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Milieu - Editor's note

Sonja Moore

Milieu, from the French word *mi* (middle) and lieu (place), implies fundamentally a person's environment or setting. Consequently, the concept of *'milieu'* offers an abundance of geographical research topics and is open to infinite ways of questioning, analysing, interpreting and representing any location, and therefore its connections to other, both man-made and natural surroundings on a local, regional or global scale. This year's numerous geographical articles reflect not only the diversity of our geographical landscape, but also how unique each and every author sees, comprehends and corresponds to his or her surroundings. Of course – not to forget – his or her personal resources, interests and experiences. The reports represented here span topics from rural to global, from economic issues to social and health concerns. Local and foreign historical and political subject matters are aired, too. In addition, the weather, a source of many daily conversations, is a focal point of several climate themes. Although, not every geographical subject is an expression of a sombre research. The 'unanticipated' experience of one tourist can relate to many of the above mentioned studies. Humorous personal tips and experiences on the practical side of research, a gruesome fieldtrip diary and a woeful tale of experiences in another 'geographical institution' are uttered here to enlighten upcoming students. Should any of these extensive subjects though not hold the reader's interests, the reader then could lose him/herself in an unusual bog poem, dive into fantasyscape, or, if all fails, may join the missionaries.

Overall, the underlying emphasis here is that this magazine will continue to provide students with a local forum to display their and other researchers geographical or geography-related research themes and ideas. This may stimulate ideas for further valuable and interesting studies. Moreover, it is also hoped that the various articles offer overall a greater perspective into the inextricable links between the human and physical environments, which can vary considerably over time and space. Physical geographical analysis (i.e. climatology, hydrology, bio-geography) may produce wide-ranging implications for social/political/managerial decision processes and attitude changes. On the other hand, decision policies based on human geography, such as on economic, transport, agricultural, tourism and housing studies, may have substantial impacts on the physical landscape.

In all, I thank every one of the authors (be they of native and alien origin) for their generous time and effort in submitting these versatile articles for this year's edition to make it hopefully another success. My gratitude is also extended to my extremely patient and supportive co-workers in this office for their continuous, and on many occasions witty advise, Mary for her comical conversation while scanning photographs, the numerous diligent photographers and of course the Geography Society, especially Julian Bloomer for his time-less efforts. A 'thank you' moreover is given to the sponsors as without their financial generosity this magazine may not have been able to be published, and last but not least a 'thank you' to you, the readers.

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Economics:

How the global economic landscape has changed in the last thirty years

Cormac Walsh – 1st Arts

The global economic landscape has changed significantly and dramatically in the last thirty years. Commentators such as Ohmae (1991) claim that we now live in a "borderless world" in which a global economy operates. The development of information communication technologies along with fundamental changes in the roles played by different regions in the international economy and changes in the international division of labour have dramatically altered the global economic landscape.

In the post war era, until 1970 the advanced capitalist states experienced unprecedented economic growth, reaching 8.6% per year in the 1960's (Dicken: 1992). The international economy was dominated by the United States and was thus hegemonic in structure. Tariffs and quotas operated widely preventing the large-scale development of global trade and particularly restricting foreign direct investment (FDI). Despite this, international trade grew faster than the economies themselves indicating an internationalising trend. The relationship between the "Northern" industrial countries and the "southern" developing economies was one of exploitation. Under the so-called Old International Division of Labour, the peripheral regions exchanged natural resources and agricultural commodities for manufactures from the core.

The last thirty years have witnessed the development of multipolarity in the global economic and political landscape. The decision of the United States to revert to a floating exchange rate and the subsequent collapse of the Bretton Woods system in 1971 could be said to have heralded the end or at least decline in US hegemony. The consolidation of Europe under the auspices of the EU and the rapid development of Japan and the Newly Industrialising Countries of South East Asia (NICs): South Korea, Taiwan, Hong Kong and Singapore has created a world economy comprised largely of three major markets. In the early 1990s 80% of investment inflows and 96% of investment outflows were accounted for by the United States, Europe and Japan.

Manuel Castells (1993,1996) argues that the application of science and technology to the production process has been the key to economic success in the new global and international economy. He cites technological capabilities and access to the major world markets as being the major criteria for international competitiveness. In the early 1990s 80% of all new jobs created in Europe were in the information processing sectors. The econometric studies of Dosi and Soete show a strong correlation between technological levels and competitiveness across industrial sectors for all OECD countries and for the same data no correlation between competitiveness and labour costs.

Castells notes that these changes have given rise to a New International Division of Labour. As technological capabilities have become more important than labour costs, the locational calculus for foreign direct investment has changed. Areas of the world with poor technological infrastructure yet with very low wage levels are no longer as important as sources for FDI. He argues that this has increased the economic marginalisation of such regions as Sub-Saharan Africa to the extent that that the title "Fourth World" is now applicable. Production and profit levels in Sub-Saharan Africa tumbled by approximately 30% in the 1980s.

In contrast to the experiences of these former "Third World" countries are those of the NICs of South East Asia. The economies of Hong Kong, Singapore, South Korea and Taiwan as well as more recently Malaysia, India and China have all grown rapidly by exploiting niches in world markets. These countries have concentrated on the development of high technological infrastructures and the production of high technology consumer goods. While their national economic policies are no largely export orientated, it is interesting to note that countries such as South Korea used protectionist policies all along the development process.

Castell maintains that the "informatisation" of the world economy precipitated the collapse of international state communism. In the case of Russia, Aganbegyan, Gorbachov's first economic advisor noted that until 1970 the Russian economy grew steadily based on increased levels of capital and natural resources input in the primitive industrial system. However the development and application of information technology in a command economy proved too difficult in the following decades, necessitating the introduction of perestroika and the gradual transition to a market based economy.

It is debated among commentators whether we now live in a global economy dominated by transnational corporations, where national boundaries have been eroded and economic forces are in full control. Hirst and Thompson (1995) argue that transnational corporations are relatively rare and that the major economic and political powers can exert considerable influence on the global economic landscape. Perhaps the one truly globalised economic market development has been that of internet based retailing but that aside, while global trends are in operation, these are spatially unequal and a fully globalised economy has as yet not been realised.

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The role of the Information Technology in EU Integration

Paul Finn – Postgraduate Research, M.Litt

European integration is an essential tool for the survival of member states in the age of globalisation and a global economy, where the core, strategic economic activities are globally integrated through electronic networks of exchange of capital, commodities and information. The foremost dimension of these economic activities concerns financial markets and currency markets. These are truly global: they operate in real time through electronic flows and have the ability to bypass, or overwhelm, government controls. In such a global arena the individual European state does not have a great say in world and domestic affairs. But as part of a technologically integrated network structure, it does.

Information technology is already a major dimension of globalisation. High technology firms are all dependent on networks of technological and economic exchange. If the Union is to enlarge then it is necessary that the technological capabilities of the existing member states be diffused and implemented into the new ones. As it is the services sector of the Union is underdeveloped, particularly in the areas of telecommunications and the Internet.

Figures 1 and **2** illustrate the dramatic differences in rates of Internet use between Europe and the USA. The development of European telecommunications networks is necessary to address this divide. This task is simply too great to be met by Union funding alone and will require the involvement of the private sector, as well as public-private partnerships. **Figures 3** and **4** are network topology maps illustrating the current activities of certain private Internet Service Providers (ISPs) and Internet Backbone Operators in the EU. They operate on different scales, ranging from that of the city to regional, national and pan-European level. Collectively they have the potential to constitute the true network paradigm that of horizontally interfused patterns linked up with larger scale European programs.
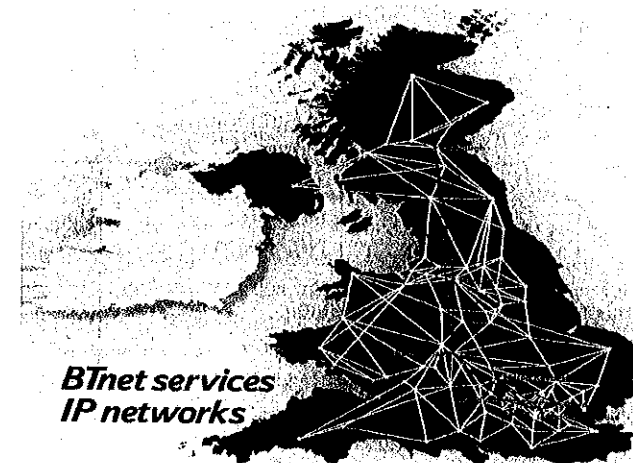

*BTnet services
IP networks*

Figure 3
The Union will play a crucial role in this private sector development and will be able to act as a catalyst in the process, as illustrated by the Lisbon European Council, by "establishing an effective framework for mobilising all available resources for the transition to the knowledge-based economy and by adding it's own contribution to this effort under existing Community policies" (Reference in Bibliography:1) Such resources will no doubt come in forms such as the Phare programme, which is currently the main channel for the Union's financial and technical cooperation with the countries of central and eastern Europe (CEECs). Such cooperation comes in various forms, in particular through the "Twinning mechanism" (Reference in Bibliography: 2), which allows organisations in the candidate countries to jointly develop and implement a project with their counterparts in member states.

One area that will prove crucial in the encouragement of private investment will be the candidate countries ability to put in place the legal framework (e.g. Public services franchises) which will allow the private sector to operate. The lack of physical infrastructure in eastern European states will also prove a problem due to the disruption of fixed networks as a result of war. The solution to this dilemma may come in the form of mobile and wireless networks. All these countries have managed to maintain GSM networks which are easier and quicker to build, and are already in operation in areas where the construction of fixed lines has proved problematic, such as Greece (see **Figure 4**). Yet there are huge disparities in this area also. In 1997, for example, there were 32 access lines (i.e. fixed lines) per 100 inhabitants in the Czech Republic, and 55.5 in Finland. Yet when mobile networks are taken into account there were 37 access "paths" (i.e. either fixed or mobile) in the Czech Republic, and 101.2 in Finland.

Figure 4
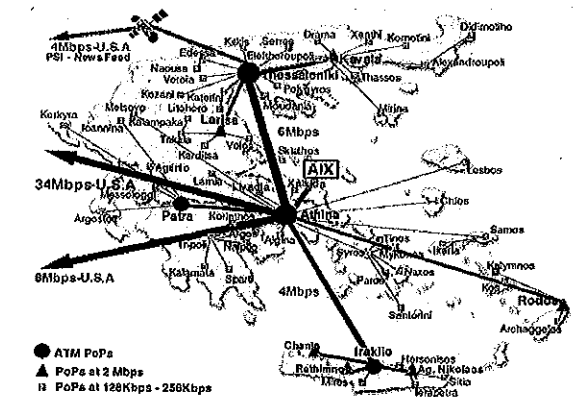
The network structure is not infallible, however, and there are certain potential pitfalls, which must be addressed. Technological capacity must be diffused throughout the entire Union. Disparities already exist in the Union as it is and must be dealt with before expansion takes place. If they are not addressed then a technological gulf will develop between east and west and a two-speed Europe may develop, characterised by economic development and social inclusion in the west and economic underdevelopment and social exclusion in the east. Then there is the question of control over the developing telecommunications networks: what if candidates begin using the networks independently of the Union: what sort of sanctions or controls will be introduced to deal with lack of

compliance? A network structure may also prove detrimental to the traditional European welfare state in its present form. This is because the networking of production and the mobility of capital create the conditions for investment to move around the world to areas of lower social costs. The search for flexibility in the labour markets and the process of disinvestments in Europe may also reduce the employment basis on which the fiscal stability of the welfare state relies.

Despite the potential problems highlighted, information technology needs to be developed and implemented throughout all nation-states of an enlarged European Union in order for the latter to participate competitively in a global economy, no matter what structure the Union may take.

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Figure 1, 2

European Union				
COUNTRY	**DATE**	**NUMBER**	**% POP**	**SOURCE**
Belgium	September 2000	2.7 million	26.36	Nielsen NetRatings
Germany	August 2001	28.64 million	34.49	Nielsen NetRatings
France	August 2001	11.7 million	19.65	SESSI
Italy	August 2001	19.25 million	33.37	Nielsen NetRatings
Luxembourg	December 2000	100,000	22.86	ITU
The Netherlands	August 2000	8.7 million	54.44	Nielsen NetRatings
Denmark	July 2001	2.93 million	54.74	Nielsen NetRatings
Ireland	July 2001	1.25 million	32.54	Nielsen NetRatings
United Kingdom	June 2001	33 million	55.32	Jupiter MMXI
Greece	October 1999	1.33 million	12.42	IDC Research
Spain	July 2001	7.38 million	18.43	Nielsen NetRatings
Portugal	December 2000	2 million	19.9	Instituto das Comunicacoes de Portugal
Austria	October 2000	3 million	36.9	Austria Internet Monitor
Finland	August 2000	2.27 million	43.93	Taloustukimus Oy
Sweden	November 2000	5.64 million	63.55	Nielsen NetRatings

Figure 1: Table showing the number of internet users within member states of the European Union.
Source: http://www.nua.ie/surveys/how_many_online/europe.html

U.S.A.

COUNTRY	**DATE**	**NUMBER**	**% POP**	**SOURCE**
U.S.A.	August 2001	166.14 million	59.75	NielsenNetRatings

Figure 2: Table showing the number of internet users within the U.S.A.

Portolan maps and their makers of north-west Europe in the seventeenth and eighteenth century

Sonja Moore – Postgraduate Research PhD

The age of discovery witnessed groundbreaking and revolutionary navigational technology, superior instruments and advances in mathematical science leading to the development of new ships, far better designed and equipped to withstand the unpredictable oceans. These developments, combined with the evolution of weapons, demonstrating far greater destructive performances than previously, were concentrated in the European nations bordering the Atlantic (Cippola, 1967).

Consequent exploitations of valuable raw resources and human labour in the new founded colonies dramatically enriched these European countries, such as England, the Netherlands and Spain. These nations became unscrupulous and dominant masters, not only in the European political arena, but moreover of the Great Seas. The result was a crucial shift of the tightly governed economic monopoly of the Mediterranean world to the small north-west countries, principally the LowLands and England. The maintenance of this increasing wealth and the continuous power struggle depended largely for the next centuries on its expanding connections with overseas colonies and hence on its vital seafaring trading links. This in turn gave rise to the foundation of capable navies, which not only protected the trading ships and its valuable commodities, but additionally also defended the vulnerable coastlines against foreign invasions.

The phenomenal change in the maritime sector spurned a change in the social, economic, political and military life, progressing rapidly during the period of the seventeenth and eighteenth century. Hardly surprising, portolan maps were overwhelmingly pioneered and developed in the main seafaring port, i.e. Rotterdam and Amsterdam in the Netherlands, and London, England.

Dutch and English mapmakers
Holland led the way in map productions by the beginning of the seventeenth century. Goos, Jansson, Robyn, de Wit, Doncker and not to forget Blaeu, were just some of the numerous famous Dutch maritime cartographers, portolan inventors, engravers and publishers. The involvement of whole families, such as in the case of de Wit or Goos, underpins the immense importance associated with this profession. Indeed, as maritime mapmaking kept the van Keulen family in very profitable business for over four generations, the grandsons of 'the' Anthony Jacobsz. were so deeply and proudly involved with this trade that they actually changed their surname to "Lootsman", meaning navigator (pilot). That no doubt was one of the most responsible positions on a sea voyage. The navy and merchants counted on the capabilities if sailors and seamen. They relied on the captain, his first mate and the navigator. These in turn depended on accurate charts, hence chart makers and their wider work-related associates. And mapmakers were carefully watched by their patrons and nations, who expected them to assist in the maintenance, upgrading and increase of the nation's wealth, power, prestige, and safety.

Typically the male heir inherited the family firm. However, in many cases, for instance in Goos and de Wit, women have played important roles too. It was they, when widowed, who maintained the business ends, especially the selling of maps, charts,

instruments and so on. Furthermore, women were here, as in other professions, cleverly used to enhance or broaden this industry. Through marriage connections, family businesses were merged together and at other times trade associations were bonded more closely. Then again, a well sought after outsider was brought within the family business circle. Thus, in Holland we can observe two of the most prestigious families, the Colom and the van Alphen, uniting when their offsprings took the marriage vows. And in England, Richard Mount shrewdly secured his position and association when he proposed to the daughter of his master, Willem Fisher.

England only came to the forefront of chart making in the late seventeenth century. Through a combination of various factors, England slowly found she was becoming the focus of other European powers and was determined to compete for the leading position in Europe. She was surpassing the Dutch navy, out-doing the Dutch East India Company with a version of her own, adding and enlarging trading companies and rapidly expanding her colonies and thus increasing her foreign markets. Therefore, to cope with an ever-increasing fleet of trading and naval vessels England needed competent and efficient chart makers for security and safety. Furthermore, England and the LowLands were directly connected when William of Orange was crowned King of England. The forthcoming increased communication between these two protestant countries on a peaceful basis naturally left a mark in the way mapmaking was viewed in England. For the next decades, English map producers were profoundly influenced by the art of Dutch maritime cartography. In seventeenth century England Mordon, Collins, the Moxon family, Pine, Sellers and Thornton became forerunners of the leading chart makers of the next century. The men of that era included Bickham, Wilson, Mackenzie, Harris, Senex, Mount &Page, to name but a few.

Their occupation and schooling
All of these energetic and dedicated men did not limit their vast talents to just one sector of their occupation. There were many, such as the likes as Thornton, Seller, Dicey, Mordon, Moxon, Goos, Blaeu, and van Keulen, who engaged themselves also in publishing and selling their own maps, charts, atlases, pilot guides, seamen's instruments and so on. Others were scientists, mathematicians, astronomers, engravers or instrument makers (Loots, Loon, Moxon, Harris, Wilson, etc.) Cook, Bligh and Wilson too, were highly esteemed naval captains and officers. Then, there were hydrographers, scholars, surveyors and geographers, such as Seller: Jack of all trades, but seldom a complete competent master of any.

Actually, many of them had other occupations before they choose the path of maritime cartographers. The famous Willem Blaeu, before being employed as a mapmaker, started his career by studying under the renowned Tycho Brahe, either at this man's home-island at Hvn (Holland) for instrument making or at the observatory at Uranianburg for astronomy. Loots on the other hand received first instructions in mathematical and nautical instruments. Nevertheless, in Holland there were several, who attended schools,

which taught mapmaking according to the Marcator-Hondius teaching. In England, belonging as an apprentice to either the Weaver or the Draper Company was a start in the right directions. Alternatively, one could also attend the so-called Thames School to learn the art of sea charts. Of course, many entered the profession later in life after a long work associated relationship with chart makers, as in the case of Senex. Cook, Wilson and Bligh engaged in it by line of naval duty. Some, however, like Berry and Mordon, became direct apprentices to chart makers, such as Moxon.

Their working and association environment

In London, as in Amsterdam, maritime cartographers, publishers and other related professions were all clustered together in the same quarters where the main activities for all kinds of seafaring orientated businesses occurred, i.e. the offices of overseas traders and their store rooms, sea merchants and their clients, ship builders and their providers, marine and naval stores. In London, for instance, reliable and accomplished portolan cartographers could be called upon at the literally justifiable addresses of 'the Atlas in Cornhill', 'the Globe in St. Paul's yard', or the 'Mariner's Cove'. In these bustling town-sectors charts, atlases and pilot guides were perfected and published. In most cases, among those highly skilled craftsmen a healthy competition or alliance existed, such as in the case of the consortium of Thornton, Seller, Fisher, Atkinson and Colson for their 'Atlas Maritumus', 1678. However, between Blaeu, Jansson, Colom, Jacobz. (Lootsman) and van Loon a life long intense competition endured, **especially** against Blaeu!

