of jobs being created

MC: And so how do you think that has changed Ireland? How do you, what ways do you think it has changed Ireland? The fact, these companies operate in Ireland, like HP?

SC: I think people...see Ireland as a place, as we've all noticed, every time you get on a bus or everytime you walk down the street that there is a huge number of different nationalities where as 10, 15, 20 years ago if you seen one coloured person, it was...oh...you know, it was...where as today, it's just different and Ireland is attracting people like the UK would have in the 80's, if people want to come and work here...you know

MC: Do you think it has been beneficial to Ireland? Do you think it's been a, how do you think it has changed, I suppose?

SC: Well I'm a bit biased at the moment because I'm buying a house and I'm not impressed with the prices (*laughs*) yes it's definitely beneficial but on the other hand it's, things are just going up and up and up and...yeah...

MC: And how do you think the role of work has changed in Ireland? How do you think work has changed in Ireland? The workplace has changed in Ireland, say in the last 15 years?

SC: When I was growing up, my mother or none of my mother's friends would have worked...it wasn't very common for women to go out and work whereas, I think, nowadays there's enough jobs out there and women are in the workplace, equally...as men...probably got better jobs than men, whereas 10 years ago that wouldn't have been the case, so...am I answering that question?

MC: Yes, absolutely...I was going to ask you about that, what you thought of the role of women, say even in this environment?

SC: I think Hewlett-Packard, you only have to look at the, main CEO (*then Carly Fiorino*) and that's a lady, you know, and she's been listed as one, up in the top ten of the US business people in, actually in the world, so, she's a lady, you know and, that's great for the company and I think underneath Carol, she's a woman also...so the top two people in this company are women and, I don't think there is any prejudice at all, if I, if you were going for an interview against a guy, they totally, it's on your ability and...I think definitely in HP

MC: In terms of...would you have any opinion on how the role of work has changed in Ireland? Even say in that time, even from your mum's time or growing up...how industry has changed in Ireland? I mean what do you think of these big changes that have happened in the last 8-9 years? In your opinion

SC: What do I think of the changes that have happened?

MC: This big change in the economy, the culture

SC: I don't know, I'm sorry

MC: That's fine, absolutely okay, you have touched on some of this already, which leads into this, how do you see the future of the IT industry in Ireland?

SC: Emm...I can see it constantly changing, but as a plant being stable 'cause there's always goin' be something else to come in and take over, take it's place...aah...for production lines out there, they, they seem to always need less and less people to operate them there...every different production line we bring in, it has more capabilities within itself, whereas the first one, we probably needed 12 and now we only need 6 people to run it...so technology is constantly changing and machines and computers are doing more work all of the time and all the different software packages are constantly changing and you've got more tools to use on a PC so...life, work is being made a hell of a lot easier...I think

MC: Okay, but that obviously means and ties in with, in terms of your own learning, is that an ongoing process?

SC: Oh, constantly...oh, absolutely, we work, we use this software package, it's called SAP, and that's what we control all our inventories and it's linked production to accounts to finance and all that good stuff...and it's just so in-depth...I...I use a tiny section, other departments use another small section and the whole tool is just phenomenally big...and...eh, constantly trying to learn more about it the whole time, you know, and you still only know a tiny, little proportion of it...and there's always new packages, like, even the *Microsoft Windows*, for example, it's constantly upgraded...(M: so you're constantly trained in those upgrades...)...yeah, we have courses in here and you can go on and learn, what, you know, new stuff that's coming out and stuff like that...so they have courses and anyone can go along and just put your name down, which is great, you know, it means we can all keep ourselves up to date with any changes that are coming about, and packages that we would have used, maybe *pencil and paper* 5 years ago...it's all gone now and it's...*pencil and paper* and *passed-down, handovers*, they're all gone and everything is just, it's all logged on the PC...if it's not on the PC, then it didn't happen, you know

MC: Okay, okay, Susan, yeah maybe, in just regards to that change, if I was to ask it this way, how do you think working in Ireland has changed since your mum and dad's generation to your generation?

SC: You want me to say something and I'm just not getting it (*laughter*)

MC: No (*laughing*) I mean, do you think there are more jobs? Not having to go away, those sort of things

SC: There's...there's a lot more jobs, I think...jobs in factories were very...manual, you know...to be a factory worker was a very manual job and the IT, what was a computer? I know, I...the first, I heard of a computer was in secondary school, you know...people, offices and schools didn't have PC's...in primary school, wouldn't never had PC's where as nowadays, every child in the country nearly has a PC and all homes have one and...you know, children at the age of 4 when they go into school use PC's...which is something that didn't happen in my day, you know

MC: And the last thing, and you've touched on already, that changing role for women, how do you think it has changed in Ireland? The fact that you are in a global company, in many ways, this is one of it's global sites...so in terms of that, how do you think it has changed for women or has it?

SC: Yeah, yeah...well I think Hewlett-Packard as a company, encourages women...they, they like to have a certain percentage of women as engineers, as technicians...so just as an example, we have, my manager would have been an ex-engineer so she's going down to colleges throughout the country and she's...selling Hewlett-Packard as a place to work to all these students that are just going to graduate, you know, and they're sending out a woman to that so that in itself is saying something for the women in the workplace, you know

MC: Okay, thank you very much

**D – Interview with Ger Walsh, Health and Safety Supervisor, Warehouse
Hewlett Packard, 9 October 2003 (Beckett Meeting Room, Building 1, 14.45 p.m.)
Present: Ger, Mark and Representative of the Government and Public Affairs Department**

Ger: My name is Ger Walsh and I was born in Dublin...my main duties in Hewlett-Packard are within the Logistics Department, I work for *Process Control and Materials Admin* mainly what that involves is...the actual operation itself...controlling the processes so that the Warehouse is working to the correct *process flow*, it involves writing them, auditing them...em any issues coming up through into the departments...

...it would be me going in, to have a look at those and see if we can solve them...*also* the other aspect of my job is...*Health and Safety*...from a *Health and Safety* point of view I am responsible for *Supply Chain*, so not only logistic but all parts of *Supply Chain* which would be...purchasing, planning...Tees (*note*: Uncertain of spelling as I did not clarify)...which is documentation, *Materials Engineering* and Logistics...so it's for all of *Supply Chain*...my main role there is...as, eh, a contact point within *Supply Chain* for *Health and Safety*...again carrying out safety audits, risk assessments...making sure any safety concerns are *closed out*...we have *contractors based, running the warehouse*, so it is making sure that *they* are following the correct safety practices and that they are closing down any safety concerns raised...it's carrying out safety audits with the H and S Department here...they're my main functions, there are obviously other bits and pieces that come along with it...so I'm involved in...quite a few projects, so, the project work seems to be quite heavy at Hewlett-Packard

Mark: And how long have you been working at Hewlett-Packard?

GW: I have worked in Hewlett-Packard for 4 years in total...3 years of that was as a *contractor*, so, as the lads would say, I've sort of *gone over to the Dark Side*...now I've, I've the experience of the contractors but now I'm working for Hewlett-Packard, basically making sure the contractors are carrying out their work so sort of like *Poacher turned Gamekeeper*...type of position

MC: So there's both full-time and contract work happening at the same time

GW: There are full-time HP employees...within the Warehouse, there's probably about 50 or so contract people and maybe...very small...maybe 12 to 15 HP employees overseeing that contract as such...em...*previous work*...eh...previous work experience...this is the first time I worked in an IT-based company, previous to that...my first job role was...office admin within a sales office...original job, office admin...straight from school...thought that was the *bees knees*...thought that was the best job...one of the original yuppies...eh, thought this was the job for life...circumstances changed...lead to redundancy and I took a stop-gap job within warehousing...it was...cold storage

MC: Can I ask with the job? Was that down to the economic change or?