Their publications

According to Muriel MacCarthy and Caroline Sherwood-Smith (1998), the Spaniard Pedro di Medina and Martine Cotes were the first to put seamanship into words and onto paper. Paolo Forlani in the same year, 1569, produced the first sea chart, which was engraved on copper. Afterwards with the advance of the printing press, all maps were printed. Thereupon, the Wagenhaer maps, after the Dutch cartographer Wagenhaer, were widely used both in England and in the LowLands. They remained largely unchanged until W. J. Blaeu published his first pilot guide in 1608 under the grandiose title 'The Light of Navigation'. Twenty-four years later, 1632, J. Colom published his, or maybe *the first* sea-atlas under the exciting name the 'Fierie Sea-Columne'. However, it was only in 1644 that the sea-charts of all the British Isles were included. This was accomplished by A. Jacobz. in his pilot guide 'Lichtende Column often Zee-Spiegel'. Although Blaeu was one of the first mapmakers and publishers, producing the first pilot guide, it was J. Colom who fashioned the first maritime books and de Wit the first maritime atlas in 1675. Dutch portolan publishers put great importance onto their finished products. Hence, atlases, charts and pilot guides have awe-inspiring titles, which bring together the seriousness, value and duty maritime maps perform. Titles such as 'De Vyerighe Colomn', the 'Zee Fakkel' and especially long titled ones, for instance 'Klaer Lichtende Noort-Ster ofte Zee-Atlas, 'De Groote Lichtende ofte Vyerighe Colomn, ' Lichtende Colomne ofte Zee-spiegel' and De Zee-Atlas of Water Waerld, indeed provoked the sense of the unbridled powers of the sea. Most Dutch publications have variations of these titles and many were reissued over the next decades, such as Jacobz. 'Sea-Atlases' of the 'Zee-Fakkel'. Previous individual charts were often later included in atlas editions. Colomn, in the year of 1663, was so enthusiastic that he produced an 'Atlas of Werelts-Water-Deel' with astonishing **1032 charts**. Most of these Dutch publications, as well, were available in different languages: Latin, Spanish, French, English, Dutch and sometimes German. Producing multi-language maps

must have been the result of endless demands, both at home and abroad, and there can be little doubt, that these Dutch maps were obviously of superior quality and accuracy compared with those produced elsewhere.

When English charts came onto the market the mapmakers had adopted some of the Dutch titles into English, for instance 'The Sea Mirror' from the Dutch 'De Zee-Spiegel'. This was either because it was proven that they were best sellers or the English lacked imagination. Many other publications simply went under the name of 'The English Pilot' – making sure to be distinctly recognisable from the 'Dutch Pilot'. – with some explanatory additions such as the 'Northern', 'Southern' or the 'Oriental Navigation'. Atlases, generally, went by the title 'Atlas Maritimus'. Again, clarifications were added, such as 'Novus', or 'Commercialis', though for those who could not read Latin, the English version was added in the title also. However, there seems to be little or no references within these maps of any other languages. This may indicate that English publications were solely produced and sold at home for domestic use, rather than destined for foreign political, economic or travel demand.

Their patrons and commissions

Portolan maps were insofar different from other maps at that time, as they did not always warrant a patron or some sort of commission in order to be produced. The mere fact that these were very practical tool, rather than some sort of ornamentation or prestige, gave the mapmaker a free hand to publish single charts and sell them to respected customers, which included naturally sea captains, sea merchants and traders. Other buyers included explorers, scientists and overseas travellers. This practise of selling single charts seems to have been more common in England than in the LowLands, where by foreign demand it was of course more sensible to sell in bulk, i.e. atlases. In England, it was possible to advertise for finished maps privately. Dicey, for instance, advertised in *'The General Advertiser'* and Thornton in the *'London Gazette'*. Moxon also had private customers, including Samuel Pepey and Edmond Halley. Halley, on the other hand, also actively encouraged Harrison, Wilson and Senex to produce the most accurate sea chart at that time. This map was dedicated to Lord Parker, the infamously impeached Lord High Chancellor. But there were respectable government institutions, which were in great need of detailed portolan maps, notably the continuously strengthening navy. Defence, maintenance and improvements of natural and manmade harbours, inlets and channels, winds, tides and depth, the most common sea routes and the accurate positions of ships by longitude and latitude were foremost in the minds of the Naval Institutes. As the British monarchy was interested in sea charts as well, they commissioned Bickham in London, ca.1750, to produce a bird's-eye-view of the royal dockyards, fortifications and harbours. He, too, prepared for the admiralty a picturesque sea chart showing the French squadron with ca. 40.000 muskets surveying England's coast prior to the war between the two countries.

Both in England, as in the Netherlands, many portolan cartographers were employed as hydrographers, either directly by the state or by private companies, such as the English and the Dutch East India Companies. Other government departments, including the law courts, used sea charts for marine disputes. In England, *the Royal Society of Arts instituted in London* once decided to hold a competition for the most accurate sea charts. And, naturally, there were the customs and revenue departments, being very keen on having up-to-date charts in order to deal

efficiently with taxes, piracy and smuggling, as well as defence and general improvements of harbours and ports for better navigation. Thus, in the interest of the state, the Council State Commissioner of the Customs granted W. Humble a special licence for the import of cartographic publications from the Netherlands. A set of W. Blaeu's and Robyn's charts also included sailing instructions and realistically sketched landmasses in profile. These may have been sensible instructions and visual aids for sailing novices, embarking for the first time into waters of the north-west coast of Europe.

Not every sea chart however was for the sole purpose of being practical. Pine's map of 1739 was indeed meant for prestige and to reinforce that protestant England was superior over her old rivals. Pine reproduced the burnt tapestry hanging which once upon a time hung in the House of Lords. This exquisite tapestry showed the victory over the Spanish Armada in the form of a sea chart. Added to the battle scenes were the Spanish king and the Pope being annihilated by thunder and lightning hurled down at them by the Protestant English. Just in case on did not get the visual message, helpful words were inscribed: '*God breathed and they were scattered*'. Prestige and self-importance were also the theme of two other related maps. One shows the events and retreat of Bonnie Prince Charles across the waters through the eyes of his loyal Colonel of the Admiralty, Grant. The other, the same occasion, but through the eyes of the pursuer, the duke of Cumberland.

Irish portolan maps and their makers

How did isle of Ireland fit into this maritime world, being neither a strong political nor an impressive economic player in the European sphere? Ireland was from a military strategic point of view very important, as Catholic France could use her as a launching pad to attack protestant England. Therefore, England needed to secure Ireland, both on land and on sea. In comparison to England and the Netherlands, however, Ireland did not possess the same amount of sea charts and definitely very few indigenous mapmakers, such as George Gibson. This young man produced extremely detailed portolan maps of Dublin bay, however, because of being Irish by birth, could not get any state department or corporate support to foot the bill for the financial expenses. His father, a teacher of mathematics, came proudly to the rescue and thus helped to enrich our heritage with superb Irish historical sea charts and documents.

Mackenzie, Roque, Scale, Richards, Cowan, Burgh, Perry, Stokes, Collins and others manufactured very accurate charts, especially of Dublin Bay at various stages. As most of them were English cartographers and publishers, this leads one to believe that rarely an Irish craftsman was educated or interested in this profession or, that the British government did not trust them. The probability is that it may have been a combination of both. Certainly, one could substantiate this mistrust by pointing at the portolan maps of the east coast of Ireland by the British mapmakers, Scale in 1765 and Mackenzie in 1776, for the Irish Revenue Commission and the merchants of Dublin to curtail the smuggling operations. Could they have trusted the Irish, given the nature of the task and the difficult Irish-British political situation?

Besides the Revenue Commission and the merchants, the city corporation, the lord mayor, the sheriff, the Admiralty and its examination board, and the Ballast Office Committee of the City Council all had vested interests in portolan charts with the same agendas as every other port and harbour town in Europe: improving of channels and bays for better navigation for both naval and merchant ships. Other patrons included the Lords Powerscourt and Longford, the Dukes of Bedford and Ormond, who were

naturally quite partial towards these maps, as they owned land and estates bordering the coastline.

Two factors are distinctively noticeable about Irish sea charts. The first is that throughout the two centuries, at last, the coastline of Ireland was constantly improving to a most accurate shape. The second factor is that, as time progresses, many of these maps sadly lost their artistic adornment and became, purely functionally by the end of the eighteenth century.

Visual lay-out

Portolan maps, as already stated, were overall practical appliances. They were of no use to any captain by putting them on a wall, except for show or illustration purposes. Charts were actively spread out on a table, so that one could walk around them and get a proper view from every angle. Mercator's concept of putting the north on the right hand side of the map became, especially in the Netherlands, the traditional form, which was copied throughout England and the LowLands. Though, there seems to be no logical reason or explanation as to how and why this particular lay-out came into existence. On occasions, maps such as Mordon's of 1702 and Mount & Page on 1715, north or east can be found at the top of the chart. When Jacobsz. published his own chart format in 1644, he had compass roses and other focal points where rhump lines radiated from, added to the map. Furthermore, the interior of landmasses were left empty, with only coastal names inscribed towards the inland as not to obscure the important coastline. These tremendous developments occurred in the times of continuous advances of printing techniques, but also when copyrights had yet no legal foothold. It is of no surprise that Jacobsz.'s charts were copied on mass and plagiarism of his works was widespread. Consequentially, Jacobsz.'s method became the prototype of portolan maps. Visually they were distinctively recognisable and easily differentiated from country/landscape maps. Vital features included longitude, latitude and scales of maritime league. Wind directions, coastal dangers, rocks, soundings, time of tides, currents and accurate distances were important incorporated aspects particular to sea charts. However, depending on the patron or the commission, not every map displays all of the characteristics, as can be seen on one chart, dating 1795, in the Maritime Museum, Dun Laoghaire, which shows no longitudes, latitudes or rhumb lines.

On the other hand, other details were added sometimes, which usually was not the norm, unless specifically asked for. Thus, in 1762, Semple presented a chart showing improvements of Dublin bay ordered by the Ballast Office. And Gibson's chart of 1756 depicts magnetic variations, which he himself was deeply interested in.

As with other general maps, portolan charts were also published with delicate cartouches mirroring the political, social, religious and economic situation of both the mapmaker and his patron, and the general ambition of its mission. Cherubs, nautical figures such as sea monsters, nautical scientific and mathematical instruments, various vessel types, presumed overseas cargo indicating wealth, heavenly bodies blowing the different winds, sea gods with tridents and their families gave these maps an air of significant importance and untouchable power. Sometimes, other subtle or exaggerated messages, such as country scenes, were illustrated, either to show what one might expect to find in foreign lands, or to convey an idealised setting in the patron's country. Though if executed to perfection either in ink or in colour, these charts were also great masterpieces of fine art and interestingly pleasing to the eye.

Conclusion

Portolan maps were obvious and principal tools for everyone concerned with the sea, coastal areas, seamanship and its environs, be it Dutch or English governments or individuals, literate or illiterate persons. These charts were a crucial help in expanding empires. With ships being the only mode of transport across the oceans in those centuries, sea charts helped to connect and bring the then unknown worlds together. Sea charts were a necessary aid in the defence of coastal regions and sea routes, for navigation and dock improvements. For north-west Europe, these portolan maps became a valuable help and source for scientific research and

brought about new professions and highly respected occupations. Mapmakers came from a wide variety of backgrounds and held numerous positions aside, developing the sea charts to an ever higher standard of accuracy. However, the story of these skilled men and their products does not end there. This was only the beginning. With the increase of overseas travel, expanding scientific explorations and discoveries, portolan maps not only maintained their initial functions, but were guaranteed a specific future. To explore the consequential developments and importance of portolan maps of the following centuries is a task that should not be neglected.

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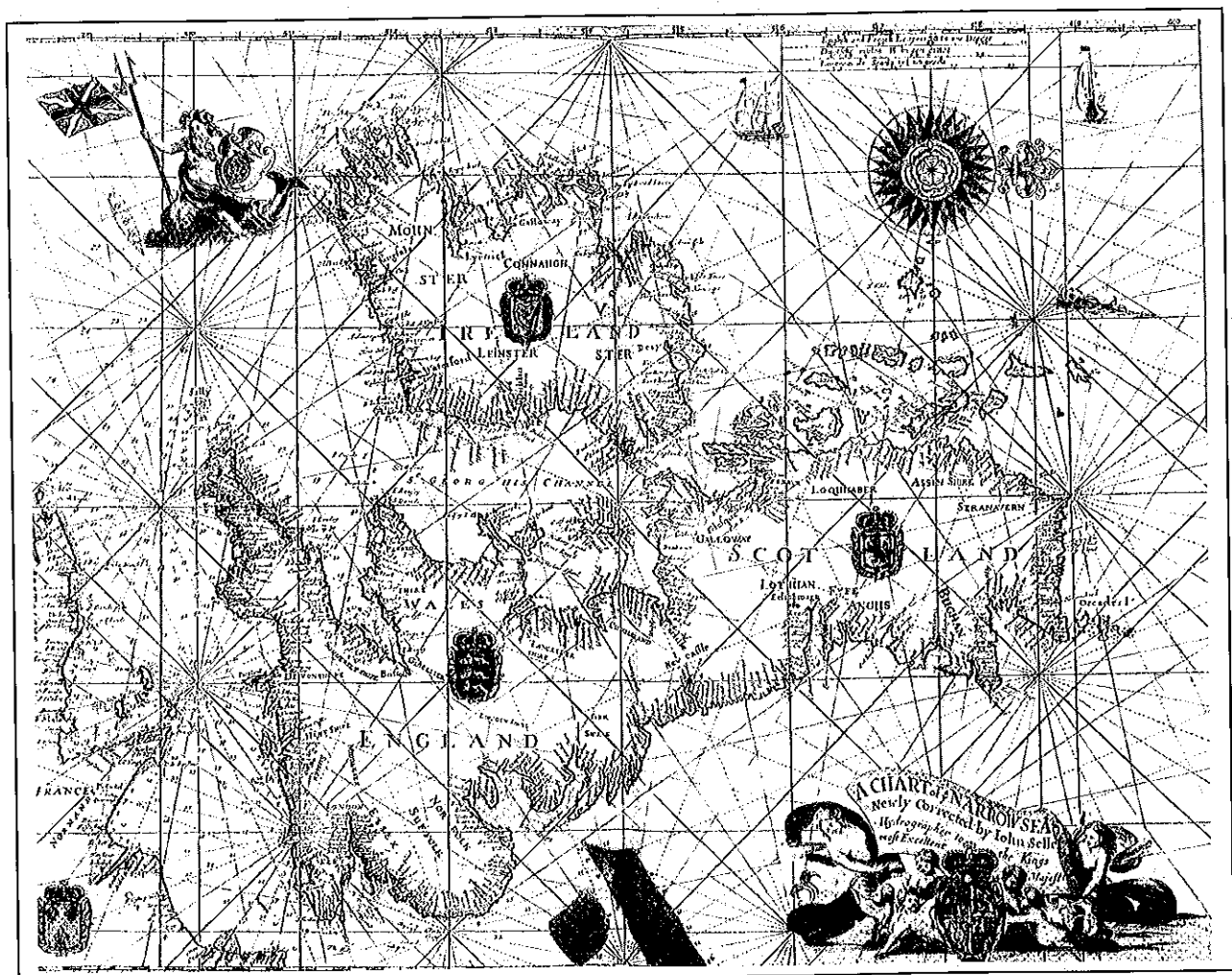
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Reflections on Historical Geographies and Descriptions of the Holy Land, c.1600–1900

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Introduction

In November 1986, while on a year's study leave from Loughborough University in the University of Cambridge, I received an invitation to join a group of human geographers from the U.K. (I called them the 'Noah's Ark group', for there were two representatives of each sub-discipline) to travel to Israel to meet with and to join a field excursion with, a group of Israeli geographers. My first experience of that very special country was powerful and lasting, both emotionally and intellectually, not least a strong memory of travelling up the road from Jericho to Jerusalem late one afternoon, just as the sun was setting and reflecting its light on the walls of Jerusalem. I have revisited the country for research on two subsequent occasions, and have continued to analyze the impressions of the country by a number of scholars who visited or sought to reconstruct its conditions in the past.

George Adam Smith and his Historical Geography of the Holy Land (1894)

I decided, on my first visit (for a variety of reasons, including a sense that much of the conversation would be about modern Israel) to take with me a modern paperback edition of George Adam Smith's *Historical Geography of the Holy Land*, first published in 1894, but running subsequently to many editions. This was a book I had looked at as an undergraduate but not read since. Whenever we stopped at an important site – I particularly remember Masada and a very nationalistic interpretation of the powerful nationalist symbolism of that site being given by our guide – I would read to myself, and occasionally out loud, Smith's description of the place at which we had stopped. The prose is powerful, and highly evocative of place, especially in its Biblical contexts. One of my favourite and one of his most powerful statements, in this case also about the Dead Sea from Chapter 23 which deals with this region :

"Surely there is no region of earth where Nature and History have more cruelly conspired, where so tragic a drama has obtained so awful a theatre. The effect of some historical catastrophes has been heightened by their occurrence amid scenes of beauty and peace. It is otherwise here. Nature, when she has not herself been, by some convulsion, the executioner of judgement, has added every aggravation of horror to the cruelty of the human avenger or the exhaustion of the doomed. The history of the Dead Sea opens with Sodom and Gomorrah, and may be said to close with the massacre of Masada" (Smith,1931 edn., 320).

The power of this prose (his chapter IV, entitled 'The scenery of the Land and its reflection in the Bible' is well worth reading) led me to investigate his life and work, leading to the publication of an article in the *Journal of Historical Geography* in 1988 (Butlin, 1988). Space does not permit a full analysis here, save to say that this prominent Scots divine and academic (an outstanding Old Testament scholar, he became Principal and Vice-Chancellor of the University of Aberdeen) was very much bound up with the progress of geography and physical science in the late nineteenth and early twentieth centuries, and aware of the communicational advantages of maps. His *Atlas of the Historical Geography of the*

Holy Land was published in collaboration with the famous Edinburgh map-maker John Bartholomew in 1915. He was certainly in touch with some of the contemporary developments in physical geography, referencing work on the Rift Valley and biological works on the biogeography, for example, of the Dead Sea, and citing the important work of the American scholar and divine, Edward Robinson on the *Physical Geography of the Holy Land* (Robinson, 1865).

The research on George Adam Smith, through some of his references and authorities cited, led me to investigate other, earlier and contemporary writers on the geography and historical geography of the Holy Land, and to focus on some of the general features of the history of historical geography, as variously understood and practised through the early modern and modern periods, and also to reflect on its context within the broader history of geographical thought. The tradition of 'sacred geography' is worth dwelling on here: the idea that the understanding of events as recorded in the Bible might better be understood against a detailed knowledge of the Geography and the history of the Holy Land, has a long tradition.

The great enthusiasm in the Reformation for the authority of the Bible was not confined to the Protestant churches: Dainville, in his study of the changes in the sixteenth and seventeenth centuries in the geography curricula in French Jesuit institutions in France, shows how sacred geography was a key component, placing emphasis on maps and such events as the location of the Garden of Eden, and the location and effects of the great flood, including the location of Mount Ararat (Dainville, 1940) The connection with the writings of George Adam Smith can, therefore be connected with earlier work in the eighteenth and the seventeenth centuries.

Richard Pococke and Thomas Shaw

An early example of a 'scientific' type of description of the Holy Land is provided by the English scholar Richard Pococke (1704-1765), a clergyman with a passion for travel, who travelled in Egypt and Palestine in the years 1737-1740, and published in 1743-45, in two volumes, his *Description of the East, and some other countries : Egypt, Palestine..* in which he undertook one of the earliest systematic geographical descriptions of the Holy Land, while retaining links with the geographical images of that country given by the ancient geographers and by early maps. The second of the two volumes was entitled *Palestine or the Holy Land, Syria, Mesopotamia, Cyprus and Candea*. Pococke was a clergyman, who became Precentor of Waterford, then archdeacon in Dublin, and from 1765 Bishop of Ossory in Kilkenny. He had a deep knowledge of classical history and geography, and made frequent comparison of the present state of the region through which he was travelling with the accounts of that region by classical writers. His interests in antiquities and in scientific aspects of the places he saw (the chemical composition of the water of the Dead Sea, for example) place him as a forerunner of the great scientific surveys, such as the Napoleonic survey of Egypt of 1798-1801, published between 1809 and 1828, which in turn ushered in a frenetic and

competitive era of European survey and exploration of the region in the nineteenth century (Godlewska, 2001). He continued in some respects the pessimistic tone reflect by earlier writers such as Sandys, particularly about what he saw as the faded glory and reduced agricultural productivity of a once noble and fertile region. Pococke is sometimes compared with another clerical scholar Thomas Shaw (1694-1751), who in 1738 produced an outstanding book called *Travels or Observations relating to Several Parts of Barbary and the Levant*. Shaw was Oxford based, but like many clerical scholars before him he had taken a post as chaplain to an English 'factory' [a colony of merchants], in this case at Algiers. His book was used until well into the nineteenth century, and particularly by the French (it was translated into French in 1743) as an authentic account of the geography and life of North Africa.

Edward Wells and his historical geographies

There were other geographies being written at the end of the seventeenth and the beginning of the eighteenth centuries. One author in whose work I developed a research interest is Edward Wells (1667-1727), author of several important works, including *a Treatise of Antient and Modern Geography* (1701), *An Historical Geography of the New Testament* (1708), and his three-volume *Historical Geography of the Old Testament* (1710,1711,1712). Wells had graduated in Arts and Divinity and had taught Geography, Rhetoric, and Mathematics at Christchurch, in the University of Oxford, from 1697 to 1701. Although, like many other commentators on Biblical or sacred geography, he had not visited the Holy Land himself, his intense study of Biblical classical, and geographical sources (including various maps) gave him an interesting basis for his books, and his appointment as priest of Cotesbach in south Leicestershire in 1702 gave him the time and opportunity to write them. Wells' geographical sources are worth scrutiny, for they reflect the kinds of writers and works that were currently favoured at the time of writing, and they are an interesting mixture of ancient and contemporary sources, representing a range of ideological views. Wells' special (regional) geography was very much in favour in late–seventeenth–century Europe, and included comparisons between geographies ancient and modern (on which he also wrote a book in 1701, which included a chapter on Sacred Geography), but yet also clung to the traditional chronology of the earth's history and the concept of the total repopulation of the earth from Noah's sons after the flood. To all of this he gave the title historical geography (Butlin, 1992).

George Sandys and Thomas Fuller

Earlier works in the field of sacred historical geography came from the 'armchair' writer about the Holy Land, Thomas Fuller, and from inquisitive travellers, such as George Sandys (1578-1644), the youngest son of the archbishop of York, who wrote *A relation of a Journey begun. An. Dom. 1610 in Four Books. Containing a Description of the Turkish Empire, of Egypt, of the Holy Land, of the Remote parts of Italy and Lands adioyning* (1615). This work contains useful descriptions of the landscapes through which he travelled, part of his general thesis about the Holy Land, not unlike that of earlier and later writers, being that of a region which had once seen greater glory and wealth, but which was now in a parlous state, ascribed to the Ottoman occupiers and their religion.

Thomas Fuller's book on the Holy Land is also an interesting read. His *Pisgah-sight of Palestine* published in 1650, emphasizes the interactions between geography and history in the Biblical accounts of the Holy Land, and dwells, like many contemporaries, on the territorial history of the Tribes of Israel, and the battles and wars in which they were involved. He also has some interesting observations on the practice of geography in seventeenth-century England.

Fuller (1608–1661) was a Royalist and served various aristocratic patrons and the King as chaplain in and after the English Civil War. His published works included *The Historie of the Holy Warre* (1634), *Good Thoughts in Bad Times* (1645), *A Pisgah–Sight of Palestine* (1650), *A Church History of Britain; with a history of the University of Cambridge* (1655), and *The History of the Worthies of England*, published after his death, in 1662. Fuller was a scholar of great breadth of interests and wrote in a highly attractive, polemical, and style, with a preference for aphorisms. He engaged readily in controversy, and was quick to respond to criticism of his writings.

A Pisgah–Sight of Palestine followed his writings on the western European Crusades in the Holy Land of the eleventh to thirteenth centuries – including *The Historie of the Holy Warre* (1634), a history of the Crusades to the Holy Land. *A Pisgah– Sight of Palestine* was a geographical description of Palestine, giving details of what was termed its sacred topography, but very much more. The full title of the book is *A Pisgah-Sight of Palestine and the confines thereof, with the Historie of the Old and New Testament acted thereon*. The first 'book' of the work is entitled 'The general description of Judea', and lists some basic aspects of its geography and its products. Against contemporary arguments about the possibility of certainty in matters pertaining to the geography of the Holy Land he states that "The bowels of the best Mappes are puffed up with the humours of fancy, and a scepticalle windinesse, so that a conjecturall Eartquake shakes the foundations of the strongest mountains, in the point of their exact situation. Such are the irreconcileable differences betwixt Geographers and their descriptions" (Fuller, 1650, 2).

He develops his idea of the role of Geography in his study of Palestine : "Our work in hand is a parcell of Geography touching a particular description of Judea...Nor can knowledge herein, be more speedily and truly attained, then [sic] by particular description of the tribes, where the eye will learn more in an hour from a Mappe, then the eare can learn in a day from discourse" (Fuller, 1650, 3). *A Pisgah– Sight* is a long book of 800 pages, illustrated with one major map of the Holy Land together with twenty-seven other large maps, including such features as the territories of the tribes of Israel, the neighbouring regions, and Jerusalem. The maps are decorated with sketches of peoples and their styles of dress, and symbolic representations of events and of topography. They were not particularly accurate, a fact that does not seem greatly to have concerned Fuller: "Such Townes as stand (as one may say) on tiptoes, on the very umstroke, or on any part of the utmost line of any Map (unresolved in a manner to stay out or to come in) are not to be presum'd placed according to exactness, but onlie signifie them here, or thereabouts. Nor is it without precedents in the best Geographers, so in their maps to make the generall continuation of neighbouring countrys clearer thereby" (Fuller, 1650, 5).

The basis of his geographical knowledge of the region described is essentially the evidence from the Bible and the published accounts of contemporary and earlier travellers. The nature of the geographical description of features and places in *A Pisgah-Sight* is entertaining. Fuller continues part of the tradition of writing sacred geographies by using as supporting evidence the accounts of ancient writers such as Strabo, Tacitus, Pliny, Ptolemy, and Josephus Flavius, and the work of sixteenth- and seventeenth-century writers such as Adrichomius, Bochart, Raleigh, Llwyd and Sandys.

A great part of *A Pisgah-Sight of Palestine* reconstructs the territories of the tribes of Israel, and each section contains descriptions of rural and urban areas, their economic geographies and significant biblical events. Fuller's aim was the provision of a background to the Bible and biblical events.

Contexts and ideologies

The historical, ideological, religious and historical contexts of the works cited above are extremely complex, and have important implications also for the ways in which the distant pasts of this particular place are read at present. The above–mentioned texts are all based on Western European Christian and male perspectives, but there are many alternatives, which can be derived from writings by women (Melman, 1992) and from Judaism and Islam, for example. Common themes within the texts cited, include the deterioration of once–great places, a fact frequently attributed to the Ottoman empire and to Islam; and the ways in which accounts of Christian religious practices (such as the celebration of Easter) are influenced, not surprisingly, by the particular religious traditions of the writers. Other common experiences related in these and other accounts involve references to the natural– and human–induced hazards of travel. The use of the term 'Holy Land' itself was fraught with religious and political difficulty, some observers, including Fuller, preferring to use the name 'Palestine'. These accounts contain the germs of the understanding of the significance of archaeological remains, though many of them stay close to literal biblical interpretations of the past. Common issues of interest to commentators before the late nineteenth centuries also include the location of Paradise/The Garden of Eden, and the 'geographies' of the peopling of the earth after the Noahtian flood.

In addition, there is the very difficult and complex set of questions concerned with the ways and instances in which such texts have, perhaps inevitably, become bound up in contemporary analyses of Palestine/The Holy Land's past. Concern has been voiced at what has been seen, from one set of perspectives, as the 'silencing' of Palestinian history through links made between distant developments in prehistory and the emergence of the modern state of Israel (Whitelam, 1995; Butlin, 2001). There will be no immediate and satisfactory solution to these problems, not least while contemporary and tragic conflict in Israel continues, but scholars nonetheless have a responsibility to continue debates on issues of regional and group identities in the past, looking more, perhaps, for pluralist rather than singular explanations.

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Rituals of Imperial Power: Spectacles of resistance interpreting royal visits at the turn of the century Dublin

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In Sep ember 1998 while on an unofficial visit to London, the Irish President, Mary McAleese announced her intention to join with Queen Elizabeth in Messine, Belgium at the opening of the British-Irish funded memorial to the Irish dead of World War II. She also confirmed that she would be meeting with the Duke of Edinburgh in Dublin later in the same year. Both developments were hailed by the President as a sign of the leadership being given in creating 'fully grown, fully adult relationships between these two islands [of Britain and Ireland].' Moreover, McAleese looked forward to a time when she could welcome the British monarch on a state visit to Dublin, 'I think the day that happens is a day we can all say 'Yes, we've arrived at a degree of comfort with each other that

really does mark the closing of the culture of conflict... it will mark the budding-in of the culture of consensus that we are building.' Such a state visit would indeed make a symbolic statement about the maturity of the relationship between Britain and Ireland 80 or so years after the achievement of political independence. It would also mark the first visit by a reigning British monarch to Ireland since 1911 when King George V visited.

Then, the political and cultural context could not have been more different. Dublin was the deposed capital of a country that endured a strained and ambivalent colonial relationship with its nearest neighbour, Great Britain. Successive political discontinuities and tensions ensured that Ireland's status as a colony was ambivalent and significantly different from, for example, India and Calcutta, its counterpart capital and vice-regal seat of the British Indian Empire. A mid-latitude colony of settlement rather than a tropical colony of exploitation, the settler population in Ireland was small and the colonial experience was different to that experienced elsewhere and especially in the non-western world. The Head of State was the British monarch, who was represented in the country by his viceroy, while power rested with the Chief Secretary for Ireland, upon whose advice the viceroy acted. As Fitzpatrick argues, 'both in form and in practice, the government of Ireland was a bizarre blend of 'metropolitan' and 'colonial' elements. So, Ireland could be pictured either as a partner in Britain's empire or as her colony. The royal visits that took place in the early years of the 20th century brought this confusion into sharp focus. Each of these cohorts, of people loyal to empire, of Home Rule nationalists and of more militant republicans, collided in the context of a series of imperial events that took place in the first eleven years of the twentieth century when three British monarchs made five visits to the country; Queen Victoria (1900), King Edward VII (1903, 1904 and 1907) and finally King George V (1911). While each event celebrated Ireland's role as imperial partner and Dublin's status as imperial city, they also proved highly contentious and galvanised opposition among those who saw Ireland as a colonial subject of a malign from of British rule from which the country should break free.

This research explores what can be termed the contested geographies of imperialism that prevailed in turn-of-the-century Ireland and sets out to offer an interpretation of these royal visits as ideologically charged events which played a key role in the construction of a sense of imperial identity in a colonial city on the cusp of independence. The conceptual framework adopted is informed by a growing body of literature on the imperial city, on the role of parades and performance in articulating forms of identity and on the street as a specific site of ritual and spectacle. Recent work by geographers has demonstrated the importance of political processes, such as imperialism, in shaping urban landscapes and emphasised the range of specifically *urban* characteristics associated with imperialism. This work has also highlighted the significant role played by parades in articulating constructions of identity. As landscape metaphors parades impress 'not so much by their actual substance but through pageantry, fanfare and show... spectacle is used to inspire positive feelings of admiration and wonder.' Consequently, there is a range of attributes associated with parading and public spectacle, which must be interpreted. These aspects include the ceremonial space that is the parade route, the different aspects of display and theatricality that go hand in hand with the public performance, including the use of decorations, temporary structures, lighting, fireworks, music, colour, the role of the military. As Yeoh and Kong suggest in their work on national parades in Singapore 'parades... seek to impress through their pageantry, fanfare and show... through the demonstration of military might, through the deliberate use of colour, through the manipulation of lights and fireworks, and through the orchestration of sound and music.' It is also important to consider the role of the participants, both those taking part in the parade, those observing it and those who seek to actively demonstrate resistance.

During the royal visits to Ireland, Dublin's urban landscape became the stage upon which imperial power was acted out with much pomp and ceremony. Each visit embodied a significant measure of spectacle, theatricality and choreographed ritual, designed to ensure a measure of symbolic and indeed political significance that went far beyond the remit of a merely private visit. As landscape spectacles they temporarily transformed the city and in creating a sense of awe and wonderment, also cultivated a sense of imperial identity that brought Dubliners into a closer communion with the centre of the empire. They provoked enormous public interest and support from those loyal to the crown, as well as intense opposition and demonstration of resistance from the nationalist community who challenged the imperial hegemony that these events represented. Particular attention is paid in this work to the ways in which Dublin was used as a site for the royal procession, to the symbolic geography of the ceremonial parade route, the elements of display and theatricality that were utilised, including the various decorations erected, the use of colour, of music and of particular symbolic events that took place during the royal procession. Each of these elements were given careful consideration by the state and by loyal Irish institutions in order to fulfil their imperial objectives. More than just exploring the spectacle associated with these events, this research also interprets the meaning beneath the imperial gloss and explore the ways in which it was contested and resisted by groups at odds with the imperial regime. Dublin was the context in which imperial rule was played out but also the site where it was challenged by the various strands of Irish nationalism.

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Lesotho – The Mountain Kingdom

Julian Bloomer – 3rd Arts

The corrugated iron shacks swept by, people treaded home along the well-worn pathways by the roadside and Bob Marley declared that 'everything is gonna be all right'. As the combi roared towards the setting sun visions of Africa became reality but as yet still blurred by romanticism, one thing was clear however – Marley's declaration is taking time to prove itself in this particular part of the world.

'The Roof of Africa' as Lesotho is quite accurately titled is one of only three world nations that are completely surrounded by just one other nation (the Vatican and Monaco being the other two). Lesotho then, due to this rather unique geographical position, is completely economically dependent on its one neighbour – South Africa. In fact it is only with some luck that Lesotho, then known as Basutoland, was not declared a British protectorate at the start of the 20th century and thus not a part of the Union of South Africa in 1910. This quirk of fate saved Lesotho from becoming a homeland in 1948, which is surely what would have happened under the then South African regime of apartheid. The 'mountain kingdom' peacefully gained its independence from Britain in 1966. From this time on the political events of Lesotho faithfully followed the proud tradition of so many African nations with many a military coup. In 1998, after fraudulent elections, riots occurred that led to the destruction of much of the main thoroughfare in the capital Maseru. The South African National Defence Force (SANDF) and the Botswana Defence Force (BDF) came in as part of a supposedly peacekeeping force. The Basotho people (the majority tribe in Lesotho at 85%) though are very bitter over the role played by SANDF and anti-South African sentiment runs high throughout the county. While political stability and a certain calmness has returned to Lesotho this will be put to the test later this year when the next general election is to be held.

The smiles of the easy-going Basotho people belie the shocking statistics that attempt to quantify the problems in one of the world's poorest nations. The GNP, as of 1998, was decreasing at a rate of 3.1%. The majority of the population survives through subsistence farming, with maize being the staple crop. Lesotho's main export is its one natural resource that it has in abundance -- water. Through the Lesotho Highlands Water Project, an incredible engineering feat involving many major dams and two tunnels through the Maluti Mountains, water is being captured, diverted and sold to South Africa. While optimism is currently very high, especially in the mountain villages that have gained from the new infrastructure and employment opportunities, the possible environmental consequences of diverting such tremendous amounts of water are yet to be realised. In fact water is not the only commodity that Lesotho is exporting to South Africa. If Lesotho were also getting paid for the amount of soil being eroded from its slopes it may indeed have a significantly higher GNP. Poor farming practices and wandering cattle, combined with sparsely covered ground, ensure that much valuable soil is lost from the steep mountainsides each year.
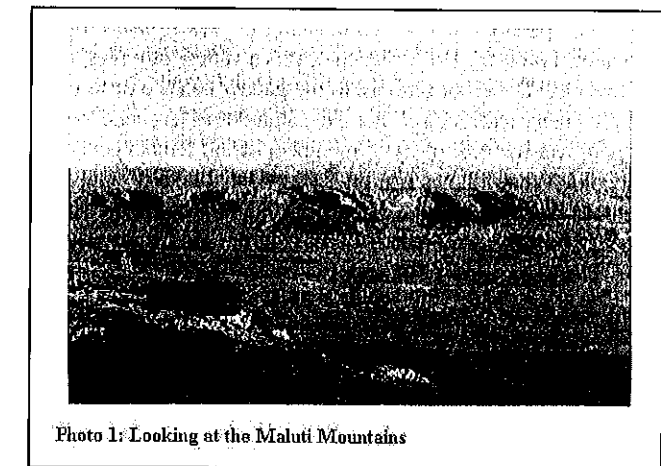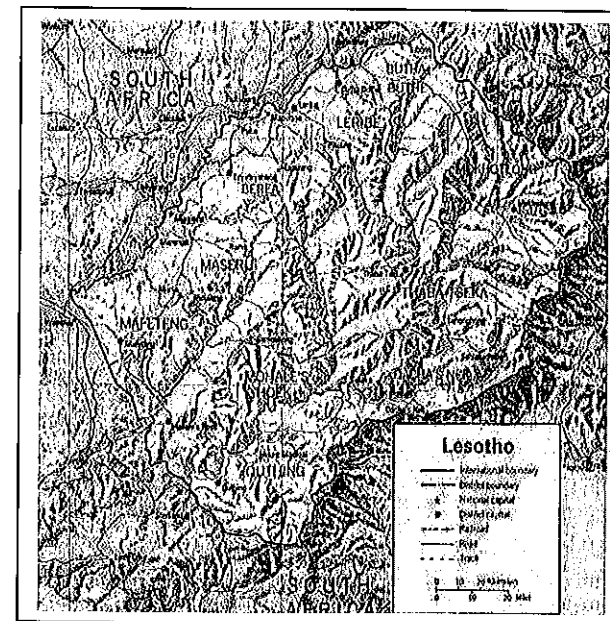

Photo 1: Looking at the Maluti Mountains

Life expectancy is currently 56 years at birth. This is not however a nutritional problem as such but more to do with the provision of health services and the spread of diseases, especially the HIV virus. AIDS awareness in towns and urban areas along the lowland (west) side of the country is quite high given the amount of posters and other publicity campaigns run by the AIDS awareness groups in the region. In the remote mountain areas though ignorance is prolific with one principle of the local primary school declaring that he was not sure whether it was not the use of condoms themselves that transmitted AIDS. Much false information seems to exist regarding the causes of transmittance. The United Nations estimate of an adult HIV infection rate of 23.57% (1999) shows just how mind boggling the problem is in the country. Clearly the lack of education regarding the transmission of AIDS can be playing no small role in allowing this figure to keep rising, and addressing this issue is the task faced by AIDS awareness groups, non-governmental and governmental alike. From personal observation there appeared to be a great stigma attached to AIDS and even after someone died from the virus the true cause of death was not alluded to. This covering up and denial of the situation is not helping either, instead it forces victims to suffer alone and even ignore the problem, resulting in a spread of the virus.