GW: It was...it was...it was down to the particular company and it was down to the economic changes...I was working as Sales Support so we had Reps out on the road and I was supporting them internally...they had invested a lot of money in R and D...some worked out, some didn't so they had to cut back on finances so they felt the most expendable part was Sales Support...because Reps could cover their own work internally...so it was through the company and financial situation more than anything else

MC: So this was your first job?

GW: First job, straight out of school and straight into this job within a couple of months...first job ever

MC: And did you know anybody working here at HP or how did that come about?

GW: The connection to this was, my first job was, oh, I don't know, it's...what am I now? 34 now so, 17 years ago, so that was 4 years, at 21, I was made redundant out of there and started working in the warehouse industry, first time ever in the warehouse industry, stop-gap job within the cold-storage industry, hard environment...hard environment

MC: In the physical-manual way?

GW: Physically and pressure-wise, it's...cold-storage or any sort of storage is pure distribution, so you get it in and get it out as quick as you can...you can be put under a lot of pressure, we had occasions where we'd be loading...*handballing*...now I was a *checker* within the organisation...we'd have lads *handballing*

MC: 'Handballing'? Can you explain?

GW: Manually loading trailers rather than palletised...they were manually loaded, boxes of frozen beef, averaging 25 kilos a box, we would have occasion were we'd be loading frozen meat for a container and you'd have 32 containers go out in a day...so there was a lot of pressure on the job 'cause you've got timelines to catch...through that...that position again was unfortunately another redundancy situation and that was purely em...economical situation

MC: Was that in the Dublin area?

GW: It was in the Dublin area, yet they had other companies based in Waterford and they were a large UK transport company that ran this, through the down slump in the beef market with the beef tribunal which caused a lot of problems with the finances, they decided to close down the Dublin operation and just keep the Warren Road (Waterford) open, so it was...it was a purely environmental, economic situation there, but through my working there...made some contacts in the cold storage industry and I moved throughout a few other cold storage spaces through that...the connection to *here*...is, my previous job to working here was in a *meat-processing plant*, I got to know one of the lads in the warehouse who was working with me at the time who had some friends working with the contractors that were working in Hewlett-Packard, he went for a job here, he got the job, meat-processing plant is again a completely different environment, again a lot of pressure on you, really the emphasis is not on safety but get the product out, I've had a couple of occasions where there have been near misses from a safety point of view and I was getting a bit fed up of it so, the chap, who was working here and asked him if there were any jobs going? So he got me an application form and I'm here ever since

MC: Okay

GW: So that was almost 4 years ago...as I say 3 years of my time here was spent as a contractor and 1 year now more or less as a HP employee

MC: Okay, yeah how do you think the IT industry has changed Ireland? You have got a lot of experience in sort of, different areas so obviously you'd have a sense of the economic climate in Ireland

GW: It has, obviously, brought a huge amount of work, first of all, but I think it's also brought a lot of *American-style thinking*, in particular, in regards to business, em, and you only see that when you are actually working in the industry, em, *the Americanisms*, the terminology that they use for business and it's not...*they don't consider anything just a job, it's a career*...so they encourage you to go forward and develop yourself, so, it's the first place I've discovered that sort of thing, now, as I say, in other warehouses I worked in, you would have to push for yourself to go do these things whereas it's the opposite way around, they encourage *you* to develop yourself, so I think in that way it's given the Irish, an employer market a very, very well-trained and capable and that's why you still see a lot of companies still coming here and they say because they are the best trained people in the world, I think the biggest way it has improved it, is for the better, now, unfortunately, I think it is going through a slump at the moment so, obviously the big bubble had to burst at some time, but I think, most of the big companies won't suffer...too greatly

MC: And how do you see yourself in this change?

GW: I think the biggest thing it has done for me is that it has given me an opportunity to, develop myself because I have previous experiences of other set-ups, I've seen how *not* to do things, em, again just relating to what I am doing now with the Health and Safety, one of the main reasons why I got the Health and Safety position was because of my *drive* to make sure everything is safe...because from previous experience in other warehouses, as I say, where safety is *not* an issue, I have had instances where racking has collapsed around me and could have killed me and, you come in here and they say...*well if it's not safe then you don't do it*...and you sort of say to yourself, *that doesn't sound right*, although it is right, it doesn't sound right and through that I developed in, more safety conscious and I, pushed safety within the warehouse so I think I am part of the change with regards to...my previous experience

MC: So it's not something that has gone on around you

GW: I think, no, what has happened here, this, eh, this type of company, American company, HP company, have taken my experiences and allowed me to develop based on, they've listened to what experience I've had and taken that into account when any changes have come in so, I think what they do is...

...they encourage you to develop yourself...I think, they nurture you, if you know what I mean, they will actually listen to you whereas if you were in another company, other companies I've worked in and you say *I don't think that should happen* they say *yeah, has to get on the truck I don't care*...whereas here they actually take it into account and that sort of thing

MC: Yeah, okay, do you think the changes have shaped or influenced the way people in Ireland view this country and how outsiders think about contemporary Ireland?

GW: I think the traditional Irish person, obviously, likes the beer, the bit of craic, that's never going to change, I think it's true, we work hard, we play hard and I think, eh any Irish person will put 100% into whatever job they doing but they'll also put 100% into enjoying themselves so I don't think, I don't think there's been, I think we've always been the...I suppose...em...the sort of words you'd really put on it, as regards Europe, anything like that...we've always been the little person...not referring to *Leprechauns* but we've always been the smaller nation...*ah, yeah they're alright, they're over there*...but I think, through, not only industry, through sport, through everything...the world has suddenly realised it's a small country but...jaysus they've some amount of people there that they can offer such an amount of, and I think it's proven by the amount of American companies...now I know...I mean, obviously, the likes of the IDA have a huge input into that, I mean taxation grants and all of that, grand but it's the people, ultimately, that will keep the employers here, so I don't know, I think, as I say, the, eh, the eh, the impression outside of Ireland will always be *great craic, but they're some workers as well*

MC: So you think in that sort of sense, the role of Ireland has changed both in Europe and on a global scale

GW: I think we're more prominent, I think people have to stood up and listened now and have realised that, eh, we do have something to say, em, we're not behind the door in saying it either and I think now it's got to a stage where, because of the success of the market, the employment market, I think, it's now made us more prominent in...in Europe in particular

MC: And in your own areas of work, Ger, what do you see as changes in the future, in your work practices? Is there anything that you see that might change in the way we work or?

GW: I don't know...that's a tough one to answer, I think, I think there will always be changes, of course and I think one of the biggest drivers, in this economy, is going to be *cost-driven*...there is going to be cost-driven but one of the other things aside that, is the likes of safety legislation which will prevent costs being a major factor but I think you're going to see a lot more changes to...*looking at how much it's actually going to cost to do this rather than just do it*...and I think really, and you can see that in a lot of places that, I mean some of the strategies that we have would be cost reduction for the year, and they go look at this and see what they can do, I think it is, a lot of things are going to be cost-driven, we are an expensive country to live in, there are, the services are expensive, so I think that is going to be one of the biggest changes and things will always change, things are always going of change...whether they change drastically or not? I don't know...I don't know

MC: And yeah, how do you see the future of the IT industry in Ireland?