From a statistical point of view, with only five doctors per one hundred thousand people, Lesotho is among the most poorly served countries in the world in terms of health care. An informal tour of the Queen Elizabeth 2 hospital in Maseru revealed the depressing state that health care in Lesotho is in. A fine hospital in its day, the five decades since its completion though have not treated the building well and apart from the odd electric monitors and the two televisions in the waiting rooms, time has moved slowly in the main hospital of Lesotho. With such poor medical facilities at the starting line how can such a country begin to do battle with the AIDS epidemic?

Since the collapse of the apartheid regime in neighbouring South Africa in 1994 the knock-on effects for Lesotho have placed the country in an even more precarious position. As unemployment levels have soared in South Africa and the price of gold dropped the traditional area of employment for Basotho men, the South African gold mines, has rapidly deteriorated. Lesotho then not only has to cope with problems on the home front, especially the failing health of a sizable proportion of the population, but also come to terms with a radical reduction in income from relatives in South Africa. This unfaltering economic dependency on South Africa, while being somewhat alleviated by the Lesotho Highlands Water Project, is proving to be Lesotho's biggest obstacle to overcome. With the prospects for South Africa's economy not shining brightly at present then where and to whom can this impoverished 'mountain kingdom' turn to in its hour of need?

A few observations and personal notes on sexism in schools

F. Houghton – Postgraduate Research PhD

There is a plethora of research detailing the sexist nature of the educational process. This research covers a variety of topics, from the historical design of schools, to the gender balance of teachers and principals, teaching practices, the attitudes of teachers, as well the portrayal (or lack of it) of members of the female gender in textbooks. What follows is a brief experiential note detailing my observations on sexism in schools, including some of its spatial forms, and my (mostly failed) attempts to try and be a non-sexist male teacher.

I remember starting my postgraduate training to become a teacher in the early 1990s. I was surprised that on this, admittedly very intensive, one-year postgraduate course, the total time committed to the topic of gender equality was approximately one hour. This struck me as very odd given the overwhelming body of evidence that exists clearly detailing the extent of sexism in the education process. In view of this glaring omission, I resolved to try and further my knowledge on this topic by focussing my dissertation on sexism in teaching materials.

I was shocked on my training course by the high degree of gender segregation in schools. I was familiar with research showing this among children, but was surprised by how it affected teachers as well as pupils.

Before commencing the teacher-training course in late September/early October it was obligatory to spend two weeks observation in a primary/national school. In effect this meant working as a form of teaching assistant for this period. The school I chose for my period of teaching observation had been experiencing a decline in numbers and therefore had two staff rooms rather than just the usual one. Ostensibly these were classified as the smoking, and non-smoking staff-rooms. In reality however for the vast majority of the day they were single gender staff-rooms. The principal would address all members of the teaching staff in the non-smoking staff-room each morning at about nine o'clock. Following this the male members of staff would withdraw to the smoking staff-room. Barring occasional errands into the non-smoking staff-room, the male members of staff would then operate between their classrooms and the smoking staff-room for the remainder of the day. Gender segregation remained relatively intact with female members of staff who did smoke generally abstaining during school hours. Being a non-smoker myself I never did discover if there was a 100 percent smoking rate among male members of staff (perhaps such a high smoking rate among men, if they were all chain smokers could easily explain this practice).

Approximately two months after this, I remember starting my teaching block in a co-educational secondary school. I had deliberately opted for this type of school feeling that this was a situation in which work towards achieving equality on a number issues could best be achieved. Despite some preliminary training on video the microteaching labs, beginning teaching practice was still a big step and I was duly nervous. I had previously visited the school only once to meet the principal, head of department and the liaison teacher for trainee teachers. I clearly remember finding the staff room door and pausing briefly to calm my nerves before going in. I opened the door and entered to find myself in a large room containing approximately 40 chairs and about five people. Feeling nervous and an obvious stranger, I hastily sat down in one of the seats nearest the door. As the colour receded from my cheeks and my heart beat returned to something approaching normal I looked around to see that approximately half of the chairs were arrayed in a row along the back of the room, while the rest, including where I was sitting were positioned in an L shape between them and the door. As the minutes ticked by towards nine o'clock I had begun to notice a distinct pattern emerging as teachers of different genders entered the room. Male teachers uniformly passed by me to sit on the row of chairs spaced along the back of the room, while female teachers sat around me near the door in the L shape seating configuration. This left me somewhat conspicuous in my jacket and tie among the female teachers. However at this point my head of department who had entered sometime earlier came over and as subtly as possible whispered in my ear that 'the men generally sit along the back, leaving this area for the women'. Needless to say at that point in time I hastily moved and regret to say that I never sat in that area again.
It seems impossible to try and overcome gender segregation and strive towards greater gender equality through education when gender is a key determinant of relationships between staff members. The multiplier effect is a term used frequently to describe the potential of teachers to effect change. It is a term normally used to describe the possibility of effecting positive change. However such a level of segregation must raise serious questions as to the nature of the message being transmitted and being subjected to that multiplier effect. I had of course encountered numerous single sex groups in the past. However the majority of these groups were at least semi-permeable to other sex interaction. What surprised me was how rigid this gender barrier was.
Obviously when actually teaching I was able to see for myself the sex differences in behaviour which are all too apparent to teachers. The situation I encountered in most classes was almost amusing in its stereotypical nature. Although there were of course exceptions, the classrooms seemed to be full of loud, boisterous boys and generally quieter, more conscientious girls. However through some hard work and consciously and consistently reminding myself of the extensive research evidence demonstrating pro-male gender bias in teachers' attention, I attempted to try and achieve some balance in my attention. In truth I doubt I ever managed to give the 50 percent of my class that were girls, 50 percent of my time. It was however a conscious target and I like to imagine I went at least some small way towards achieving it. I am not so naive as to believe my practice did any good. Certainly not given the short length of teaching practices and my reduced trainee-teaching load. However I feel that at least I tried not to commit too much damage. My second teaching placement was in a single sex grammar school, which was not particularly where I saw myself. However as it was in run by a religious order and that point in time I had never even stepped inside a school operated by a religious order, so I was happy at the thought of broadening my experience. While in this school I later tried repeatedly to raise the issue of sexism in society with pupils but found my male pupils wholly uninterested in the topic, declining to engage at all. This was unusual given their generally high level of enthusiasm and the positive relationship I had with them. This was the only topic I brought up which ever met with this negative and apathetic response. Alas I never did manage to significantly overcome this block and never could fully engage this topic with my classes here.
Throughout my training I found many of the standard textbooks to be sexist in their portrayal of women, or in the absence of women. Where possible I tried to correct this by preparing my own materials, but found myself continually without the time, energy or resources to comprehensively adopt this approach. Teaching, writing lesson plans, reviewing lessons and writing critiques alongside the incessant piles of marking did not leave me with much time for re-writing the textbooks.
In my naïve youth as a trainee-teacher, I had expected an uphill struggle to try and combat sexism and inequality generally. However I had expected resistance to come from attitudes socialised into children, which I hoped were still open to influence. Instead what surprised me at the time was level of gender segregation in teachers. The issue of what message is in effect being transmitted to successive cohorts of children remains. I still find it particularly intriguing how spatial aspects of this process, such as the single-gender staff-room and the gender-specific seating zones, serve to perpetuate and intensify gender segregation among teachers.

The denial of the 'right to place': the implications of moral-legal discourse on Traveller spaces of citizenship.

Una Crowley – Postgraduate Research PhD

The purpose of this paper is to explore the nature and implications of the 1998 Traveller Accommodation Act for the everyday lives of Travellers and relate it to current critical human geography discourses on citizenship. My main argument is that recent moral-legal discourse in relation to Travellers, contrary to its 'progressive' rhetoric, masks a continuum of the exclusionary conceptions of citizenship that marked the early decades of the State. This conception is "... one that explicitly understands that excluding people from their rights, not only as citizens, but also as thinking, acting persons' is both good and just" (Mitchell 1997:306), and is also contrary to the rhetoric of European Union models of citizenship, social inclusion and freedom of movement. Through an examination of historical discourse, policy and legal responses to nomadism the paper exposes the limits of the concept of modern citizenship by opening up questions, drawing new connections and revealing how it can be drawn and redrawn by structures of regulation and confinement.

The paper will approach the discussion on the 1998 Traveller Accommodation Act by examining some historical motives for anti-nomadic discourse and the stereotypic thinking that is constantly reinforced by dominant sedentary culture and ideology in Ireland. These powerful discourses, with their inherent claims to 'truth' have led, at least in part, to the present situation where Travellers have been singled out for special attention by the State in this new legislation and programmatically denied the full rights of citizenship. It is as Painter and Philo (1995:108) have argued in this realm of "...assumptions, fears and prejudices that citizenship in both its de jure and de facto guises is invented prior to its installation in actual practices 'on the ground'".
Part Two examines the implications of Section 32 and 35 of the 1998 Traveller Accommodation Act by questioning not only the discourses surrounding the Act but also the freedoms accruing to Travellers. My main concern here is with the way in which space has been employed as a structuring feature of citizenship and how such treatment has involved the mapping of Travellers personal mobility and the erosion of citizenship by circumscribing the spaces within which Travellers can act unhindered by political interference (Fyffe, 1995).

Part 1

1957-1990 'Disciplined Nationalism'[1]

Denigration and oppression of Travellers has been documented in writings as early as 1830's. However, it wasn't until the second half of the twentieth century as government took an interest in 'civilising' and 'settling' the Traveller that mobility became a prime target of government.

In 1957 the Irish government embarked on a new strategy of foreign led industrialisation which sought to modernise Ireland, attract new industry, improve farming methods and generally erase the traces of 'underdevelopment' and poverty which were still so much in evidence (Helleiner 1997:114). It was a period when the basis of the national development strategy was laid which propelled the economy towards unprecedented growth in the fifteen-year period 1958-73. It marked a major shift in social policy from the anti-interventionist stance supported by the Church towards increased state involvement.

The Taoiseach of the time, Sean Lemass, argued at the 1959 Ard Fheis that 'patriotism was the motive force necessary to build up a progressive nation with a viable economy'[2]. Selfish concerns were to be set aside for the benefit of the nation and common good. This utilitarian vision of modernising Ireland gave rise to xenophobic opposition to Travellers based on a purified national sense of identity. If the Irish were considered (by the British certainly, and by many Americans as well) to have the propensity for drinking too much, for slovenly habits, and large families, the Travellers were a stereotype brought to life, walking caricatures of an image nationalist Ireland was consciously trying to shed (Kent 1980).

Their preference for self-employment and rejection of proletarianism earned them the antipathy of some of the most powerful groups in Irish society. Traveller's economic independence was perceived as a rejection of the new ideologies of the Lemass era and they increasingly came to represent a direct and exceptionally visible opposition to the norms and values of Irish sedentary society (MacLaughlin 1996). Travellers were constructed as being against the common good, as economic exploiters, lawless and criminal. As a class of people thought to be incorrigibly uncivilised, Travellers were viewed as thorns in the side of progress and modernisation and for many, the 'rehabilitation', settlement and assimilation of Travellers was seen as a necessary part of the larger project of national economic and social development (Helleiner 1997, 2000).

Travellers were 'shackled' by an ideology that Lemass referred to as 'disciplined nationalism'. It was an ideology that was to have dramatic effects for their way of life over the next forty years. This conception of nationalism and 'republican' citizenship gave minorities no assurance that their rights would be protected in the face of majority will. For Travellers disciplined nationalism went beyond mere rhetoric and in 1963 after the publication of the Report of the Commission on Itinerancy, the government embarked on a national programme for the 'settlement', 'assimilation' and 'rehabilitation' of its nomadic population.

This Report was a major milestone in the discursive construction of Travellers. It was driven by utopian plans and an authoritative disregard for the values, desires and objections of Travellers. Policy makers envisioned a series of homogenising and rationalising reforms that would transform the heterogeneous society of Travellers into part of the greater national society where the same 'standardised' norms, customs, beliefs and work ethics would prevail-part of the nationalist ideology of a single society perfectly legible from the centre (Scott 1998).

The Commission took complex, traditional types of alliance systems, illegible and traditional social practices such as nomadism, peddling, scrap collecting, horse dealing and created a standard grid. The use of surveys and censuses, served as a technique of decipherment, enabling the chaos of nomadism and Travellers existence to be disentangled. It allowed Travellers to be disembedded from their individual socio-spatial contexts into a domain that could be represented and opened up to political deliberation and intervention and brought inside the policy process. These state simplifications however, were like abridged maps and did not represent the actual activity or lives of Travellers they depicted, nor were they intended to. They represented only the slice of it that was of interest to officials (Scott 1998). The types of information gathered and the way it is shuffled and cumulated (Latour 1987) allowed for the creation of a fictive space for Travellers. Popular and historical discourse became a resource which was selectively 'mined'. Travellers 'reality' was now in a form where it could be debated and diagnosed. Travellers were conceptualised as a social and moral problem with certain definable characteristics; they are illiterate, unemployed, pathological and irresponsible.

The Report, with its inherent claims to 'truth' and expertise provided the limits within which the discursive objects, Travellers, could act and exist. What was involved, to use Jacques Donzelot's phrase, was a 'systematic grafting of morality on to economics' (Procacci 1991: 157). Its ostensible humanitarian discourse disguised and obscured the political and material aims of a modernising Irish nation. Settlement involved the fabrication of a new moral geography and from the 1960's on, the mapping of Travellers personal mobility became an intrinsic part of government's settlement strategy. It was assumed that these proposals would put an end to nomadism, transgression, unauthorised camping and their littered scrap.

Over the last four decades Travellers have been forced to settle in overcrowded unsanitary sites, or ghettoised in marginal urban housing estates. They have been subjected to vigilante attacks, attacks in the media and economic restriction. Nomadic Travellers are continually subjected to harassment and eviction. They remain one of the most impoverished and socially excluded groups in Ireland today and fare badly on every indicator used to measure disadvantage: including unemployment, illiteracy, poverty, health status, access to decision-making and political representation.

As with other minorities however, Travellers can and do push up against the regulating, constraining limits of their spaces of citizenship (Bell, 1995). Very quickly Travellers became conversant with the law in regard to where they could encamp and how long the process of getting prohibition orders would take. As soon as the order came they would then move on to another area where the legal process of eviction would begin all over again. The drastic reduction in traditional sites meant they tended to camp on vacant industrial land, near housing estates or roads which were in the process of construction and according to O'Boyle 'generally arrived in large conveys' (1999:286). More recently, 'cash to move on' disputes have created further tensions and there are regular reports of extortion by the Travellers in the papers, "...it was alleged in the High Court that travellers on another site near Kilruddery had demanded 2000, for every man, woman and child from a development company, in return for moving." (Irish Times August 29 1994).

[1] *Irish Press* 9 November 1960 (Speech by Lemass at Fianna Fail Ard Feis)
[2] *Irish Press* 11 November 1959

Part two

1990-'Citizen Europe'

By the 1990's the obvious failure of the settlement programme, the explosion in the Traveller population and mounting tensions between the two communities has led to increased pressure on government to find a 'solution'. It was also clear that government would have to find alternative methods of representing and intervening in the aspects of Traveller life it sought to govern. Under pressure on one side to enact legislation to prevent nomadism, and from the European Community to protect Travellers rights, the state was faced with a dilemma. How could government single out Travellers for legislation and prevent nomadism without been seen to infringe on Travellers democratic rights? How could the State govern Travellers in ways that were seen to be consonant with liberal democratic ideals? Government needed and ultimately pursued a functional substitute for confinement in the disciplinary control of Travellers as 'free' citizens; an approach that would enlist the support of Travellers, local authorities and the settled community; a strategy and technique to render the settlement programme operable.

The governmental technique used is to invoke the powerful and emotional discourse of citizenship. Citizenship discourse within the European Union is often referred to in the context of belonging, identity, equality, rights and inclusion. However, it is also very much about who doesn't belong; denial of identity and exclusion. There is, as MacKian (1995) has argued, a huge divide between *discussing* citizenship in terms of who should or should not be a citizen, and the *actuality* of being a citizen. There is a need to go beyond the formal *allocation of rights* to enable us to account for the barriers to realising these rights and actively participating as full citizens (Roche 1997: 155).

Active Citizenship discourse, the conception of citizenship used in relation to Travellers, has conceptualised the citizen in terms of obligation and responsibility. The emphasis on social rights as central to citizenship is offset by a parallel emphasis on opportunities and entitlements. The 'genuine' citizen is viewed as responsible, involved in community and makes a positive contribution to society. Active citizenship discourse works a double alliance; firstly it allies itself to political authorities, translating the political concerns of ill health, poverty, uncontrolled mobility, criminality, pathology into a vocabulary of management; a mechanism for rendering Travellers 'reality' amenable to certain kinds of action. It then works in alliance with Travellers, translating the same concerns into a range of techniques for improvement (Rose and Miller 1992:175).

The moralising rhetoric of the previous decades has been transformed into a language of Travellers helping themselves and having a responsibility towards their environment and locality. Discussions on the expanding and retracting spaces of citizenship repeatedly turn to this notion of locality and towards inclusion. There is an implicit assumption that the locality will represent the means for social inclusion, the base from which the individual will articulate their citizenship. Indeed the entitlements to many social rights (for example the right to vote, social welfare) depend on spatial fixity. But what if, as MacKian (1995:213) asks, there is no locality, no territorial unit to which an individual relates, no specific material geography?

Far from being automatically inclusive, the active citizenship promoted by the European Community and Irish government, with the Act is overtly hostile to nomadism, allowing increased penetration of the Travelling Community by the state and erodes citizenship by circumscribing the spaces within which Travellers can act unhindered by political interference (Fyffe 1995).

its fixed relation to 'locality', can impose a grid of definition on the possibilities for 'citizen Traveller' that serves both to exclude and highlight those who do not 'play by the rules'. The nomadic Traveller is denied a voice and their non-conforming territoriality is seen as their own wilful exclusion from the entitlements and responsibilities of citizenship. Ironically, the more economic success nomadic Travellers attain, the more vulnerable they are to stereotyping as criminals and economic exploiters. What is really happening through 'active' citizen discourse is the construction of the nomadic Traveller as an ensemble of adversaries that confront the social project, to use Procacci's words "the constituting of a different subject from the productive subject: a subject aware of its duties, a civil and political subject" (1991:163).

This representation of Travellers serves both to rationalise hostile sedentary community action and justify restrictive legislation and state policies that programmatically deny to Travellers the full, inclusive rights of citizenship based on the acknowledgement of diversity. After all it was not aimed at all Travellers, just those who reject the responsibilities and obligations of citizenship. Travellers who refuse to actively participate in the social, economic and political 'project' according to the set 'ground rules' are portrayed as anti-citizen and made to forfeit the rights of citizenship. The dominant power relations inherent in this discourse are 'obscured by the fictions of the decontextualised and universal citizen"(Kofman 1995). The debate is polarised in terms of being either for or against the common good, if it is against the common good (for example camping on public grounds) then the public is victimised and the perpetrators must be excluded from public (Bell 1995:146).

1998 Traveller Accommodation Act

Presented as part of a larger process of legal reform aimed at protecting minorities and Irish ratification of international human rights legislation, the 1998 Traveller Accommodation constituted the Irish governments undertaking of its duty to Travellers by providing accommodation and justified as a necessary measure in the drive for successful settlement and enhancement of individual Travellers quality of life. The sections of the Act that criminalised nomadism were down played; after all they only applied to Travellers who refused their responsibilities to society. The territorial exclusion of nomadic Travellers from public space (or at least the legal exclusion of behaviours that make it possible to live their way of life) has increased in strength with the passing of the 1998 Traveller Accommodation Act.

Section 32 of the Act replaces and strengthens the powers of local authorities and the police to evict Travellers from public spaces. It criminalises camping on the roadside or unoccupied land, outlawing the places Travellers traditionally camp. Travellers can be forced to move to sites (often over crowded) with limited facilities, this may include just one tap between several families. Travellers are not allowed camp within one-mile radius of any Traveller accommodation provided for Travellers by local authorities. This seriously impacts on the social and spatial practices of Travellers' everyday lives. Travellers homes can also be confiscated or removed if they are considered unfit for human habitation due to a lack of proper services (this could relate to almost all illegally camped caravans); likely to obstruct or interfere with the use of public or private amenities; likely to constitute a significant risk to personal health or public safety. This section of Section 35 (relating to halting sites) can be read as a form of 'Border Control' (Sahlin 1995) and involves the physical exclusion or expulsion of tenants who do not conform, controlling who is let into sites and who is allowed to stay, in effect screening applicants

and removing problem tenants. It operates through the classification of people in terms of opposites (reasonable/unreasonable) and through the isolation of categories, which are rejected. Interpretation and response is shaped by sedentary social and cultural values. 'Good tenants' are those who aspire to conformity, to the dominant social values and the 'bad tenants' are those who threaten the prevailing social order by disrupting these values (for example lighting camp fires, keeping horses, scrap etc). Restrictive tenancy agreements deny Travellers the opportunity of remaining economically active. As with section 32 this section gives considerable discretionary powers to local authorities and Traveller behaviour is controlled by supervising, punishing and rewarding.

The Act also legislates certain moral claims; that the right to a nomadic way of life is inappropriate and illegitimate. Territorial exclusion is much more subtle and devastating than segregation; it means that nomadic Travellers now have nowhere legally to camp (except for a handful of transient sites) and moving from one camp to another involves nothing more liberating than moving from one trespass charge to another. They are only allowed to be as long as they are moving. The intent is clear, to control behaviour and space such that Travellers simply cannot lead a nomadic lifestyle, without breaking laws (Mitchell 1997). This intervention in urban aesthetics attempts, in effect, to remove nomadic Travellers from public space, delimit their geography and enforce their invisibility. What perhaps can be seen as the most detrimental effect of territorial exclusion in terms of achieving equal citizenship, is the tendency of the marginalised to find localised solutions. Painter refers to "the tendency to avoid public spaces where 'proper' citizens go and instead to seek and carve out safe havens away from the 'terrorism' of such spaces" (1995:116), increasing their invisibility, lack of voice and place in society.

The degree to which the Act curtails the freedom of Travellers seems to be disregarded by policy makers and legislators. Not only is the Act presented as rational and reasonable, but is vindicated with some conception of right; they see themselves as protectors of the common good and national interests. Theirs is not simply a good or just cause but a very necessary one. Law exhibit its own 'will to truth', declares the guilt of offenders and exerts a 'pressure', a 'power constraint' on other discourses. There is no need to take a

hands-off approach to Travellers who do not conform to the norms and values of settled society and act as responsible citizens, they are after all of no economic value to the nation and their nomadism is seen by many as a pretext for unlawful activities.

Conclusion
Contemporary reforms supposedly aimed at improving the quality of life for Travellers have been structured and constrained by a pervasive view that presupposes the superiority of sedentary life over the nomadic. The knowledge and truths produced within Traveller related discourses were not merely a neutral reflection of what is happening on the ground. It was never a question of determining Travellers concrete 'reality', and still less of eulogising their culture and mode of existence they express. The policies and programmes adopted over the last forty years encouraged a view of Travellers as anti-citizen, lazy, criminal, uncivilised, and in need of rehabilitation.

Despite the rhetoric of social inclusion and freedom of movement for all citizens, the Irish government has chosen a continuum of an exclusionary model of citizenship when dealing with its nomadic population. Travellers continue to be excluded from the public domains of civil society-trapped in an exclusionary model of citizenship with a fixed relation to territory, driven by utopian plans and an authoritative disregard for the values, desires or objections of nomadic Travellers.

An examination of the 1998 Traveller Accommodation Act exposes the myth of equality before the law and the Act could be interpreted as a rigid and overtly hostile piece of legislation and a potentially powerful instrument in the prevention of travelling and the final settlement of Travellers. Sections 32 and 35 of this Act, seen as a *quid pro quo* for the provision of accommodation, attempts not just to annihilate Traveller space but also creates and tolerates social conditions that might very well end their existence as a separate group. As with many other policies and programmes in relation to Travellers the 1998 Traveller Accommodation Act is, to use Scott's words:

"…short of that draconian but all too common situation, we are left to weigh judiciously the benefits of certain state interventions against their costs"(Scott 1998:6).

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Rural/Agriculture:

The myth of rural community

Lisa Hammond – 2nd Arts

Europeans have long since established the idealised notion of 'rurality' as being the safer, healthier and friendlier environment to live in as opposed to the rat race of urban life. During the nineteenth and twentieth centuries rural communities became increasingly difficult to define. As the growth of industry progressed into rural society, traditional rural communities showed characteristics of urban societies. This essay will define the term 'rural community' and discuss the principles used to differentiate between them.

Sociologists and social geographers alike have set out to define the characteristics of rural communities and their populations. The rural urban continuum emerged in the late nineteenth century. Ferdinand Tonnies, a sociologist, based his theory on the extremes of both rural and urban communities. He termed the rural *'Gemeinschaft'* and the urban *'Gessellschaft.'* He believed that the rural community was based on kinship with status being ascribed and the land being a characteristic form of wealth. In these rural communities religion was a central institution. He described the urban communities as a cosmopolitan lifestyle with great isolation, where status is based on personal achievement and money is a visible form of wealth. In urban communities central institutions are based on political opinion.

However Tonnies has been criticised for not distinguishing between the two areas but merely describing the two extremes of both rural and urban life, therefor his theory has been referred to as unrealistic and inaccurate. Even though some recognised it as being based on 'an ideal type' and not based on empirical research. In recent times there has been empirical evidence to prove that rural communities are not always 'traditional' or to use Tonnies term *'Gemeinschaft'* and visa versa. Some theorists believe that Tonnies rural-urban continuum only stresses the vast differences between the two communities and have gone on to investigate the "transformation which occurs from one pole to the other, thus offering a theory of social change which can be use to identify the nature and direction of the social processes involved."

Louis Wirth another sociologist based his theory outlined in 'urbanism as a way of life' in 1938 on the size, density and heterogeneity of the urban population, believing that this has a profound effect on the community, leading to isolation and segregation. Whereas he describes rural areas as traditional folk communities.

Pahl, another critic of Tonnies model believed that there were more similarities between the lifestyles in the urban and rural areas than differences. By this he meant that the contrast in lifestyles was not as great as one might initially think. This principle can be applied to the developed world whereby urban areas are now infringing upon the rural. This urban sprawl, often by choice by the wealthier middle classes, to the peace and tranquillity of the rural villages are a result of en masse migration to the urban fringe often serviced by commuter railway lines and quality road networks. This can be seen in a positive light, as it can stem depopulation in an otherwise decaying area, develop services that may otherwise be neglected and bring investment to local businesses.

However if the area evolves into a dormitory town the new inhabitants may be viewed with resentment by the locals because

of their lack of community involvement. Pahl discovered in his study in 1966 of two villages on the outskirts of London, that there were vast differences in the lifestyle between the local community and the newcomers. The new inhabitants were of a different class background and as a result established different working, educational and living patterns to the local community. Indeed what Pahl discovered were two very different classes of community evolving around the same village but with very different social values and aspirations. In fact, it could be argued, that he had in fact discovered both *'gemeinschaft'* and *'gessellschaft'* type communities. This was not the 'ideal type' rural community that Tonnies had described. Pahl later remarked that "in the sociological context, the terms rural and urban are more remarkable for their ability to confuse than for their power to illuminate."

However it must be noted that Pahl's study was limited to only two villages within close distance to a major city, so it cannot be assumed that his findings are indicative off all rural areas. Indeed it could be said that there are village like communities within the city as noted by Herbert Gans in his 1959 'urban village study.' Gans believed that the differences between the urban and rural communities could be related to the inhabitant's age, gender, education and social class. He opposed Wirths determinist theory on this basis. Obviously the location of the rural community and by this I refer to its proximity to a major town or city has a huge influence on the inhabitant's lifestyle. Progress in industry coupled with declining agriculture contributed to a decline in the traditional way of life associated with the 'rural communities' in the literature and history books. It is therefor agreed that the rural urban continuum is discredited as a way of differentiating between the two communities.

Mitchell's model of rural communities is based on "their attitude to change and degree of integration." He identified four types of communities, the first being, open and integrated rural community which has a growing population and is adaptable towards change. The second, closed and integrated which although isolated has a strong stable population and is self contained and traditional. The open disintegrated community is effected by outside influences and cannot cope with the rate of change. It has a rapidly growing population and is often termed a commuter or dormitory village. The closed disintegrated community is a small village with a declining population and services network, which is often due to closure of the core industry.

Mitchell's typology allows rural geographers and sociologist alike to distinguish between different communities in rural areas, but will we find the ideal type that Tonnies described and indeed many others, including Alice Taylor the author, whose books are reminiscent of the carefree, idyllic countryside that so many people try to recapture by relocating to rural communities. Indeed, we must ask ourselves do these areas still exist in the developed world. The areas that are targeted for commuter living are done so for a particular reason, i.e. because they are within reach of the urban areas, they offer a less congested way of life and a degree of

peacefulness. Are we in the developed world just buying a piece of 'rurality' and by that I mean is this merely constructed rurality? We don't travel far in our search for peace and quiet and we don't travel alone. As mentioned before the urban sprawl grows larger and moves closer to rural areas every day.

However the isolated rural communities remain so and suffer from depopulation and declining services. It is therefor difficult to find the ideal type community that fits the description or follows the pattern set out in the 'myth' of rurality. This does not stop urbanites from buying a piece of that myth even it is only for a short period of time, i.e. by way of purchasing holiday homes, and tourism in general.

Rural areas are often reliant on tourism as their main source of income and so contribute to this myth in their advertising of the area. Tourism also contributes to the rural communities in more ways than one as Robinson points out; "in Ireland tourists bring numbers, money and reassurance to those who live in isolated rural communities, with an enhancement to self-esteem perhaps having the most profound effect."

Holiday homes are often referred to as seasonal urbanisation and are more associated with the wealthier middle classes. The advantages of holiday homes to rural areas are just as varied as the disadvantages. Holiday homes although do not make heavy demands on the local services they do however result in an increase in local property prices. Local services industries may benefit from the business but as it is seasonal it can not be relied upon. They have to put up with the seasonal influx of people and traffic, and bear the costs of the upkeep of their roads and other services to accommodate them.

In conclusion, the different types of principles are outlined and adopted to differentiate between the rural and urban communities. In relation to this discussed topic it shows the usefulness of the rural urban bancontinuum and how sociologists and rural geographers alike have discredited it. It is hoped that this essay discussed the 'myth of rurality' in relation to the developed world and questioned its existence. It does seem however, that although the rural landscape is shrinking the myth enjoys a healthy existence as more and more people exchange urban life for a piece of rurality even if it s only for a short time

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Farming life in the 21st century: some preliminary thoughts on the pitfalls and possibilities of conducting research into the lives and identities of young farmers (Abstract)

Dr. Caitríona Ní Laoire, NUI Maynooth

At the outset of a two-year project funded by NIRSA, entitled **'Young farmers and farming life in contemporary Ireland: the social and cultural implications of rural restructuring',** I outlined in a departmental seminar on 19/10/01, the aims of the project and my initial thoughts on the pitfalls and possibilities of this research.

The project focuses on young farmers, at a time when processes of rural and agricultural restructuring, changing social and gender relations, national economic growth, and rapid urbanisation of parts of the countryside are having far-reaching impacts on their lives. Some of the implications of these processes for farmers are likely to be a decline in the attractiveness of farming as an occupation, a reduction in the farming population and rising levels of stress. The project aims therefore to explore aspects of the changing way of life in contemporary rural Ireland, focusing in particular on young farmers, as a group at the centre of these changes. The intention is that an in-depth ethnographic study of the lives and values of young farmers will provide a platform from which to explore wider issues of modernisation, de-traditionalisation, isolation and stress in contemporary rural Ireland.

The opportunities of this research lie in the contribution that can be made to existing knowledge and literature in a number of emerging areas, such as the study of the context of rural stress and suicide, the lives of young farmers, farming cultures and rural masculinities. Ethnographic methods, mainly in-depth interviews with young farmers, will be used in order to 'get at' highly localised manifestations of wider social and spatial processes and to tease out a largely hidden research subject. However, the pitfalls of this type of research lie in issues such as representation - how to present one's research to the informants – and associated ethical issues, as well as more practical dilemmas such as the choice of study area and access to informants. In summary, the project is an attempt to re-construct local geographies of rural change that shed light on contemporary global social and spatial processes, and in the process to tell the stories of some of the young people involved in these local geographies.

Climate/Geomorphology:

"If the earth did not rotate, and if there was no friction, air would move directly from high to low pressure areas" (Strahler).

An explanation of how atmospheric motion is controlled by a combination of forces.

Lorraine O'Reilly – 2nd Arts

Just like tangible objects, air must also have some kind of driving force to move it. The movement of air is divided into two types, that of vertical movement and horizontal movement. Both of these types are important. Also in relation to horizontal air movement, we can see how different forces determine how much air will move, its speed and its direction. The forces at work here are (a) Pressure Gradient Force, (b) Force of Gravity, (c) Coriolis Force and (d) Force of Friction. To understand atmospheric motion we must look at each of the forces at work individually before analysing their interaction with each other that gives us our atmospheric motion on earth.

Horizontal Motion

This is the dominant type of air movement and can be 100-1000 times faster than vertical movement. This type of motion has three major characteristics:

1) This motion physically relocate warm and cold air masses and in doing so can give energy to places that maybe deficient of energy.

2) Air can relocate moisture, moving moisture from areas of surplus to areas of deficit and finally

3) This motion gives us one of our greatest natural hazards – strong winds.

Vertical Motion

This type of air movement is slower than the horizontal air movement but is also of vital importance. This motion controls the range of movement of the air masses. It is associated with fine weather because rising air tends to produce cloud and condensation.

While vertical motion is important, we are more concerned with the horizontal motion as its work is sub divided into 4 categories that determine (a) how much air will move, (b) how fast air will move and (c) the direction of air movement once the air starts to move. We will look at these four categories in turn.

Pressure Gradient Force

This force pulls air from areas of high pressure to areas of low pressure. This force is perpendicular to the isobars. It is worth noting that the pressure decreases vertically (as we move up the weight of overlying air diminishes). Also as a general rule, high pressure gradient means the wind speed usually moves faster and low pressure gradient means the wind speed usually moves slower.

Force of Gravity

This force keeps us attached to the surface of earth. It is the exact opposite to the pressure gradient force and they balance each other. In general because of gravity we don't have dramatic upward or downward movements in the atmosphere. Gravity is weakened the higher up we go in the atmosphere. This force though not noticeably doing much work holds the system in place and keeps the air from moving out into space.

Coriolis Force

This is the force of deflection, it is greatest at he poles and least at the equator. In the Northern Hemisphere, the force deflects a moving object to the right at a right angle and to the left in the Southern Hemisphere. This force only affects moving objects and without movement the force is non-existent. At given latitude the Coriolis forces increases as the speed of the object increases. This force only influences the direction of movement (not the speed). Winds are faster over 2000ft above sea level and also not affected by the force of friction, therefore, the Coriolis effect is at its strongest here.

Force of Friction

This force is stronger at the surface and weaker aloft. Anything that moves across the surface of the earth including wind is going to feel slowing down and friction (frictional drag). As we go higher up into the atmosphere this force is eliminated. Wind moving over water has no frictional drag, however if the wind is moving over a city/ forest/ mountains it has a lot of frictional drag (as air is forced up in order to move over an object, it is slowed down). This results in a weaker Coriolis force.

Normal Winds versus Geostrophic Winds

Normal Wind

Normal winds occur near to the earth's surface. This wind is subject to the forces of gravity, friction and pressure gradient. At the surface, friction has the ability to cause the slowing down of the wind and therefore the coriolis effect is greatly reduced. As a result of this the pressure gradient force is the stronger and wins the battle resulting in a change in the wind direction.

Geostrophic wind

This wind occurs 2000 ft above the surface. At this altitude the forces of gravity and friction are weakened enough to be assumed negligible. As a result the influences that come into play here are pressure gradient and Coriolis forces.

The pressure gradient is pulling from high pressure areas to low pressure areas. The Coriolis force is causing deflection at right angles, to the right in the Northern Hemisphere and to the left in the Southern Hemisphere. However, we must have movement and speed to have deflection. Initially we assume that there is no movement and therefore the pressure gradient force wins and air movers from areas of high pressure to areas of low pressure. However, as this air begins to move it begins to speed up, at this stage the Coriolis force kicks in and as the speed increases the Coriolis force becomes stonger. Eventually the Coriolis force is equal and opposite to the pressure gradient force and they cancel each other out. A compromise is reached and the wind moves parallel to the isobars. This is what we know as geostrophic wind.

Conclusion

From this essay we can see that if the forces of friction and coriolis did not exist that pressure gradient force would be the dominant force. However, in looking at atmospheric motion we had to take into account more than one force working at a time. We had to consider the fact that the earth was rotating and that objects move at different speeds (coriolis), we had to consider the landscape over which the air would move and how this can impact on air movement (friction) and also the variation in pressure centres from high to low and the movement between them (pressure gradient force). We can conclude that no one force is dominant and each has their regions/zones where they reign supreme. The battle for dominance is on going and it is what gives us our atmospheric motion and the variety of forms it takes.

The Detection of Climate Change in Ireland – Abstract

Laura McElwain – Postgraduate Research PhD

The primary objective of this research project is to investigate the magnitude and direction of ongoing changes in Irish climate. The study will utilise the Irish observational climate data sources supported by Met Éireann. An extensive array of data from the synoptic, climatological and rainfall station network throughout Ireland, from 1890 to the present, is being collected with a primary focus on the period from the 1940s and 1950s. Preliminary analysis has involved the assembling of a set of suitable potential indicators, which have enabled the identification of possible climate trends. Annual temperature records indicate an increase similar to global trends with rapid warming in the last two decades. Analysis of Irish precipitation change appears to support the predictions of Global Climate Models with evidence of a trend towards winter increases and summer decreases. In association with this, an important element of the present research will be to process the primary climatic data to yield secondary climate indicators and extreme climatic data. It is hypothesised that these may show more variable trends. A number of statistical tests exist to assess the significance of trends in time series. These will be identified and applied to the key temperature and precipitation data series, as well as atmospheric circulation, sunshine hours, cloud cover and wind speed and direction. It is thus hoped to be able to state with some conviction, which parameters of Irish climate appear to be in a state of significant change, possible as a result of global anthropogenic influences.