GW: I think it has gone through a rough time over the past few years, I think there have been a lot of...very highly publicised changes particularly with big American companies, with IT companies, I think though, it's mainly hit service companies rather than manufacturing companies, we...I mean, obviously, manufacturers have been hit fairly bad as well but I think it's going to slow down, I think it's going to level off, there had to have been a burst of demand out there, saturate the market, it's going end up drying up and it will just level off...I think it's going to turn a corner but it won't get much bigger, I think it's just going to sort of stabilise now and more or less stay as it is now and I don't think there's going to be any huge drops anymore

MC: And how, what do you think would be the importance of research now at this stage in...in, say, Irish economic development?

GW: I think, in as regards the actual economy itself now, yer man...employment and all that sort of thing...I think, at this stage now, the government have had a good run the past 6 - 7 years because it has been really up there and it's been great...employment and everything...and they let it ride...they didn't put anything into the thoughts of infrastructure, into thoughts of taxation...

...I think, they're going to struggle now and I think, unfortunately, what's going to happen is...this government is going to go out and whoever comes in is going to have a hard time to encourage people to come in here as regards companies, em...I think because it has gone so well and the bubble has now, more or less, burst...it has to be looked at...you can't just stick a production plant in the middle of nowhere...again it would come back to cost...and I think it is going to have to be looked at, particularly, as I say with infrastructure, communications infrastructure, everything around that and really, it's probably now you see a lot of development going on roads...you've got hours of traffic jams and it's probably...*that bit too late*...it's going to really put pressure on I think...on the ordinary taxpayer and the government to get new people in here

MC: And just as I suppose as a final question, how do you think working has changed in Ireland since, say, your Mum and your Dads generation to say now? What do you think has been the change?

GW: The biggest change, I would say from my own experience, would be your family life has become as important, if not more important, as work, em, my Dad worked *hard* and he was away probably 2 -3 days a week, it's, I think family life is, so the hours of work has changed and the emphasis is on, if you've got an issue at home...you sort that out first, it's more important than sitting in here so I think...I suppose social aspects of working have changed considerably in, compared to my fathers and mothers time, I would say that is probably the biggest change and it really is geared around quality of life and that would be the biggest change I would reckon I've seen

MC: Okay, alright, thanks a lot Ger, appreciate it

E – Interview with Lionel Alexander, Vice-President and General Manager of HP Ireland

Hewlett-Packard, Friday, 21 January 2005, (Meeting Room, Building 7, 15.00 p.m.)

Present: Lionel, Una Halligan (Director, Government and Public Affairs, HP Ireland) and Mark

Lionel: Got it? It's working now? (*had problems with the mini-disc recording device*)

Mark: Yeah we're working now I think, just test, that's grand, can I start by asking you your full name and title here?

LA: Okay, my name is Lionel Alexander; I'm the Vice-President and General Manager for HP Ireland Manufacturing

MC: Okay, and do you mind if I ask you how you came to this position, in terms of, previous work experience and how you've ended up in Leixlip (Una: In Ireland) County Kildare?

LA: Okay well it's a very...well I am actually 24 years with the company, first job, started off as an engineer but I think HP's, eh, opportunities being that it is such a big global company, I averaged a job in HP for four years and I moved...and I picked my career in paths based on the exposure I wanted and (coughs) I think I joined the inkjet part of the business back in '94

MC: Okay and was this in?

LA: Singapore, it was in Singapore

MC: So you started working for Hewlett-Packard in Singapore?

LA: I worked in Singapore...I started my job in Singapore then I spent, like, very short stints, like 6 months to a year in the U.S. then 6 months in Japan, a few places, in different job categories...and this was my first overseas posting which is long-term...so I joined the business in '94 and then soon after that they decided they wanted to start up another site and we were looking in Europe so I was partly involved in selecting the first team of managers we were interviewing in Ireland and then started transferring some of the activities over here...and then in 2000, after my, eh, predecessor from the U.S. decided to go back to the U.S. they asked me If I'd be interested to come here...so it's been great

M: Okay and can I ask you, in terms of when you were looking in Europe...yeah, why Ireland?

LA: (*Laughs*) couple of reasons, (U: Some personal), some personal, my wife is Irish...so that's one reason

MC: So HP came here on account of, (U: (*Laughing*) absolutely)

LA: Yes...no (*coughs*) but the reason they came to Ireland was a couple of things...I think when we looked into Europe...we looked at quite a few countries...and em...Ireland was short-listed along with maybe, I think, two other countries...and when they went through...eh, you know, the various selection criteria's...very clear selection criteria which we went through to pick the site...em...definitely number one would have been...you know, the location is important...you know because we need the...the location, in terms of the infrastructure that you have...so number one I think Ireland came out for one thing the strong availability of talent...of people, I think, eh...it was starting to buzz with the growth of the *Celtic Tiger* and you started to have, not only have a strong rich available competency of talent but it also started to attract Irish people who left Ireland and were starting to come back...so huge talent...and for our kind of a business...technical competency is a key trial so...availability of highly educated technically competent folks is very, very important...second thing I think was also the, eh...the extremely attractive tax regime...most multinationals, I mean, wouldn't go anywhere unless it makes great financial reason so...the tax regime was, eh...the third thing, I think was, the relationships with the Government...it's very important, I think most multinationals, most companies, most businesses, you know, you can never predict where your business model goes...every year or every three years, four years so, so you need to be in an environment that is flexible enough that you can change your business model so can continue to be successful...in Ireland that is very feasible primarily because the government partnered very well with the multinationals

MC: So they're quite flexible?

LA: Very flexible, in support and understanding the challenges, some countries when you go, I think, they don't quite understand the challenges of...some of the big companies

MC: Could you, would you mind embellishing on some of that? When you say the challenges?

LA: I'll give you an example, I think (*coughs*) em, you could talk about, HP, fundamentally, started of as a 'test and measurement company', but today a huge part of our business is in the consumer world...and that's the most dynamic world to be because each and every one of us here in this room are consumers and you know your selection criteria, right...you want everything for free more or less, you don't want to pay for technology but yet...eh, you know...the customer perspective of, em, driving the business is very critical...so as customers start to go to ease of use...em, simplicity...you know, the business model changes...someone said this very well before and that is...if you go back to the early days right...eh, when man came to earth, for the first time, right...people could not understand anything, believe...believe a lot in god, god was the answer to everything right...in a way the way business has transformed today, the average consumer are looking for gods as they want things to be simple right...they don't understand, things are very complex...I mean, you look at a PDA connected to your, to your, you know...PC to your TV to your mobile...it's just too complicated, things have gotta' be simple...so when things gotta' be simple, the business gotta' be flexible...so today our business model looks great...next year...it'll change

MC: So in many ways, the technology that, sort of, lead to this globalisation force is also impacting on those globalising forces?

LA: Absolutely, it'll change, so the customer profile demands might change in a year and so we must change our business model...(M: 'okay')...now if you are in a country that is very rigid, eh, in that...it makes it very difficult to be flexible...and you lose your advantage, so that was very important

MC: So how does that impact, how you operate?

LA: So, eh...you know, I mean this site is a good story to talk about, eh, when, when most companies came to Ireland at the time of the Celtic Tiger boom...it was because you needed a presence in Europe, very important...some of them were highly manu...highly manufacturing in terms of organisation like we were...but back four or five years ago, it was also very clear that it was a matter of time before the Euro would strengthen against the Dollar...it was not if but...when, right...now we are in that phase and you can start to see the competitiveness of being in Ireland is not as compelling as it used to be...

...(U excuses herself from the room at this point)...because those advantages that you got from tax and everything was being eroded by *high labour costs*...so we embarked onto a transformation four years ago (2001) at this site because from my perspective I knew, (M: This was going to come down the road), it was and if we stood still and did nothing then the axe falls, right...because, suddenly...oh jeez, China looks really good now...so we transformed over the four years...so now, what we were, what was purely manufacturing...today...we are heavily into *Research and Development (R & D)*

MC: So it's to specialise in that regard

LA: Yeah, to marketing...but we also into manufacturing...but you select your manufacturing companies, you go into a, like, a high...*a high-mix, low-volume...multiple skews*...serving Europe, a specific country...is a different model...so to do that kind of transformation, you need government support...you need partnerships...you need government grants, you need to invest in technology, you need to create *IP (Intellectual Property)* that was the partnership

MC: Can I ask, in terms of your own experience, say coming from Singapore because it is one of the global locations...em, like how long have HP been in Singapore? I imagine there were similar sort of, eh, experiences, I presume, in say in Singapore as what is happening here?

LA: Yes, yes...Singapore has been in business almost 25 to 30 years, or probably coming up to 35...so much longer than been in Ireland...and I've told a lot of people my story...I've been in HP 24 years and I have been through many divisions...some have disappeared...*some don't exist anymore*...and the primary reason is because people decide not to embrace change...fight change right...change is not bad...I mean...the one thing people have to understand too is that when there is disruption, there is also *opportunities*...most people look at a disruption and say 'jeez, this is bad', *actually* it's good...you go find the opportunities to your disruption that best suits your competencies and so yes, Singapore went through that, em...you know, I mean, *my first job* in HP...when I first took up the job...em...in '82 when I first started as an engineer...after like zillionth interviews which was ...HP were very prudent about who they picked at that time...finally got the job you know...and within six months I lost my job...because the business I was...they hired me, decided they were going to move everything elsewhere...you know, for a young age, just starting...not a very pleasant experience...but it happened...so it kind of built in me at that time that...the worst thing you can do for your people is...if you choose to...just remain static

MC: So how did you respond to that one?

LA: Well, you see, when I lost the job, you know, I was *accessed* not actually lost...in other words, I was made, (M: redundant?), *available* to the rest of HP so, and I...because of my qualifications I got very quick...so I wasn't that bad off, (M: But an experience nonetheless), an experience...because it could have just as easily been, if no one had picked me, then they would have had to give me a package, so, it was an eye-opener that you, you know...what I, as an employee, I felt disappointed...I felt disappointed because how could things change so fast in an organisation which kind of speaks about the leadership, right, so my biggest frustration was not about, yes I knew I would be picked up, but I hoped I was picked up by an organisation with leadership...which is a little bit more far-sighted...right...without us having this cliff-face scenario, (M: Of course), so that was a little bit more...I think that was kind of...kind of engrained into me and then through my career...I seen a lot more of organisations which chose to use, do the wrong things...eh, start building competencies that are more driven by *ego* than me and...they don't exist...right...so that's probably

MC: So it's impacted how you...your relationship with the people you work with then?

LA: Absolutely...absolutely...it's a lot to do with the **people here too** and I think, you know...the one thing I've **learned** about the Irish apart from being married to **one, you know** very quickly...eh, you got to be a *straight-shooter*...you know, don't spend, (M: yeah), **you know, I mean if you** got bad news just look people in the eye **and tell** them that's bad but, you know, it's not the end...but do not try to, you know, cover it and flower it in a **way that** people start to see this as eh...integrity but they choose not to be honest...(U. re-enters the room)

MC: And can I, to be honest...**we spoke**, (L: **sure**), you know about it in that regard as well, there's been a lot of talk about the rate of **Corporation Tax** and the favourable conditions...how much does that impact...the role, and I know its not just Hewlett-Packard as you said, its all multinationals...

...we work in a global environment, I am aware of other locations from Singapore to Puerto Rico where there is no Corporation Tax and so we compete in those sort of environments...but how does that impact the operating here, in terms of...eh...if they suddenly turned around and there's a change of government here and they say 'well listen we want suddenly 20% or it's...

LA: Bad news...bad news...so, you know the...remember I alluded a little bit to manufacturing, right...eh, the way we have created our future has been...eh, you build your pillars of competencies on the foundations of manufacturing...right, so at the end of the day its like building a house, right...your foundations are manufacturing then you build the rest of the building that eventually becomes a phenomenal structure...but if you don't have that foundation...there's no reason...so a lot of people say, 'well you could always be an R & D centre' and I say, 'sure but it all depends on who puts the next grant on the table'...sure competency is there, right...and then he says 'well what about the learning curve?' (*refers to value chain of technology competency*), 'sure learning curve is there...but what if I tell my 20 Irish R&D engineers, 'guys I'll give you an expatriate package to go to Hungary?'...right...(M: yeah)...because at the end of the day what they give me in grants and what I pay you in expenditure, I'm still ahead...so I can, there are ways of closing the learning curve, right...so...while, if you're...invested into *high - capital activity* and manufacturing, it's not that easy, right...and then you try optimise that specifically with your other competencies...I've always kind of defined this into two areas of manufacturing, right...the one type of manufacturing I would call the *low - road strategy*...that, don't even try to hold onto it...that's going to go to India, that's going to go to China...that's going to go to Ukraine...don't even go there...sometimes I've...I've been to some meetings where I've heard people talk, 'oh how can we beat China? Not on *low - road*...you can never beat them...*high - road* which is where the consumer chooses to pay an *IP* (*note: Intellectual Property*), for your *IP*, pay a premium, that's where you want to be

MC: Sorry Lionel, can you explain about *IP* to me?

LA: *Intellectual property*...so for example if I have a packet, so if I produce...one good example of a high-road company is, eh...*Nike*...right, I mean you could buy Reeboks for 25% less but you buy Nike because you want to pay for that little emblem and that premium...that's the *IP*...right, that little emblem...but you don't mind paying 20 bucks for that, right...so...we need to go after businesses in Ireland that actually support that model...and those kind of businesses don't disappear, because the consumer decides...its...also another good example is...what do you call it? These little popping up grocery stores...right, if you look at it...how could a *Spar* (small convenience chain) or a *Superquinn* (supermarket chain) as it is, right...compete with the likes of the huge *Tescos* (another supermarket chain but cheaper) and all that, right...well *Spar* is very simple model...because sometimes when you go to *Spar*...if you are in Ireland, it's more expensive...but you're not going to tackle the traffic...(U: yeah and the car-parking...yeah) to go to a *Tesco*...and your bill might be about 10% more but you say, 'I'll pay that 10%'...(U: to save the hassle)...and that's the model...(U: like when you go for petrol, convenient)...yeah...so that's the model, right...you're going to go after customers just like that...because of ease of use...convenience, simplicity...they'll pay for that, right...and does kind of businesses will stay...those *low - roaders*, basically, there's is no *IP*...bottom line is what you decide to pay as consumer...that has to leave Ireland

MC: So, what do you, what would you...eh...how do you see it so Ireland ensures the longevity of this...of this, what has been, this...profound transformation?

LA: The first...the first step they've made which I'm really pleased about...which I think has been a major milestone because of people like Una and Des, the Controller, and all who have been talking to the *IDA* (*Industrial Development Authority*, Irish government body to promote economic development)...*don't tie investment to jobs*...right, do not always ask if I want to get a grant, 'how many jobs is this going to create?', the paradigm shift from *just job-creation to job-preservation* has to happen, that's a first step...and for job-preservation then you get the support to create business models that best support the competencies of the organisation...at the end of the day, no multinational has any emotional attachment to Ireland...or Singapore, or China or India...there's no...(M: real world?)...*it's business, right...and if there's no business reason to be in a country we will not...we will leave tomorrow*...but, Ireland has a lot to offer...if we get the business model right with our competencies, with our infrastructure...and the ability of the partnerships...you have a compelling model...so that has to happen, starting with the first...eh, eh...you know, the job creation thinking...is, is good...the second part of it really is to be very clear about...