Getting to the point: downscaling coarse resolution climate model output for environmental impact assessment

Dr. Robert Wilby, Department of Geography, King's College London

Atmospheric concentrations of greenhouse gases (principally carbon dioxide, methane, nitrous oxide, ozone and sulphate aerosols) have increased markedly since the late 1800s, mainly due to human activities. At the same time, global mean temperatures at the surface have increased by about 0.6°C. There is now compelling evidence from climate models that the two are related (although natural phenomena such as solar activity or volcanic eruptions are partly responsible). Climate models are also used to make projections of future global climate and sea level change given estimates of future greenhouse gas emissions. This note describes some of the techniques currently used to generate *regional* climate scenarios from *global* climate information.

The most widely used source of future climate data originates from General Circulation Models (GCMs). These models represent the climate system using four primary equations describing the movement of energy (first law of thermodynamics) and momentum (Newton's second law of motion), along with the conservation of mass (continuity equation) and water vapour (ideal gas law). Each equation is solved at discrete points on the Earth's surface, at a fixed time interval (typically 10–30 minutes), and for several layers in the atmosphere defined by a regular grid (see **Figure 1**). For example, the UK Meteorological Office Hadley Centre third generation, coupled ocean–atmosphere GCM (HadCM3) has an atmospheric model with a horizontal resolution of about 300 km and 19 vertical levels, and an ocean model with a horizontal resolution of about 100 km and 20 vertical levels

GCMs provide a 'broad–brush' view of how climate variables, such as global temperature and rainfall patterns, might change in the future in response to rising concentrations of anthropogenic greenhouse gases. However, they cannot resolve important processes relating to cloud and topographic effects, at length scales less than the grid spacing (**Figure 1**). Unfortunately, many significant climate change impacts are thought to occur at these finer spatial (and temporal) scales. For example, assessments of future flood hazards require (sub–) daily precipitation scenarios at catchment, and sometimes even station scales. Regional Climate
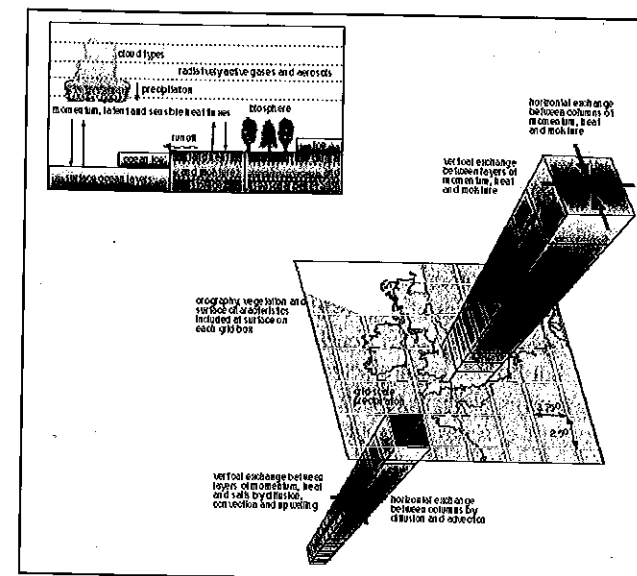
Figure 1. The conceptual structure of HadCM2. (Source: http://www.cru.uea.ac.uk/link/)

Models (RCMs) nested within GCMs represent the physical dynamics of the atmosphere at horizontal grid spacings of 20–50 km for a patch of the Earth, but are computationally demanding, expensive to run, and currently impractical for obtaining long climate simulations (>10 years) or multiple scenarios. Furthermore, as **Figure 2** shows, even at 50 km resolution the HadRM2 model represents the West Midlands region of England (five counties) with less than twenty grid–boxes. Although the RCM can resolve important features such as low–level jets, the RCM still smoothes out much land–surface heterogeneity and topographic detail.
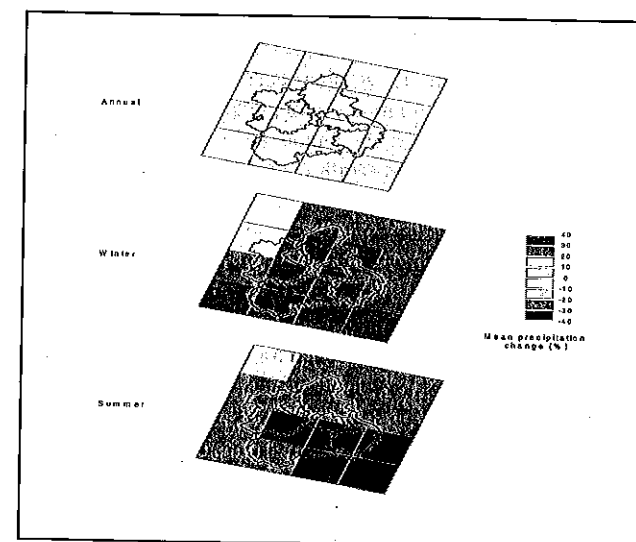

Figure 2. Changes in mean annual, winter and summer precipitation (%) over the West Midlands by 2080–2100 relative to 1961–90 projected by the regional climate model HadRM2.

As a consequence climate modellers and impact assessors have developed a range of statistical techniques for deriving more detailed climate scenarios directly from coarse resolution GCM output. The primary task is to translate large–scale GCM variables into the local–scale information needed for impact assessment (**Figure 3**). The techniques used to relate large– and local–scales are known collectively as downscaling. The most straightforward procedure (called "unintelligent" downscaling) involves three steps. Firstly, a base–line climatology is established for the site or region of interest. Depending on the application this might be a representative long–term average such as 1961–1990, or an actual

Figure 3. Downscaling climate model output for hydrological impact assessment.
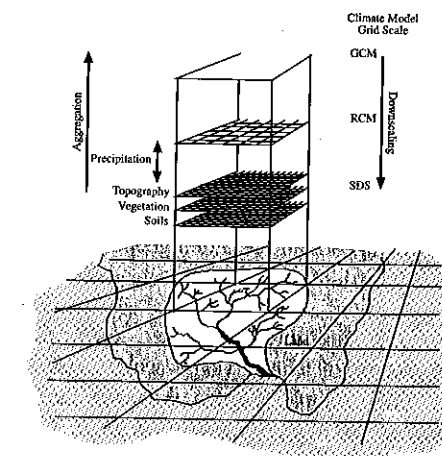
meteorological record such as daily maximum temperatures. Secondly, changes in the equivalent temperature variable for the GCM grid–box closest to the target site are calculated. For example, a difference of 2.5°C might occur by subtracting the mean GCM temperatures for 1961–1990 from the mean of 2061–2090. Thirdly, the temperature change suggested by the GCM (in this case, +2.5°C) is then simply added to each day in the base–line climatology.

Although the resultant scenario incorporates the detail of the station records as well as the areal average climate change of the specified GCM grid–box, there are problems with the method. The downscaled and the base–line scenarios only differ in terms of their respective means, maxima and minima; all other properties of the data, such as the range and variability remain unchanged. The procedure also assumes that the spatial pattern of the present climate remains unchanged in the future. Furthermore, the method does not apply to precipitation records in a straightforward way because the addition (or multiplication) of observed precipitation by GCM precipitation changes can affect the number of rain days, the size of extreme events, and even result in negative precipitation amounts!

For these reasons, three alternative statistical downscaling techniques have emerged, namely: regression methods, weather pattern classification, and weather generators. In each case, the basic principle is to use large–scale climate variables from the GCM (e.g., mean sea level pressure) to estimate small–scale meteorological variables (e.g., station precipitation or wind speeds). As in the case of regional climate models, scenarios downscaled via these methods depend completely on the validity of the host GCM (see **Figure 3**). It should also be noted that statistical downscaling often requires extensive observational data sets for model training and significant amounts of pre–processing for the GCM output. Furthermore, all downscaling methods make the fundamental assumption of climate stationarity: that current climate relationships hold true under future climate conditions.
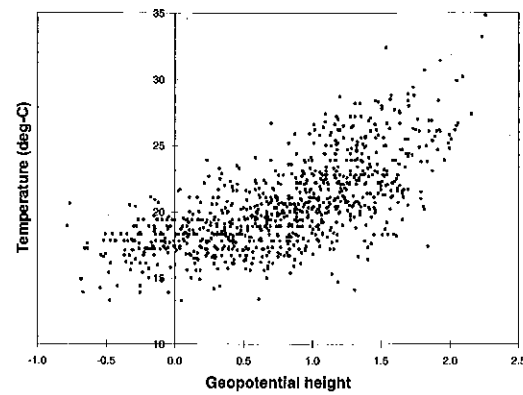
Figure 4. The relationship between maximum daily temperatures in August at Nottingham and 500 hPa geopotential heights over Eastern England, 1961–90

With these issues in mind, regression–based downscaling provides a convenient method of relating (large–scale) cause and (small–scale) effect. For example, **Figure 4** shows the relationship between observed 500 hPa geopotential height, h, (a measure of the thickness of the atmosphere) averaged over Eastern England and observed maximum daily temperatures in summer, T, at Nottingham, England. Historically, maximum temperatures at Nottingham increase non–linearly as the thickness of the atmosphere increases. By using a regression equation to specify the average relationship between observed h and T, one can downscale future maximum temperatures at the same site given future values of h projected by a GCM. The regression method applies equally well to other surface variables such as wind speed, sunshine amounts and humidity, but may require different predictor variables (e.g., large–scale wind speed and direction). Using more sophisticated techniques such as Canonical Correlation Analysis (CCA) the simple regression procedure can be extended to multiple predictors and multiple sites.

The second downscaling approach uses weather pattern schemes (such as the Lamb Weather Types). First, surface and upper–atmosphere pressure patterns are used to classify the daily circulation into defined weather types. Observed climate records (e.g., station daily rainfall totals) are then stratified according to the associated daily weather type, and an average for all days in each weather type computed. For example, **Table 1** shows the chance of rainfall occurrence, average daily rainfall amount and temperature at Durham, UK under different Lamb Weather Types. On average, the anticyclonic weather type has the smallest chance of rainfall (just 10%), and the cyclonic type the greatest (62%). The cyclonic type also has the highest rainfall amounts, on average would yield more rain days and greater rainfall totals at Durham. Similarly, more westerly days and fewer easterly days would tend to increase the mean daily temperature. This of course assumes that the historical weather type properties remain valid under future 7.1mm per rain day. This implies that a future climate scenario in which there are more cyclonic days (and fewer anticyclonic days)

climate conditions. The method also presupposes that pressure patterns produced by the GCM can be translated into weather patterns consistent with observed pressure data. However, a major advantage of circulation–based downscaling is that it can be applied to a wide variety of environmental problems, including air quality and water resources.

Because circulation methods use actual sequences of weather patterns (whether observed or from GCM experiments) they can produce realistic series of downscaled variables such as persistent wet– or dry–spells. Weather generators use statistics like those in **Table 1** but do not require actual weather pattern sequences to drive the downscaling. Instead, weather generators employ pseudo random number series to sample the rainfall or temperatures from each class by chance. Using the statistics shown in **Table 1**, the random number generator would determine firstly the weather pattern of the present day, secondly the chance of rainfall, and thirdly, if rainfall occurs, the amount. In more sophisticated models, the weather patterns and rainfall occurrence of previous days determine the weather pattern and likelihood of rainfall on the current day. In the long run, the weather generator will reproduce the same *mean* statistics as the circulation method but from a different day–to–day sequence of events every time a simulation is performed.

The generator can also produce daily precipitation for future climate scenarios once GCM results have been used to estimate the new frequency of each weather pattern. Again, future chances of rainfall and average rain day amounts associated with a given weather pattern are assumed to remain unchanged from the training period. A key advantage of the method is that it can produce large numbers of daily weather series from a single GCM experiment. This can be very useful for investigating extreme events such as long wet–spells, droughts or heat–waves. The main disadvantage is that basic weather generators do not always reproduce slowly varying properties of climate behaviour, such as decade to decade changes in rainfall intensity associated with changes in the strength of the North Atlantic Oscillation.

From the preceding discussion it is clear that there exist a range of techniques for downscaling coarse resolution climate model output to the scales typically required for environmental impact assessment. Indeed, it is hard to envisage a time when GCMs will ever fully resolve the variables needed for detailed crop modelling, point soil erosion, flood generation, etc., so downscaling will unlikely be superseded by increased computing power. Unfortunately, the research literature is becoming dominated by studies in which the downscaling has become an end in itself. We should not lose sight of the fact that these techniques are primarily justified on the grounds of more realistic scenarios for impact assessment. More work is, therefore, needed to convincingly demonstrate the 'value–addedness' of downscaling *vis-à-vis* use of raw GCM output for this type of application.

Weather Type	Frequency (% days)	Days wet (% days)	Rainfall (mm/day)	Temperature (°C)
Anticyclonic (A)	18	10	3.9	9.3
Cyclonic (C)	13	62	7.1	9.9
Easterly (E)	4	40	5.2	7.5
Southerly (S)	4	41	5.0	9.9
Westerly (W)	19	33	4.1	10.1
North–Westerly (NW)	4	23	3.8	9.3
Northerly (N)	5	40	4.7	7.3

Table 1 Average frequency of the seven main Lamb Weather types, and the corresponding the percentage of wet–days, average daily rainfall amounts, and average daily temperatures at Durham, UK 1881–1990.

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A discussion of the geomorphic characteristics of County Kildare in relation to the landscape evolution of Ireland

Mary Stapelton – 2nd Arts

How did Ireland evolve into its present form? Ireland started off as part of a bigger continent called Pangea south of the equator and has been moving northwards since. 500 ma years ago we were under sea (30 degrees south of the Equator) in a time of deposition. In the Devonian period about 400million years ago uplift occurred due to plate collision and then erosion by rivers which swept debris and boulders off the mountains and dumped them on the flood plains nearby.

The oldest rocks found in Ireland today are gneiss in Wexford believed to be 2000million years old (part of the Eurasian plate) and in Mayo, which is 1500-1900 million years old (part of the American plate). The Iapetus Sea separated these plates and was eventually subducted as these plates collided again.

The Leinster Axis (110km long) composes of Ireland's biggest upland area above 300 metres above sea level formed in the

Caledonian orogeny and has a north –east /south west trend. As these igneous rocks are formed from magma that is slowly cooled beneath the earth's surface and they are now at the surface considerable erosion has removed metres of surface material. Much of the granite is now rounded showing the effects of glaciation during the Quaternary. The northern part of Wicklow is broader based and of a harder granite than near Tullow which is a softer more easily eroded granite. The heated granite metamorphosed other rock. In this region there are a lot of glacial features including U shaped valleys, hanging valleys' in Glendalough and lakes. Rivers in this area are often gently flowing in upper reaches and cascade down onto Limestone region such as at Powerscourt.

The Ridge and Valley province of South Western Cork noted for its folds anticlines and synclines formed approx 400 million years ago, is composed of old red sandstone (formed in desert conditions from sand that has been compressed) and carboniferous limestone.

Plate Tectonic activity in the late carboniferous caused the older rock to be displaced and resulted in Old Red Sandstone being interspersed with limestone. This area divides up into east west trending folds with rivers such as Blackwater, Lee running in east/west direction In the western area trending is west south west and watersheds have been destroyed by the effects of glaciation. (e.g. The Gap of Dunloe)

In the early Carboniferous the ocean started to cover Ireland again submerging everywhere but Donegal in a warm shallow sea and thick layers of sediment formed with marine life leading to development of limestone. There is little evidence of Upper Carboniferous activity as Ireland has very few coalfields.

The Burren which has been extensively weathered by rain causing dissolution of the limestone, forms a Karst area denuded for the most part of vegetation showing features such as pavements caves etc. There is evidence of raised beaches at a height of 300 feet here showing sea level changes at different times and that the land has risen by this much.

The area south of Clew Bay is composed of rocks of old red sandstone of veriscan orogeny on older dalriadian quartzite that originated in Donegal carried there by glacial action. Further on in Mayo are rocks of granite that were formed 18 kilometres below the surface. The hardness of the rocks on the west coast helps prevent massive erosion by sea. The Ox Mountains in Sligo are formed of gneiss and form a terrane boundary and are surrounded by carboniferous rocks, which are downfaulted to the north and South.

The Donegal Highlands are Dalriadian rock of Caledonian orogeny. Composed mainly of Granite and quartzite. Donegal has the highest sea cliff Sliabh League in Ireland and Europe. At the time extensive faulting occurred here breaching watersheds and U shaped valleys.

The North of Ireland was the only area affected by the Permo-triassic era. In this warm climate an ocean has disappeared evidenced by fossils in sand dunes, new red sandstone has formed afterwards. Ireland is underwater for the Jurassic period and sediments of shale and mudstone were deposited. There is very little evidence that chalk was deposited throughout Ireland except for the Giant's Causeway and a small amount (100 metres above sea level) in Killarney.

In the Tertiary Ireland was uplifted again and the Northern Ireland plate started to split and basalt was extruded over 3000 kilometres as a new ocean opened up and came to a halt as plates stopped moving. The weight of the basalt caused a depression in the centre and most rivers in this area now run into Lough Neagh. Scarps were formed at edge of Basalt and were nearly 400ft above sea level. This was an area that had extensive glacial activity and where Irish and Scottish ice collided.

There has been much debate about what happened to Ireland in the tertiary but there is very little evidence to back up any theory. In Antrim basalt protects the chalk laid down in the cretaceous period. Also there are igneous dykes in Co. Fermanagh that would have formed at depth of 1.8 kilometres. In the Mourne Mountains there are Tertiary plutons, which have risen 800metres, indicating that amount of erosion over time. Now it is thought that there was general upheaval, with the outer rim of Ireland being uplifted and

the interior being downwarped. In the depressions sediment accrued and spread over land and on the uplands there was massive denudation. The opening of the Atlantic Ocean occurred at this time.

The Central Lowlands are the largest geomorphic region of Ireland. This region is composed mainly of Lower Carboniferous limestone and varies from 60metres to 120 metres above sea level. Limestone is a sedimentary rock and is either formed organically from decaying vegetation under water giving rise to limestone and peat or formed inorganically from weathering and erosion of granite nearby giving rise to breccias, conglomerates, sandstone, mudstone and shale. There are many lakes in this region and the undulating plain is interspersed by small hills of four origins:

1) Inliers of Older bits of volcanic rock protruding through newer rock found in Kildare Limerick and Roscommon
2) Coral reef limestone that is very resistant formed as mounds on sea floor in carboniferous time stretching from Lucan to Portmarnock
3) Hills of Igneous rock formed by small volcanoes that are visible in the land found in Offaly and Limerick.
4) Outlier of Upper Carboniferous occurring above sea level found in Hill of Tara and Castlebar.