...you know, for the information and communications sector we are in...it is good that the government also realise, don't throw in the towel just because you already have these companies here...and don't jump into the *biotech - pharmaceutical* and think that is the next wave...most countries did that...Singapore did that and went into recession...(M: 'okay')...specifically that...you have to remember how...(M: 'they went chasing one wave and then the next thinking it was the answer?')...exactly...and economic cycles change...and you're caught in this change...the repercussions are unbelievable...Singapore went through that because...they said...well the IT sector is great...we're going to invest in *Fabs* (large industrial complexes)...building D-ramps...and Fabs will always be here because who is going to take a Fab away, right...so...get off the ICT and went off to Fabs and went after pharmaceuticals...what happened...when the Asian currency crisis hit in Thailand when the Baht crashed...everything went down, right...there were no more demands for PCs or so after the year 2000...right because that was an artificial thing so eventually PCs became a commodity...because people weren't willing to pay for all that, you know...give me the cheapest thing...clones came in and D-ramps at that time which the ? were building...which were called *gold* ...became cheap commodities...and you didn't need to do that in Singapore...so Singapore Fabs were running at 10% capacity...pharmaceuticals didn't take off...and...they realised the folly of abandoning a stable...and nurturing a stable investment, right...and what they could build on...and that's what, that's what I think Ireland...the government here...with, with the ICT sector, are beginning to realise that...don't forget to nurture your current...eh...you know, support it, provide a means for investment and then create avenues for *cross-pollination*, right...because if you look at your pharmaceuticals sector...and you look at the ICT sector...you'd be amazed if you create those *grounds of pollination* what business opportunities can come out of that...because they are linked, right...and you can create a huge amount of opportunities...and last but not least...I think...eh, the ability for companies to work with tertiary institutions without any kind of, eh, control to IP is important...right...as multinationals, we...you know, we're not going to go and work and say, 'we want everything...you guys get nothing back'...(M: that was my next question) (laughter)...we wouldn't...you know but we'd want *propriety of IP*...to me it is not a question of finance...because, you know, propriety, right...so if I work with Una on a project and I say to Una, 'look, once this patent is made, I own this patent but I am willing to give you 35% royalties, because I want exclusivity and that's a business thing, right...and we need to create that environment...and...I don't know if you read about the *MediaLab* (a cooperative between MIT and the Irish government, based in the Digital Hub, a centre for innovation in technology in Dublin)...(U: yes, yes and that's why)...they're going to shut down, right...and that's why, it was in the Sunday Business Post (*Irish broadsheet*)...exactly for that, right and I mean...what's the guys name? Nick...(U: Nicholas Monlaponte), Nicholas Monlaponte in MIT...he doesn't want to step down from the high moral ground which they have with MIT in Massachusetts...doesn't work here right...so guess what happens...companies won't go in and invest...so you need to create that environment, that conducive environment...so those are the changes that I think are really important

MC: Okay, okay...and so...in many ways, I suppose that does tie in with in many ways...how you see the future of the ICT industry in Ireland? I mean it would be those sort of factors, yeah?

LA: ICT industry will...you know, it is going to become...it will still be a major...its going to change dramatically...em, and the one thing you got realise, you know, em...is technology is going to become more affordable...right...I mean, its going to go down, people want...ease...if you look at what the future holds, it is starting to happen...so...its also going to be a tough place to be...on those kind of business

MC: In terms of competitiveness?

LA: Competitiveness...and you know, market-share and but its not something you can't succeed in, you can, you just got to get better and I think, Kylie (?) said this at the last meeting when we had in EME, which I thought was very good, right, apart from, you can have passion, you can have confidence but you got to be predictable, of what is coming ahead of you, in anything you do, the ICT business or any business we do, if we are predictable about what is changing out there...and we start to keep defining our business model...which, by the way, is what is making the company successful today, its not technology...it's the business model, see, 15 - 20 years ago, it was technology which differentiated companies, right, who came out with the first IP...and you know, you remember that these, you may be too young (*laughter*) the 41C calculators, right...you remember the old HP calculators? I was in engineering school and if you had a 41C stuck to your belt...you made it! (*laughter*) you're a real engineer, right because that was technology...right, and we sold that because of the technology, we didn't even have to market it, I mean, with a 41C you didn't have to put an ad in the paper, engineers just (clicks fingers) engineering degree, 41C...today is not about technology, today companies that succeed are companies have the right business model...and if you have the right business model

MC: So you mean in terms of being flexible?

LA: Redefine the model of what the customer wants...right...eh, customers want different things in terms of...one common example, of course is Dell and *Dell Direct*, that's a business model...right...that direct model...has created...opportunity for PCs to work but the same direct model does not work for cars, you never buy a car from a PC...or you, you want to go see, to feel...so...where is the common ground? So if you want to sell a product, direct is important...but you also need to create an opportunity for customers who want to experience that change, right...and...an example of what some people have been talking about was...eh...shopping in a supermarket is an experience right...you go to shop, I mean, some people enjoy, some people hate it but some people who enjoy it for the ambiance of the supermarket...you go to the bread section, you get the smell of fresh bread, right...so...there were some guys in the research centre who were working saying, 'why don't we create that ambiance, right, for the customer to do that from the living-room or from their study, by actually creating the smell, so you go through a 3-D dimension model into a...you're actually in the mall...or in the shopping...centre, I mean, the supermarket, (U: in that department), area...and you can actually pick what you want...it automatically and you also get, because of the bread, flavours, smells, aromas being released...you feel you are in the bread section...right so that is one area but what it means is people are trying to change to make it easy...so business models are going to change dramatically that...what we as consumers want with ease...and if companies who have got that right, upfront...are the ones that are going to win

MC: And can I ask, it gets back to...I know I am conscious of time, (U: yeah because we have to get back to, go ahead), you said yourself, you were six months in your first job and then, being let go and then, do you think that's also part of...because, it seems to me, a lot of...a sense of this being innovative, being flexible...being responsive, that that is also the way in many ways, even from personal experience...that is the new way of working...our ideas of, you know, long-term, more permanent work, that this too is also going to change?

LA: It is...you know, eh...a couple of things, right, when in Asia, when I was in school, the idea of jobs was you must join the government...because it was great, right...I mean a job for life (U: a pension)...a pension...(U: used to be the same here, Lionel, it was the same here, 50s and 60s...absolutely the same) and you were engrained and you told your parents, 'I want to go into the private sector', 'why? Are you mad?' you know, so...that's changed and I think like everyone else, every individual in this world today...in any job that we have...and its becoming increasingly clear a couple of things need to happen...*one* is you got to be very flexible...*two*, got to keep educating yourself, right...I mean, with the changes that are happening out there...you know and *three*, I think most importantly that, you know...its every...single...individuals responsibility not to end up becoming...you know, totally unaware, right, or ignorant in their jobs, right...because you can choose to do that and then you just don't become, you know, a *value-add* anymore, that's got to keep changing so, the continued education, even for engineers, what you graduated four years ago from college...its gone...and you got to keep educating yourself, if you're on the business part of it, keep understanding, understanding what...how business models are changing...what difference between successful companies and unsuccessful companies...and that's primary responsibility, for me personally, in my role, you know...my first year here, and Una will tell you, I was very much in the thick of things...right, I was more into the operational part, because we had to be really good at what we want...but then the second part of it, after a couple of years was...the self-realisation that...where do you see the site, right, in the future? and I would say, three years ago, someone asked me and I really didn't have an answer...I couldn't say where the site was going to be in 15-20 years from now...and it would be very easy to say, 'oh I see us in manufacturing for the next 40 years', you got to be realer than that...so the personal change for me as to be to educate myself and education is about also having the right linkages with people in the organisation, right...talking to them and understanding what their thoughts are...and then starting to formulate what you think the possibilities for people...especially your staff who work for you, right...to get them engaged in where we need to go in terms of change, to ensure the site is here 30, 40 years from now

MC: And one last question...so how...what's the...can you envisage what that site might look like in 30-40 years time?

LA: I...the site will be doing manufacturing but not the kind of manufacturing you do in Asia, China, India...you know, we'll be specifically building multiple products, multiple skews...high-changeover...very quick response, exactly meeting what the customer wants and creating a valuable position for the customer...that when they want changes, right...that we provide those changes in the shortest period of time to suit their needs, right, because we're going to become very...the customer demands are going to change...

...I always think of the example of Gillette, right...Gillette is the greatest example, I mean, you know, how heck will they last in blades, right...but you think about what they did...I mean, a lot of their programmes they have aren't really major technology programmes, right...their advertising is fantastic...right, but the only problem is, they play with a selection of colours, right...ice-blue...it's a man thing, right...(U: I'll take your word for it) (*laughter*) yeah, but the way they put it "Mach 4, ice-blue", right...and then what they do is they just market, they took the fore-market and put an additive strip on the blade...right, so people who hated putting foam...just was easy for them...that was a major step...you kill one step already, so that was really clever, so what really happens really is that you start to go into *adjacent markets*, right, of your business and start providing so that 'Mach 3, Mach 4' sold very well worldwide, ease of use for customers, that's what the customer wanted...so this site, to me, is going to be providing those kind of solutions for the customer, we'll be doing a lot of R&D, right...specifically...and we will be very integrated in actually differentiating the solutions for the customers in each of the countries in Europe, right, and providing those instantly, (M: again, so very responsive), very responsively...you know...you may want...to have a customer in Belarus or somewhere who wants 50,000, eh, specific custom-made products from printers to cartridges for basically a specific school programme so its going to be designed specific to their need and then you have one development that will do the whole writing system with the printer to cartridges...and specific for that environment, right...and will take 2 months to 3 months from development to delivery

MC: Sorry, the final, final (LA: sure) how do you think the view of Ireland has changed? In terms of a global, how do you think Ireland is viewed, in terms of, is it viewed as, you know, a global player?

LA: I think that, you know, Ireland is, I would say today is viewed as a major powerhouse even much more than the UK, you wouldn't think of that. 15, 20 years ago...right, although the UK might not agree to this but actually it's a fact...it has shifted dramatically...and what exists in the UK today are really some...eh, industries that were very specific to the UK in, originated in the UK...but very little, huge massive investments in support of that so Ireland is viewed as a major player...I also believe, you know, that the government is also aware...which is why you see this delegation going to China (*A Trade Mission including the Irish Prime Minister were presently on a trip to China*)...(U: very important)...eh, its because you can't fight the emerging countries...I mean, China already today takes 30% of the steel of the world, right, I mean and they're not even...(U: trying)...yeah...they're already eating 30% of the steel...you can see their GDP (Gross Domestic Product) growth, right...they're rich in cash, right...the U.S. government themselves knows China doesn't abide by WTO (*World Trade Organisation*) agreements, they're still not floating the Yuan against free currency...but you don't want to do that because if China floats its free economy, its free currency...Japan and Korea will go tail-spinning in its economy, so China is going to be big and it's going to be a huge market...India, right, its going to be huge and its going to be big and that transformation is happening, right, for those countries and I think Ireland...as, you know its good to see this happening...because its going to help the indigenous companies of Ireland start to create opportunities going in the future because if you cut yourself out and you choose not to engage...you will lose these opportunities to the...to the Polish, to the Hungarians and to other of these European countries

MC: Because some would say that it is a dependency, in some cases of China and India, but in many ways you have to embrace that

LA: Yes, because the Chinese would need a country in Europe, right, for their...so...EU is not going to be very...you know, there is...I mean, whatever you do, eventually, if it is in a balanced economy, the EU will put tariffs on all products coming out of China, so there'll need to be a kind of partnership with some European countries, right...to get around some of this tariff, you know it is going to happen, right...either you're there first or you miss the boat, it was good to see the Irish government taking that...yeah

MC: Aware of time, thanks very much for that Lionel. (U: get some photographs now?)

F – Interview with Mark Doran, Clean Room Operations Supervisor

Hewlett Packard, 28 November 2004 (Canteen 12.30 p.m.)

Present: Mark D., A Representative from Government and Public Relations Department and Mark C.

Mark C.: Can I get your name?

Mark D.: My name's Mark Doran

MC: And where were you born Mark?

MD: I was born in...eh...Dublin, in...in..Crumlin, in Dublin and then we moved to Nutgrove...in Rathfarnham (also in Dublin) when I was very young so, lived there most of me life and I'm living in Tallaght (suburb of Dublin) now...so...that's it briefly...brief spell, brief spell in Lucan (in County Dublin) as well as but...

MC: In between?

MD: Yeah, yeah

MC: And how long have you been working at HP?

MD: With HP almost 8 years, so, eh 7and a half to 8 years...when did I start? More 7 and a half...started in July

MC: So were you out...was HP here or was it Blanchardstown at that stage?

MD: It was Blanchardstown...so there was two...basically two final assembly lines, high vas lines...and one package line there at the time...so...I started off as an Operator on a package line so that's...

MC: And it has worked into what you are doing now?

MD: Yeah well I have worked through from there now...I done a few, about a year and a half as an Operator...and about two years as an Operator and then moved onto Process Technicians job on...done that for...

MC: Which is up in the *Clean Room* area, am I right?

MD: Yeah so it's the Clean Room, worked in an area of the Clean Room called the *Barrier Area*...which is the first area...em...that wafers get processed in the Clean Room and em...I was a *Process Tech* there

MC: And how many areas are there in the Clean Room?

MD: In general? Well there is multiple, each steps of the process are broken down into areas for...you know...ease of management...process flow and that type of stuff you know...so you become kind of...eh...self-sustaining, self-managed kind of...entities within the Clean Room themselves

MC: So if there are any kind of problems, you can quickly identify the area?

MD: Yeah, yeah...exactly...but obviously there is a clear process flow there as well...systems can link up...em...more easily as well... 'cause they *allocate location codes* on each of the systems so it's a tracking system...you know...you've got a location code...so you're working in *Barrier*...you could be...I don't know, 7900...and you might have one or two different locations within there so...you can track work in progress as it goes through each area...and if there were *miss-processes* along the line...you can also track them through back to where they happen, you know...it's handy for all those types of reasons

MC: absolutely...and can I ask your role?

MD: *Just In Time (JIT)*...kind of stuff as well...sorry (MC: no, go ahead) I was just saying it's handy for Just In Time management...as well of material...so you're not having big build up of *WIP (wafer in progress)* anywhere...it's kind of moved to the next stage and they may pull from the proceeding area and

MC: So it's quite efficient?

MD: It's pretty efficient...we do tend to buffer material...probably more than we have to but...eh...you know it's a bit of an insurance policy there as well...so (MC: So you have to be aware of that?) yeah, it doesn't work perfectly by any stretch of the imagination so

MC: Like anywhere I suppose?

MD: Yeah, yeah

MC: And your role in that now? As you are no longer a Process Operator...

MD: Hmm, yeah I'm away from the process now, it's more people management...(coughs) so it's really...eh...I think you're given the...eh...you're given the...em...gambit of, eh you need to get the best out of people rather than you having to telling the people what to do...or you have to know what they do with *micro-management* the whole time...it's really...right, they have a set of objectives, I have to know what those objectives are and they need to reach and meet those objectives and once they do that, like, I don't need to know how they exactly how they do it and when they do it...have to have a general idea

MC: You delegate rather than sort of looking over their shoulder?