My county of interest is Kildare. Kildare in its eastern region adjoining the counties of Carlow, Wicklow and Dublin has Ordovician rock that was baked by the granite intrusion giving slates, greywackes and grits. Many small streams run off hills such as Saggart Hill, Furryhill and all are northwest trending. The rest of Kildare forms part of the Central Lowlands, a mainly undulating plain broken only by a few limestone hills such as Carbury Hill, Hill of Allen etc. and a hilly region at east of the county. The oldest rock in the lowland region is found in an area that once was part of the Iapetus Ocean. As this ocean was being subducted volcanic activity tuffs were formed on the overriding plate at Kilcullen. The Kildare Inlier was formed by volcanic action under the sea in the period when volcanic arcs were being formed. The volcanic rocks in the Kildare Inlier are mostly andesite lava.
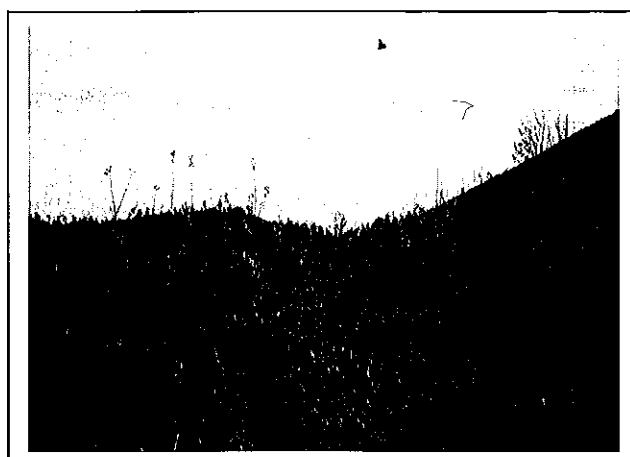

Figure 1: Dunmurry Hill & Chair of Co. Kildare

In the Devonian period, the Kildare plain consisted of lowland with an accumulation of red sandstone from further north most likely deposited by glaciation, which was later, covered by limestone. In the Carboniferous period limestone was formed from marine life under a warm sea that lay across this region. The area of cover was extensive as Ireland is mainly low-lying in this middle region.

These limestones range from pure limestone in the South to reef limestone that forms the Chair Of Kildare proper. Oolites, dolomites and black earthy limestone of Northern Kildare are varieties of limestone. Near Clane there are reef Knolls.

Field work
As part of my fieldwork I visited the Hill of Allen (fig.1& fig.2) and took samples of rocks which turned out to be mainly limestone and andesite sometimes mixed in. Part of this hill is wooded and the other side is extensively quarried out. In Boston Hill, which is part of the hills that make up the Chair Of Kildare I observed a former quarry (fig.3) with a pond now forming in the depression. I found limestone and shale and rocks from lower carboniferous when Ireland was covered under a warm sea which contained old red sandstone of the Devonian period which is usually found in Cork and Kerry. . From further up on Boston Hill I photographed the Central Plain (fig1) which is undulating bog (peat) and low-lying. Approaching Dunmurray Hill, which also contains shale, limestone and sandstone you get a view of the Chair of Kildare (fig.2) proper. The Chair itself consists mainly of 'reef Limestone'. Grange Hill has slate and Redhills also has red shale from Ordovician times. From the Curragh (fig.3) which is an outwash plain formed by glaciation I travelled to Athgarven near Kilcullen, where the Liffey changed its southern course as it was blocked by a moraine (fig48& 5) when the ice retreated and dropped it's load. There on the Liffey's former riverbed, which is now a depression houses have been built. Silurian grit and slates can be found on the eastern ridges near Castledermot as well as some granite, which has been extruded here, from the Batholith

.

Co. Kildare has been repeatedly glaciated and is covered in glacial till and gravels ploughed down by the Ice. The Midlandian ice sheet (about 70,000years ago) covered the whole county leaving a thick mantle of tills and gravel. Ice moving eastwards met ice moving southwards and pushed eastwards across to foothills of the Leinster Mountain Chain. Here it piled up and as ice melted the narrow gaps of Slaney and Barrow could not cope. The surplus ice water accumulated causing deepening of the central lowland's basin where eventually the ice released its load and tills and gravel were dumped across Kildare. A new outlet formed between the Celbridge area and the Kildare region where limestone is now exposed. The ice split in Kildare is marked by gravel moulds

running from Rathangan to Prosperous and turning back to Broadford. Kildare is marked by many Kames.

Peat is the main surface material of the Central Lowlands and it is known as raised bog. Peat has been forming for the last 10-15,000 years in the milder climatic conditions. Many roads were built on eskers, as these were considerably drier areas in the bog. Kildare has a problem with drainage, as it's so low lying. The better soil (underlying boulder clay) is to the north of the county, ideal for market gardening or stud farms. The Curragh an outwash plain has a unique quality for horses due to springiness of earth. Many aquifers underlie this region.

Figure 2: Moraine, changing the course of the Liffey

Rivers in this region follow unusual paths such as the Liffey, which once flowed south but now travels west and north. There is a theory of superimposition where younger rocks might have disappeared leading to discordant appearance with the Caledonian mountain chain. The pressure from the ice had a great part to play in forming the direction of the flow of these young rivers, which are still coming into equilibrium. . The Barrow and Nore flow across the limestone in order to reach the South due to glaciation effects as mentioned already.

To conclude the geomorphology of Kildare is linked to the evolution of Ireland through, it's bedrock formation, the Kildare Inlier which is a series of hills known as the Chair of Kildare, it's peat areas and lastly the rivers that transverse it.

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Literature:

The Bogs of Moods

Paula Meehan – Poet

The first time I cross the Bog of Moods
I misread the map
The Bogs of Moons I thought it was
and watched as your white cap

lifted by a sudden squall
was cast before me into the canal
a full moon itself on the jet black water
shattering the perfect mirror

of the starry heavens. Seeds
of light prolific as common duckweed,
fen sedge, pollution-intolerant arrowhead.
Bistort. Bulrush. Bog Bean. Bur-reed.

The low down belly rooted naming
of these wet toed, turf sucking
mockers at our hamfisted, clubfooted clumsy
taking of each other. Glory be to whimsy

and misreading that have us cross the Bog
of Moots or Moos. For yes, they're there –
the slow moan of them squelching through the fog
of their own breaths, swinging full udders,

dainty hoofs picking through bladderwort
and crowfoot. Hells bells! And helleborine!
The harder you look, the more you will have seen;
and I say forgive me for the tense and curt

way I've been all day. The world
has shrunk to the proportion of the narrow boat.
I was a termagant curled
in the prickly armour of my pre-menstrual overcoat

barking at the moon, the mood,
the moot, the moos, until the moment when we stood
hand in hand under the stars and you showed me the rare
and lovely Grass of Parnassus, far

from its usual habit. And something loosened
and came right, as if the land
herself was settling down, plumping out her skirts,
prepared to take her ease, and done with birth.

With kind permission: Poem by Paula Meehan, from her book *Dharmakaya* (Dharma: Kaya –
Truth: Body, Carcanet Press Limited, Manchester (2000) pp 36-37)
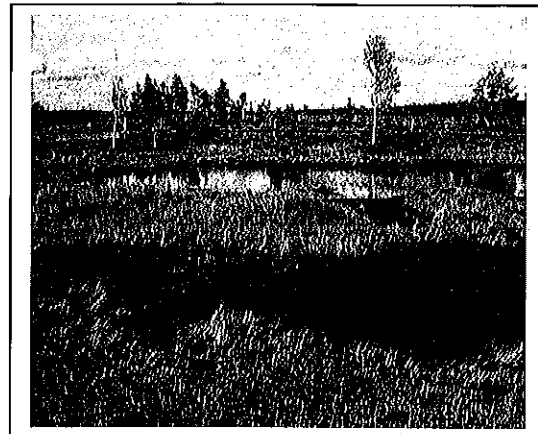
Tourism:

In what way can we say that tourism places in Ireland are culturally constructed or invented?
A discussion using examples and with reference to the 'tourist gaze', and the promotion of tourist places.

The Construction of Cong, and the Tourist Gaze

Donna Garvin 3rd Arts

Introduction

Tourism, according to Stephen Williams, is "a strongly *visual* practice" (Williams, 2000:173). Sightseeing is a large part of any holiday experience and can be described as a mode of consumption, where by, tourists visit, observe and commit their observations to memory. Locations that make a strong visual impact tend to attract tourists, providing that the appropriate services and facilities are available for their use. Promotion and marketing play a crucial role in raising tourist awareness of, and desire to see, any given place. In the case of Cong, which lies on the border between Mayo and Galway, John Ford's film *The Quiet Man* has made a huge and lasting impact on a small, and fairly spatially isolated, rural village. Although the film was released in 1952 (almost 50 years ago), Cong still continues to draw many visitors annually through exploitation of the village's claim to fame. This has resulted in a type of image that may be quite unique within Ireland. The village clearly benefits from tourism, but at what cost? This essay will discuss the construction of Cong's image and describe how it presents itself specifically to accommodate what Urry has called the 'tourist gaze' (Williams, 2000:173).

The Construction of an Image

The people of Cong have set out to maintain the image of Ireland, and more importantly, the image of 'Castletown', that are presented in Ford's academy award-winning film. The village relies heavily on tourism revenue and has successfully kept up the façade of the fictitious town. Tourist information brochures refer to the village as "The Quiet Man Village of Cong". Visitors can sit back in the comfort of old-fashioned jaunting cars and enjoy trips to all of the romantic spots that we see in the film. As well as the beautiful scenery and the splendour of Ashford Castle, we can also patronise Cohan's Bar (in reality a shop), Danagher's Hotel and Micilin's Restaurant. Cohan's Bar features in the film, while Danagher and Micilin are fictitious characters from the film. The village's promotional web site boasts of guided tours visiting locations from the film including "the dying man's house", "the river fight scene" and the "hats in the air scene".

The Relevance and Impact of the Tourist Gaze

It seems to be a source of pleasure for visitors that the quaint depiction of a rural, bucolic way of life that we find in *The Quiet Man* could remain unadulterated in the year 2001. In reality, such a construction of Cong exists merely to simultaneously accommodate and promulgate the "superficial process" of the tourist gaze (Williams, 2000:174). Williams points out that it is ironic that while a primary motive for tourism is "exposure to foreign culture and custom", tourists often experience an "artificial purveyance of supposed custom" (Williams, 2000:179). The spectacle of supposed custom evidently satisfies visitors to "The Quiet Man Village of Cong". The success of this endeavour may

be related to a notion that has become known as the 'rural idyll'. The image of uncorrupted, unencumbered and specifically Irish rural life is thematic in Ford's film and contributes to its lasting appeal. It follows that the artificial construction of Cong that has been based on the discourse of the film, exploits the anxieties of the post-modern, essentially urban psyche and concurrently adds to its enduring attractiveness to tourists.

While the economic importance and value of tourism in this remote rural setting is not contested, the apparently unmitigated concentration on this sector may have precluded, and perhaps continues to preclude alternative forms of development. In March almost everything in the town is shut. Like many rural Irish tourist destinations, Cong suffers from a pronounced seasonality effect. During the off-peak season the place seems like an absurd, nostalgic ghost town. The only places that are open for business are a couple of shops, a couple of pubs and surprisingly, the tourist information office which sells mementos of the all important film, and various books written in fluent Bord Failte lingo, including *The Truth About Leprechauns* which is detailed as "an expose of the weefolk in Ireland" (Curran, 2000:1). It is rather sad that Cong, because of the manner in which its population represents it, almost ceases to exist when it is bereft of tourists. The village is vibrant and full of activity in the minds of those who have visited the place during the tourist season. It receives few visitors during the rest of the year and they must surely leave feeling disillusioned by the emptiness and desolation of the place and the extent to which it is completely contrived to look nostalgia-filled and quaint. This situation must also lead to the migration of the young, who comprise one of rural Ireland's most valuable assets in terms of future development and the provision of those rural services that are not directly attached to tourism.

Conclusion

Clearly, Cong is a key example of an Irish tourism destination that has fashioned an image purely to support and sustain the tourist gaze. The superficiality of the 'gaze' evidently gives rise to an artificial situation whose operation depends upon a temporary suspension of reality on the part of the gazer. The maintenance of this deliberately fabricated image, which is entirely based on the Ford film, suits the objectives of the tourist, and consequently those of the tourism developer. The down side of this construction of the village is the issue of seasonality and the problems it brings such as part-time and/or temporary employment. Pionnsias Breathnach refers to the income disparity that exists between areas that depend heavily on tourism and those that do not (Breathnach ed. 1994:58). The low levels of wages that are prevalent in the tourism sector, particularly in accommodation, and the shortage of alternative employment may present problems for the community in Cong. It is not possible to assess whether the dependence on tourism in this village will lead to meaningful, sustainable economic growth.

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A study of Strokestown Park House and the Irish Famine Museum, County Roscommon

Giovanni Olcese – Postgraduate PhD

According to Colm Toibin in his book, **The Irish Famine,** Eamon De Valera was greatly concerned, if not alarmed, that customs, folklore and a general sense of Ireland's past were dying out as the country took on a social and demographic metamorphosis. As far as the Famine was concerned, it seemed to him that any memory of events were fading into oblivion.

His view of a fading historical memory was echoed by the Irish Folklore Commission. It stated in 1945 that there appeared "very little information or interest in the minds of the old people about that time [the Irish Famine]. Indeed, it seems there was a sort of conspiracy of silence on the part of their mothers and fathers about it all".

A breakthrough came in 1962 with the publication of Cecil Woodham-Smith's **The Great Hunger: Ireland 1845-49.** A delighted De Valera saw in this book the type of description and portrayal that had previously evaded him in his long, drawn out pursuit of a definitive and 'official' history on the subject. The reason why it appealed to De Valera was also the reason why it was criticised without compromise by the historians of the period. In the words of Mary Daly, it was ' a highly dramatic and emotive picture of the famine'. F.S.L Lyons described 'an attitude of mind which is not, in the deepest sense, historical'. In other words, the historians were only concerned with fact whereas Woodham-Smith added the ingredient of emotion to her work.

According to Freeman Tilden in **Interpreting our Heritage,** the essence of interpreting one's heritage, whether natural or man made, is experience over human description. Although facts are essential in the portrayal of historical authenticity and proper interpretation, the inclusion of revelation and enlightenment stimulates the visitors' thoughts and perspectives on the given exhibit. It is not necessary or desirable to experience prolonged starvation to appreciate the suffering of the victims of the Famine. Effective portrayal and description of the event should suffice to stimulate the emotions of an interested party.

On the one hand, there existed a 'conspiracy of silence' in relation to the Famine. On the other, a collective desire reigned to eradicate from sight and memory the manifestation and symbolism of a people's suffering: the stately home. In **Memory and Heritage** by Nuala C. Johnson, the stately home was a symbol of tradition and identity in an English context. In an Irish perspective, this sort of demesne was representative of 'the coloniser's cultural landscape'. With civil unrest and the subsequent foundation of the Irish Free State, many of these homes of the 'ruling classes' were abandoned by there dwellers or destroyed by fire or explosive. As Luke Dodd states in **Heritage and the "Big House",** 'the destruction of the Big House was an ideal means through which the Free State could symbolically be seen to break with the past'.

One of the advantages of Strokestown Park House and the Irish Famine Museum is that both sides of a traumatic time in Ireland's history can be experienced at the same location. According to the owners of the location, the Westward group, in its **Guide to the Srokestown Famine Museum,** the museum was developed to "balance the history of the Big House".

On the one side, there is the country home of the 'coloniser' and on the other the trials and tribulations of local people. What happened on this estate was mirrored with lesser or greater severity on estates all around the country with very few exceptions. In other words, the accounts given here to the visitor in its microcosmic situation would relate suitably to the overall picture on a national scale.

As far as the main house is concerned, a guided tour of some 45 minutes is the tool used to explain the significance of the house in the context of analogous structures elsewhere in the country. Visitors are led through the house in such away that the relationship between residents and staff become evident. That is to say, emphasis is placed in the narrative on a division between the two 'classes'. Affluence and exuberance on one side clash strikingly with work conditions of the other. The system of tunnels that servants had to avail of in order that employers did not have to set eyes on them is a concrete example of this work environment.

In the lounge and in the ballroom/library as well the exterior of the house, visitors are given explanations about the palladian style of architecture that demonstrates the family's desire to show off their 'wealth'. In particular, false doors adorned all parts of the family's reception areas of the house in order to give the impression of having more rooms than they actually had.

The tour is led then upstairs to the to the bedrooms, schoolroom and playroom. From here, the narrative goes form the description of manifest *bella figura* as experienced in the downstairs area of reception and entertainment to that of how family life was carried out at the time. Separate sleeping arrangements for the husband and wife are depicted and amuse the visitor as reminiscent of Victorian moeurs. The school and playrooms give great insight in to parent/children relationships, pedagogy and child development as a whole. The schoolroom shows the employment of a system of private tuition considered proper for the young of a particular status and without doubt classical in its nature; French being considered the most suitable mode of communication to be learned. Besides schooling, visitors are made aware of the role of the governess. It becomes apparent that the children would spend more time with the nanny than with the parents. The playroom depicts perfectly how there was enough for them to occupy themselves with so as not to be in their parents way. Like the servants, the children were 'out of sight, out of mind'.

The only parts of the house where there would be the most minimal amount of contact between staff and family would be in the dining room and galleried kitchen. In the dining room, the tour guide depicts, quite graphically, a scene of over indulgence. The visitors then imagine the table surrounded by family and guests consuming copious amounts of food and wine. The imagery of excess is compounded by the guide producing a chamber pot with which the butler was expected to climb under the table in order to assist the gentlemen in satisfying 'the call of nature'. A 'helping hand' would be employed if a guest had a certain difficulty in carrying out the task in question. As would be expected, visitors express their disdain or disgust either verbally or facially or both. The galleried kitchen is the other example of limited staff/employer contact. The gallery in place enabled the heads of the family to enter the place of work from a high and suitable distance, from where the required menu of the day could be thrown down to the cooks. Neither the allocated space for the staff nor the select territory of the family would be thus invaded. In respect of this division, Nuala C. Johnson in **Where Geography and History Meet: Heritage Tourism and the Big House in Ireland,** states that "the kitchen was the servant's class central demesne, linked to the house geographically but separate socially". In addition to this, Johnson considers the irony of a situation whereby staff invisibility of the time has enabled their visualisation by visitors today.

In the case of the Famine Museum, the visitor is his own guide. The main house has the thematic structure with the assistance of a guide but a structure in the museum exists nonetheless in a series of rooms that takes the visitor through the various stages of the 'before, during and after' of the trauma. These would include descriptions of the social structure and hierarchy, the land and people with explanations on the dependency on the potato crop. From this foundation, the visitor is led to the question of disease and its repercussions: emigration, eviction and the creation of secret societies that sought to avenge the injustices of the crisis.

One of the most striking aspects of the complex is its stark simplicity. Each of the eleven rooms contain a theme with a limited number of panels and display units. David Brett, in **The Construction of Heritage,** describes the structure as "straightforwardly chronological" with a "directed one way narrative of a rather old-fashioned didactic exhibition; but that narrative is continually undercut by visual and auditory commentaries that emphasise the lack of knowledge, the obscurity of the historical material…". The essence of Brett's argument is that the material at hand was passed down by those who neither suffered nor starved. Also, he argues that the museum is continually evolving and restructuring itself as greater understanding of the Famine develops. In other words, the museum is not and never will be frozen in time. It is in a continual process of change and improvement.

As far as the visual and audio commentaries are concerned, there exists an 'invitation' to enter into the 'story'. The museum is comfortingly quiet but the silence is merely disturbed to a bare minimum by interludes of recorded voices. These relay to the visitor various accounts of most aspects of the Famine. Nonetheless, there is no attempt to recount the story as a whole sequence of events or stating the blatantly obvious. It is simply a case of verbal documentation in reference to a particular event to be highlighted, for example, the assassination of Major Denis Mahon who ordered the eviction of thousands of tenants off the Strokestown estate.

The visual commentary takes the form of photographs, text and reproductions of prints, engravings and cartoons of the period. The various depictions on display range from the sensitive etchings of starving people to a colonial perspective of Irish peasantry that bordered on racial and cultural intolerance. The scene entitled the 'Bogtrotters' epitomised and served to justify the British stance not to instill a 'dependency culture' in a people they considered afflicted with sloth and inactivity.