MD: Yeah exactly so...it isn't...it's not a micro-managed kind of process, it's...you trust people to do it and they get on and do it...if it's not done you have to investigate why it hasn't been done...and then there's an investigation and then you can try and rectify where the problems are but it's not...big on...you do this, this, this and this at that time...you'd say, I need this done

MC: So more the word 'Supervisor'?

MD: Exactly, I think it's more leadership they try to stress, supervisors' role as leadership (coughs)...I can't remember who said it, I think it was some...I think it was an army general in World War 2, could have been Patton or one of those guys...I can't remember exactly who it was but it was something along the lines of, if I can remember it now...eh, you can either...eh, tell a guy what to do and he'll do just that or you can tell a guy what you want done and he'll surprise you by doing a lot more, that's not exactly what he said but it's along those lines so, I think if you give people the challenge, and you give them the right tools to do it and you get rid of the kind of, roadblocks that are there for them to stop them doing it, they will generally do the job and do it better than if you go in and say I want this, this and this done at certain times and this is the way I want it done

HP Public Affairs Representative: Less authoritarian type of management...more

MD: Yeah, but I mean...having said that, I mean I've seen within even the small work group...I say small...it's relatively big but...we've 4 shifts, say 40 people per shift so we've 8 supervisors looking after about 160 people on the floor...as a production group...and even within those 8 supervisors, like...I've seen varying styles...some of them are more...authoritarian than others, you know...and some of them to be, kind of, too much the other way...so I don't know...there's a balance, you know

HP Public Affairs Representative: A happy medium

MD: You can't really, you know be too soft either, you know, a balance

MC: I could see that this morning

MD: Different characters, different individuals...so we do work a bit differently...but it tends to work, in general, reasonably well...reasonably well (*slight laugh*) room for improvement...there you go

MC: Can I ask before, were you...em...did you work in this industry before?

MD: No, not a great deal...I had production experience but em...so, I suppose I travelled a bit as well...I worked in Germany, I worked in...eh...England, em, doing various jobs really just to, kind of, make ends meet...em...I think the first kind of production factory that I worked in was when I left college, initially, I worked in an Industrial laundry which was an Irish company...and it was a pretty horrendous place to work and I can tell you stories in relation to safety and...em...you know just the way they treated people and the level of trust that you had for you was miles removed from here...but then you had the unions constantly pulling you one way and the management pulling against them...em...a lot of the workers were caught in the middle...so I don't think the unions did any favours for people either...so that's been removed from here

MC: And that works?

MD: It works to a level, yeah but I also think that senior management here at the moment and over the last couple of years have lost a lot of the trust and...and faith of the people on this site...em...they have a world-wide survey which according to the results that we've seen would indicate that around the world, it's pretty much as they were...as a deal of satisfaction but I think the Irish experience is...is way different...so, em...with pay freezes and everything else that's happened...and just the way things are communicated...eh...kind of, doesn't work very well for the Irish experience, because we're being told that the company is doing really well and for the section of the world we're in in particular is doing very well...we're actually working harder than we've ever had to work...our targets are continuously going up but the rewards for that are just...don't weigh up for what we're being asked to do

HP Public Affairs Representative: Rewards are just not there

MC: Didn't HP just announce a profit of around 864 million dollars?

MD: Yeah and, and the bonus we yielded from that was 1.3%...so for the best quarter...that's the last quarter is the best quarter they've...in history for this section of the business...but because the business as a whole has been pulled down in other areas...this is probably the worst bonus we've got since I started here...so

MC: So is part of being the Euro-zone as well in the fact that the Euro has been so strong against the Dollar?

MD: No, you see...I think, I 'm not sure whether that has

MC: Impacted?

MD: Impacted...now you can ask someone in, kind of, finance department and they'll probably tell you 'yeah'...I'm not too sure how that's impacted...the whole thing but...it's 1.3% worldwide...that's what the bonus would be, (MC: So across the board?), so it's across the board...they do everything across the board here...it's good in some ways but when you're in the section of the business that's busy...and you're kind of carrying other sections as it were or you seem to be...it's not great...so it works against you, (MC: I can understand), I mean it's just one of those things right now...so...yeah...you know

MC: Six of one and half a dozen...

MD: There is, there's a level of dissatisfaction from the ground level but...*corporate* kind of run things differently...they look at the *share price*

MC: So how do you think that has...kind of links in with, in general terms...how do you think this transformation that has been brought about by the IT industry, how it's changed Ireland?

MD: How it's changed Ireland? Well, I suppose from my own point of view...em...it gave...it gave me a bit of stability...it brought a lot of employment into the country and, we had the whole *Celtic Tiger* thing I suppose and that was...really driven by, I think by...a lot of the IT companies coming into the country in the first place...but I think there was a level there where we got carried away with ourselves...eh...I won't go into Government mis-management but I think that's also a lot to do with it as well but...em...the *Celtic Tiger* for me didn't really get off the ground because I was one of the people...okay so I had a job which was great...em...but a guy doing the job that I'm doing now ten years ago was a lot better off than...my partner works full-time, I know guys who are in a similar position to meself...eh...have got the same job title as me who don't really have a mortgage to pay and wives don't have to work or parents don't have to work...and they drive much better cars or you know...so I think...the way things have escalated on the housing market, the inflation we've had to experience...that's all kind of taken away from the fact that, yeah we've all got a job but things are a helluva lot more expensive...you know, so that would be one thing...but the IT...I mean it's nothing to...it's not the fault of HP, I mean they're providing us with a job...and best luck to them but just...it's unfortunate that the country we live in is a difficult place to live financially and to be competitive I think IT companies can't overpay obviously, the last few years have really hit that home...em...with pay freezes and redundancies...I suppose we haven't had to face redundancy so it's not too bad but...you know it's getting harder and harder to have a job like this in this country...you really need to be moving to the next level if you're going to make...to make a life for yourself

MC: Can I ask you about that, I mean I have asked a few people just in terms of the nature of Ireland being part of the global economy...it's a global player...in terms of and even ideas the IT industry can move...to India and the like...do people think...how does it concern people? Yourself? Does it concern you?

MD: There's definitely concerns, I think they're here for tax reasons on one level, there's an element of localisation as well...em...they can produce a lot here and not have to store it in warehouses and transport it around the world and into a European market...from India...so there are cost savings there as well so in that respect and the whole *intellectual property* that's being developed here...em...I think we're starting to develop some technologies here from an R and D standpoint...so that type of stuff is helping us as well so there's a whole number of reasons...why...you know it's good for them to be here...but there is also the worry that...inflation, inflation, inflation is...is making this job less and less attractive for people, I know Operators who will never own a house...and they could work here 'till the day they die and they'll never be able to afford a house, so, I mean, is that a quality of life? I don't think it is, so sooner or later, these...we've got a young workforce here, they're very bright, sooner or later they've got to make a crunch decision and a lot of them will vote with their feet, you know...they'll just say, I can't afford to work here anymore, it's...it's as simple as that, so...I think what's going to happen is...HP are going to lose a lot of people to competitors if they don't start to financially reward people that are working here...but...*the catch 22 is that can they afford that or is it just cheaper for them to pack up and piss off to India...*that's the bottom line...so we don't know that yet, you know, if you were back here in 5 years time you'd probably see something

MC: I say it again, it's just a question and it is not just because of here but also Intel, SAP are faced with the same choices, same scenarios, and I suppose it is part of this global economy

MD: Yeah, yeah, I mean...and I think, I think what it does auger well is that you see the likes of Intel, who are, actually, expanding

HP Public Affairs Representative: Yeah, Feb 24 and all that, yeah

MD: Yeah and you have Wyatts, who've come in, from a HP standpoint, that could be costly so if we're talking about this site, I don't know how it's going to react because the pay freeze here is crippling them and if Intel are taking people and if...eh...Wyatts start taking people in abundance, we're going to have a hard time keeping up

MC: Wyatts? Is that another?

MD: They're...eh...they're...eh...going to Clondalkin (*County Dublin*) here, they're starting to *ramp up* and they're basically...they're, eh...pharmaceutical company but they'd be very high-tech

MC: This is the other area expanding at the moment

MD: Yeah, but they're taking a lot of technicians at the moment

HP Public Affairs Representative: Yeah, I've heard that alright, a lot have left HP to go working there

MD: Yeah, so that's, that's just from a HP, from, talking about this particular site

MC: Yeah, sure but, so how do you see the future of the IT industry in Ireland?

MD: In Ireland? Well, it's become less attractive, I think...because there's a short...there's a short-sightedness as well on the behalf of people going to college, students leaving school now looking for college places...they're looking at the IT sector as it stands and, you know, with the whole global economy, a lot of it seems to be thrown back onto, the NASDAQ (*NY Stock Exchange Index*) and the IT sector, right and it's probably the biggest players in the global economy, the way it's gone and share prices have crashed and, new technology haven't, you know, the internet really never caught on the way people expected it to, I think Y2K was the biggest marketing ploy of any, you know, greatest marketing ploy of that particular century because it made everyone go out and buy new PC's, new software...nothing happened in the end but people still bought all the stuff and the shareprices were going up, up and up and then it went *weeep*...(whistling sound, hand gesture downwards)...and I think since then what's happened is...the faith in technology, the technology sector and the technology market is...the arse has dropped out it basically...

...so, I think, you know, people trying to get a place in college don't look at IT as, (HP Public Affairs Representative: Attractive?), yeah, attractive...don't see it as a long-term *go-er*, they just look at it and say, well...it's not going to happen in the short-term so I don't want to know about it, I'll do something else...I'll go for medicine, I'll go for...it's not a bad thing either...but

MC: Sure, sure...I suppose the pharmaceutical business too...so do you think now on this push to now make Ireland a, you know...a research base, around R and D and specialise or whatever like that

MD: Exactly but you need different aspects to doing that...I think, I think the biggest R and D expenditure from any particular companies around the world would be in technology-based, IT and communications and then probably pharmaceuticals as well...so, you know you need a balance of both...I don't think in Ireland we're getting enough people involved in the, in the IT sector and you know, the R and D that could go on there

MC: Can I ask you, where do you see yourself in all this? Among all this change that has had such a profound effect on this country

MD: Well I mean...I've changed...my career is basically, kind of, aligned with me expenditure, you know, it's not really, I'm not really that super-driven kind of guy that...maybe I ought to be but it's...or HP would like me to be...but anyway...em...so I got a house so I needed a better job before I wanted a house, I needed a better job, then I had a kid so I needed a better job and that's the way I've always...but it's good...I like to develop me career as well so it's not just down to that but it's part...partly down to the harsh realities and the cost of living and part I get bored in the same job after about 3 years anyway...so, I'm always looking, I suppose, to move on a level but I think this is...more or less where I want to be for now...I'm not looking to move directly out of this straight away because I mean I've got so much on outside of here that, (MC: It's enough), yeah...I mean, going to college right now is not an option as I've got a young kid so, maybe in a couple of years, yeah, that is one of the good things about this place, I mean it will give you the benefit of, of being able to go back and educate yourself...it may not be...you know, right, if you want to do Greek Mythology or History or something, they're not going to, they're not going to give you that opportunity

HP Public Affairs Representative: But the opportunity is there...if you want it

MD: The opportunity is there to do something, you know, if you're in a dead-end job and going nowhere which I think a lot of the Operators probably sometimes feel they are, they always have the opportunity to go and train to be a Tech or do a Supervisors course or whatever they need to do, some of them choose to do and some of them don't...and that's just down to how driven they are and, they are great in that respect, they give you that opportunity and I think, Intel would be the same and Wyatts might be the same, and that I think is great because that I'll raise the profile of this nation as, a viable, kind of, base for High-Tech companies in the future, so if even HP is gone, they'll think, well Jesus there's an educated workforce, they've been there, they've done that, let's start up there, so in that respect, they're probably laying a good foundation, I think there's, you can argue for and against every time...it's strange

MC: So how do you think the World views it, Ireland now??

MD: Well I don't think we're the *Land of Leprechauns* anymore anyway, I think, you'll always see that around St. Patrick's Day but...that's, I mean, that's the Americans for you, they like to, (MC: Marketing too for you?), yeah, exactly, but I think we're, eh, we're probably viewed more seriously than we used to be but I think we've a **problem with how we view ourselves, so I mean there's a guy who wants to try and**, and I don't know whether it's a viable, kind of...project but...eh, a guy who wants to **start a massive theme park** there on the Northside (*of Dublin*) and he's **basically been laughed at, okay, so, he...there are a lot of reasons** why it probably wouldn't work but...that's...once **something like that is announced**, that **is what we instantly look at...this is why it won't work**...we don't look...**can we do this? ...you know there's** no confidence there to say *we could probably do this so why don't we try it* and but again...it's...

MC: **And why do you** think that is, Mark?

MD: **I think we've** made too many mistakes in the past and I think our, a lot of our planners and our politicians haven't been too well behaved in the last while either to give us the confidence...em

MC: Do you think history has a part to play in it?

MD: Maybe but I think over the last...the last 20, 25 years as we have developed and we have developed a lot, there's also a lot of mistakes made and I think that's what people tend to concentrate on instead of the achievements in some cases that have been made...we've come a long way as I say in the last 20, 25 years...but It's...as we've developed we've taken on new projects and made mistakes and people are...seem like they are afraid to make those mistakes again but I mean...it's part of life, you know...you make mistakes, you have to...like there's the Port Tunnel (*Dublin port tunnel project*) at the moment, it's too short, whatever...the Luas (*Dublin Tram System*) is a bit of a disaster but, like, at least we're trying to fecking do it, it's not like well we can't do it so we won't, we're trying to do something but we're having problems so people concentrate on the problems...em...there are reasons why that happens as well I think some of the politicians are to blame as well

MC: Do you think we have control over our destiny or whatever you want to call it?

MD: As people?

MC: Yeah or as a country? Or even say economically? In terms of a lot of companies here that we work for, salaries are paid by foreign companies, that sort of way

MD: Alright...yeah, yeah...I think we need to be very, eh...cost effective to keep these people in the country...I mean we can keep throwing tax breaks at them but that's just...that's...that will only go so far, em...*it's a fools economy or a false economy or fool's paradise* or whatever you want to call it...I think we need to be, you know...more cost effective and I don't think the way inflation etc. is at the moment...that we really are...what we have got is, as I said, is a well - trained, well -educated, kind of...workforce...so that's in our favour but...again time will tell whether that's enough...I don't see it attracting everybody...I think they'll always come in for the tax break and that's probably the main reason they're here for now...so I'm really not sure where this is going to be in 10 - 15 years time...you could have a lot of well - educated people walking down to the dole office and you know...we need to be careful how we elect our next government because the one we have at the moment seems to take things for granted...a change of pace maybe not a bad idea even if it's only for 4 years, you know...a kick in the ass, (MC: A change is a good thing), so that's...but like, I don't really know where it's going...you know

MC: Okay seems like a good point to finish on...thanks a lot...I wish we had more time to be honest

MD: No problem