In addition to this panelling, visitors are able to watch a short video that depicts a decrepit workhouse with images of emptiness, that is, rolling landscape devoid of any human presence. The essence of the film is to show that where there were once many people there is now nobody.

Besides the depictions on display, there are a number of things that the museum does not intend to do. Firstly, the visitors are to decide how to interpret the evidence themselves. There is no question of propagating a political agenda. It is entirely possible for people to use the evidence at hand to justify their own perspectives but each visitor has the freedom to decide which stance to take. Secondly, the underlying essence and intention of the display is to make people aware of the contemporary nature of hunger and starvation and not just what happened in Ireland. What had happened 150 years ago is still going on today. In a number of rooms there are reminders of famines of our time: Somalia, Ethiopia, India just to name a few. The diseases suffered then are still active today such as dysentery. There is also in the museum an attempt to sensitise people to the plight of refugees as this is a particularly sensitive issue in Ireland in more immediate times. Overall, what took place in Strokestown occurred all over Ireland and Ireland's experience was duplicated all over the planet.

Even though the intention of the museum is to make people think and reflect on the reoccurring themes of our times such as continual human suffering each visitor may already a fixed set of perspectives. In view of the nature of the museum, each visitor would already have knowledge, no matter how scant, of the topic on show. Each visitor would have preconceptions and prejudices and the evidence would either back up or modify existing thoughts. The freedom given, in both house and museum, to decide for ourselves means we are permitted to cherry-pick at the signs that are presented to us and interpreted them as we see fit. Jean Baudrillard in his entry in the **Encylopedie Universalis** on semiology, **Masse (Sociologie de) - langages de masse,** describes the use of a collectivity of signs to influence our behaviour and how we digest these signs according to our will and whims. From signs we formulate symbolism and from symbolism we create our values. Roland Barthes in **Mythologies,** uses the example of the political poster that establishes the link between electors and those to be elected. Subsequently, when the link is forged between the values shared then a sense of belonging is nurtured.

A visitor of an Irish republican/nationalist perspective would more so than not find an affinity with 'his people' as they are represented in a derogatory manner and become victims of oppression in his eyes. This would lead to a justification of his political psyche if he so wished. The British visitor could relate to the evidence and sense remorse for 'his people's' treatment of another people in another country if that was the intention of his visit. Equally, he may take the view as shown by Mark Bence-Jones in **The Twilight of the Ascendancy** that the landlords had very little choice in view of their economic difficulties. Either person could easily accept or dismiss the evidence at hand. In all, the debate should not remain confined in the interior of the house or museum.

Two further questions have to be answered. Firstly, how would those who belong to neither the British nor the Irish traditions either here or abroad relate to the house and museum? Secondly, would the young be able to appreciate the significance of these centres?

In respect to both questions, the answers are very close at hand. As far as the former is concerned, my personal perspectives as a visitor to both house and museum should suffice as I fall in neither of the aforementioned categories. My view-points, judgements and prejudices are those of the left with an uncompromised stance on internationalism and an entrenched believe that free-market economics are not the panacea to all our social and economic ills. As far as the economics of the crisis are concerned, I find evidence for my position in John Percival's **The Great Famine** and Christine Kinealy's **The Great Calamity**.

My visit to Strokestown added substance to my convictions on class divisions and the evils of them because that was my intention. My sense of affinity to the 'oppressed' and contempt for the 'oppressor' could not be related in either case to an ethnic sense of *appartenance*. My viewpoint came entirely from the political, the cultural and the social.

In order to answer the latter question, I decided to conduct a small experiment. I took as a 'guinea-pig', a nine year old child to see how she would relate to both house and museum. It is sad to say that the museum did not stimulated her whatsoever. While I tried to spend time reading the information at hand I would be disturbed by her on numerous occasions and asked whether I had finished yet. Only the promise of a chocolate muffin would calm the girl's impatience. The museum does not cater for small children. Nonetheless, there exist a number of activity packs for secondary level students with intent purpose of drawing attention to the famine then in Ireland and similar events overseas now. The activity packs in question, **The Great Famine & Famine Today** and **Famine: Remembering our Past Remembering Our Future?**, contain a collection of photographs, posters and assignments. The intention of such packs would be an attempt to establish an understanding by youngsters of such tragedies. Nonetheless, there is no question of having to 'dilute' such information in order to accommodate various age groups.

Returning to my experiment, my 'assistant' found however the house fascinating. This was especially the case with various displays she could relate to according to her own perspectives, such as the schoolroom and the playroom. Even in the age of game consoles and information technology, the toys on display caught and stimulated this youngster's imagination with their combination of simplicity and colour. Even the kitchen became a place of wonderment. The young girl has always be known to help at home in the kitchen and was to say the least amazed by the lack of modern day electronic gadgetry, the size of the utensils and the enormity of the place overall.

Overall, both the house and the museum offer a very interesting insight into a key aspect of Irish history. The guided tour not only was informative but entertaining. In this respect, the guide not only tells a story but also has to add the emotion, spice and if necessary a few jokes to the narrative. The key to successful tour guiding is to keep the audience interested by whatever turn of phrase may be deemed necessary.

Strokestown Park House and The Famine Museum become a place of reflection. It is a powerful example of the relationship between tenant and landowner as a salient example in Irish history. Overall, the events in Strokestown were replicated all over the island and subsequently this 'local' example reflects a more 'global' issue between those involved and socio-economic and political structures. It would be to easy to dismiss the relevancy of the museum by arguing that all that can be learnt can be taken from the large number of works on the subject. From my own personal viewpoint, it was due to the time I took in the museum and the effort I thought necessary that led me to continue my reading on not only the Famine but also on the concept of the Big House in its Irish context.
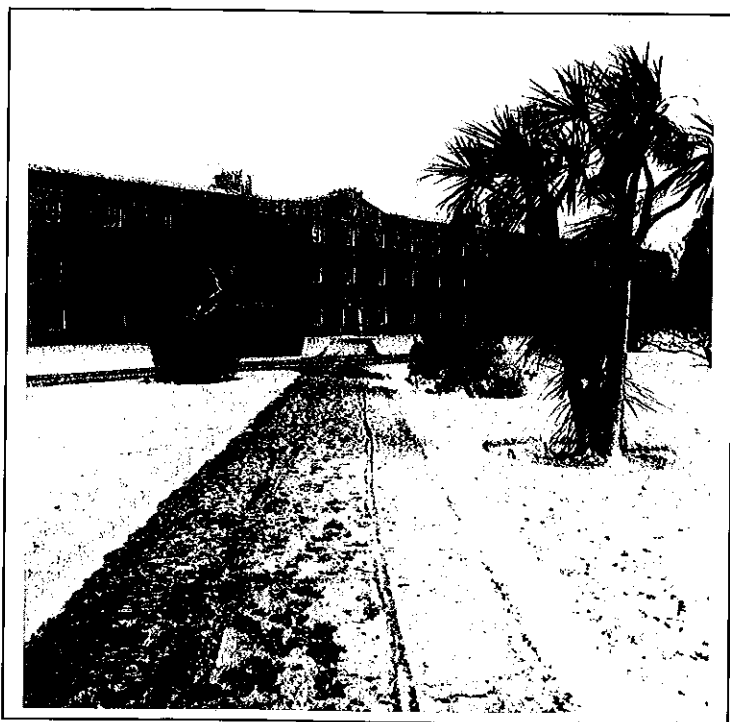
Humanity House, Winter 2001-2 NUIM (courtesy of Andrew Powers)

Bellinter:

The Bellinter Experience 2002

Sheelah Watson

The Third Annual Irish Geography Postgraduate Training Consortium got underway on Friday February 8th to 10th 2002. About thirty research geographers, from every corner of our Island, representative of nine Third Level Colleges, gathered at Bellinter House for an eventful and enriching weekend. Academic staff, numbering about fifteen gave their weekend to the organization facilitation and mentoring of the students through talks, brain storming sessions, workshops, presentations and information sessions.

Bellinter House built circa 1750 is a splendid Palladian mansion set in 14 acres of parkland two and half miles off the Dublin/Navan road. The NUIM students were housed in the very comfortable West Wing with ample space and facilities for a comfortable working weekend.

The timetable got off to a slow start with participants drifting in over a two to three hour period. The first brain storming session, the SWOT session, discussed the strengths, weaknesses, opportunities and threats we perceived in our research development process. Students visibly began to relax in the sharing of incidences of similar struggles, obstacles and fears around doing meaningful research. Strengths and opportunities of the research process were visited and outlined, feeding into a sense of optimism and a growing awareness of being part of the larger research community.

Presentation skills were visited next, after the proverbial cuppa, with a performance of 'What not to do' followed by 'The Perfect Presentation'. This was interesting and good for the uninitiated, but not a patch on our own 'Shelagh performances', for those of us who have had the joy of the 'Presentation Skills' class in 3rd Arts Geography and MA classes. In this presentation we were given pointers on the pitfalls of the early days of research from Survivors of the Postgrad regime, aptly named, Grumpy, Sleepy, Dopey, Sneezy, and Happy, in place of real names, to preserve anonymity or so we were told. These were interesting tidbits to be added to the development of structure in our work timetable, to enable satisfactory completion of the Thesis. Many students expressed an awareness of their difficulty to organize their time. The basic message is to develop a good consistent work ethic, high interest level in your research topic, realistic and adaptable understanding of what is attainable, and above all stay in close contact with your supervisor.

A very relaxed four course dinner was enjoyed around 7pm, served by pleasant staff who offered second helpings to all. With wine and chat flowing new friendships were initiated, research interests discussed and ideas exchanged between participants. New/late arrivals were brought up to date and a warm sense of camaraderie abounded. As many as seven different nationalities were represented, (from nine Irish colleges), including Russia, Africa, Spain, Italy, France, England and Northern and Southern Ireland. Geographers' research themes were visited from very diverse and sometimes converging angles. Social, political, human and cultural themes were plentiful. The economic, historic, environment, health, disability, carers, heritage, museums, education, the department store, childhood, and the culture of flight were all represented and in varying guises. Concerns for sustainable environments, inclusive geographies, cultural understandings of phenomena and histories, development of geographical information systems, and analysis of enabling technologies were among the driving forces behind the various research projects being pursued. Many participants expressed a particular interest in the applied aspects of their research interests in order to see their work as valuable to society. Physical geography was somewhat less represented but interestingly Deep-Water Coral Reefs in Irish and British Waters, Reconstructing Holocene Sea-level change in Clew Bay and the Severe Storms of Ireland since 1864 were included in discussions.

The evening progressed with a talk given by a visiting lecturer, Dr. Claire Mercer, on her Reflections on the PhD process and experience. She very ably regaled us with the story of her project on 'The Role of Women's Groups on the hill slopes of Mount Kilimanjaro in Tanzania". This was a very interesting project with many difficulties met along the way. Problems were overcome by innovation and consistent hard work. She gave good advice on allowing the research questions and strategies to develop and unfold in the field, always allowing for adaptability. She advised us to take advantage of opportunities that manifest along the journey. A good ethos in this type of research project is to allow the research assistant, selected in the field, to be your cultural guide. A local guide to interpret the language and the cultural meanings of communications is essential with this type of research.

It was down to the bar and the art of relaxation then by about 10pm but alas with students' own presentations looming large, for a 9.30am start next morning, revelries were somewhat subdued, with many participants retiring relatively early or at least returning to their rooms for last minute alterations to the scripts. Chattering was audible from some rooms till the small hours but a quiet night was the dominant mode.

At breakfast on Saturday morning there was a palpable air of fear and trepidation. Conversation revolved around individuals presentations. How long is your presentation? How many overheads are you using? Will you be using PowerPoint? Who's facilitating your group? There was a general air of insecurity and limited amounts of grub were ingested as nerves filled the dining hall. Some didn't even make it to breakfast, preferring to wait till elevenses or lunch.

Individual presentations were completed by lunch hour and there was an overt air of relief. A good lunch of salad and breads and ample amounts of tea and coffee revived the troops and renewed the spirits. Chat was plentiful again with much back slapping and genuine interest expressed in each others areas of work, where presentations had opened up new understandings of the projects in hand. Most participants were happy with their presentations, having survived the ordeal better than hoped for. It is scary putting your personal ideas out there for others to hear and question. However, the environment of this consortium is a safe and friendly forum in which to gain confidence in the art of presenting your material. This is a very beneficial exercise in personal growth and development.

Following Saturday lunch various workshop groups gathered in separate rooms facilitating new learning and explorations on topics such as, Archival Research, The Qualitative Interview, Bibliographic Management, (using EndNotes, a software package to aid bibliographic organization) Linking Theory and Writing, and Exploring Quantitative aspects of Physical Geography. Workshops were well received by all accounts and some participants would have liked to have attended more than one, but alas time did not permit. Later we had further reflections of the postgrad experience from two speakers who are in their second year of their doctorate. They shared some of the problems and successes that have arisen for them in their current projects. Following another tasty dinner we had our final guest speaker Dr Iain Robertson who spoke on Oral History as a research methodology.

Tired, but content, the partying began in earnest around 10pm. Some braver souls took a drive to the local public house where they enjoyed a drink or ? in the overcrowded smoky crush of Irishness, savouring the 'lyrical' sing-song, and the abundance of craic (the Irish version) in fresh surroundings. A sobering chilly walk back to Bellinter House (two and a half miles or so), under the brightly lit starry sky, with shooting stars testing sobriety, saw their return in the early hours. Lots of chat, the sharing of jokes, and songs round the piano enhanced by several trips to the well stocked fridges, kept the party mood rolling with fresh supplies of wit laughter and pertinent liquids. A couple hours had disappeared and then the MC, with unmistakable northern 'dulcet' intonations, announced a game of musical chairs. Frenzied polygonal arrangements of chairs then ensued. The finest bunch of 1st year Research Geographers in the country stepped merrily round the chairs to the jaunty rhythmic strides of the Teddy Bears Picnic and then fought stridently to bum a chair at the intermittent cessations in mid-note, a sight to behold I can ensure, while the nearby Rookery, in loud protest, flatly caw-cawed their dawn chorus. Satiated, and spent, bodies found their respective beds before dawn, only to rise again for breakfast all too soon.

Sunday brought lots of practical information on funding sources, career development strategies, enhancement of employment opportunities, how to get published, self development courses and the benefits of networking and making lots of pertinent contacts (consumption of vast amounts of Ballygowan a new feature of participation in the auditorium?). Ideas of what improvements may be made to enhance future consortium were taken from the floor. Thanks were expressed all around and the whole community returned to the dining room for the final lunch, a tasty hot meal to send us on our way. Goodbyes were exchanged all around along with email addresses and phone numbers. We headed home in all directions, physically intellectually emotionally and socially replete and zinging.
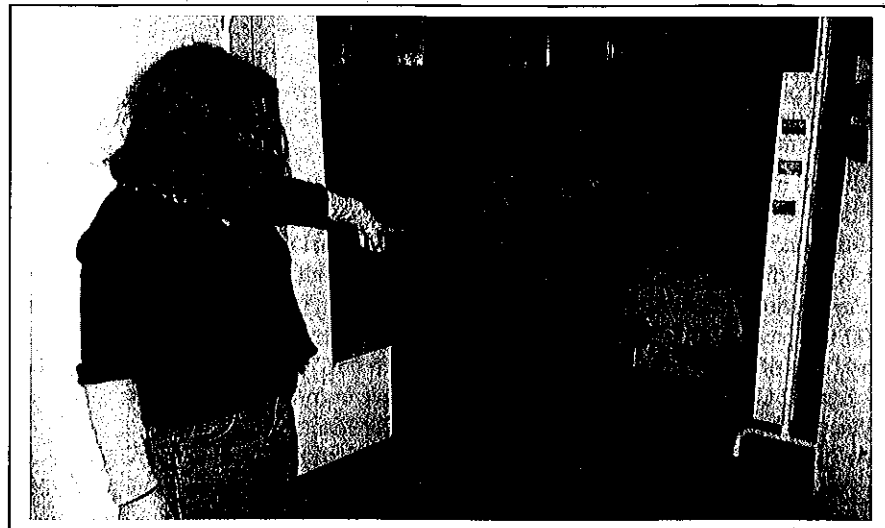
Yes, that's the way we did it in Bellinter ...

Bellinter Abstracts:

Linkages, logistics and spatial structure of Irish manufacturing industry

Nicola Brennan – Postgraduate Research PhD

Logistics (management of supply systems) are of crucial significance to the functioning of Irelands industrial economy. The proposed thesis will examine the spatial dimensions of supply structures in Irish manufacturing. Key elements to be explored are: (i) the geographical configurations of the supply structures of major indigenous and foreign end-product manufacturers in different sectors and how these configurations have changed over time; (ii) the role of specialist logistics firms in organising supply systems for manufacturing firms; (iii) the extent to which indigenous Irish firms have been able to exploit the market possibilities created by the trend to outsourcing in manufacturing industry; (iv) the extent to which specialist suppliers have been attracted to Ireland to produce inputs for clients based in Ireland. The study will be carried out through a series of interviews. Drawing on these findings, the thesis aims to conclude by making an assessment of three issues with major implications for Irish industrial and regional development policy; (i) trends in the embeddedness of foreign manufacturing industry in the Irish economy; (ii) trends in the development of local agglomerations of interdependent manufacturing firms; (iii) trends in the development of supply linkages between foreign and indigenous firms.

A comparative analysis of the spatial distribution in prevalence of Schizophrenia and Bipolar disorder in rural Ireland

Denise Grassick – Postgraduate Research PhD

BACKGROUND:
Schizophrenia (Dementia Praecox) and bipolar disorder (manic depression) are the main classes of mental disorder distinguished within the major functional psychoses. Irish psychiatric services (1998) identified bipolar disorder as having the highest (271.4 per 100,000) and schizophrenia the third highest (172.6 per 100,000) admissions rate to psychiatric hospitals and units throughout Ireland. Such widespread debilitating illnesses represent a real social and economic problem to Irish society and thus, credit further investigation.

No unequivocal scientific evidence for any single aetiological factor has been identified for either schizophrenia or bipolar disorder. Although a genetic component has been clearly established for these disorders an extensive body of literature suggests that environmental factors play important etiological roles, as environment drives gene expression. Two basic types of environmental risk factors have been implicated- biological factors at time of birth and social/environmental factors operating at time of onset. The latter pose greater importance for the present project as it involves a social dimension incorporating such aspects as social isolation, social class, socio-economic status, occupation and education and a physical dimension involving such factors as, the hydrological system, the biochemistry of the soil and the underlying geology of the area.

STUDY HYPOTHESIS:
If the risk of developing these psychiatric illnesses is influenced by an environmental factor then the distribution of prevalence rates maybe geographically uneven, reflecting the spatial distribution of the relevant causal factor(s).

AIM:
The principal aim of this project is to assess whether the spatial distribution of the two most debilitating psychiatric illnesses within an epidemiological complete population in County Monaghan is significantly non-random, reflecting the influences of specific social, economic or physical aetiological factors.

METHODOLOGY:
To identify all existing cases of schizophrenia and bipolar disorder within the catchment area using current in-patient and outpatient records
To attribute each patient to a DED within the study area by 'place of birth' and 'place of onset'.
To calculate the annual prevalence rate for each DED, this is the maximum likelihood estimate of the underlying risk.
To test whether the spatial distribution of these disorders within the study area is significantly non-random.
Overall distribution of cases (total, male, female) will be tested for departures from a random distribution using Chi-squared statistics.
Significance of the test statistic will be evaluated using Monte Carlo simulation test [10,000 repetitions].
Evidence of significantly high or low prevalence rates in specific DEDs will be estimated by calculating a Poisson probability model.
These estimates may be regarded as unstable if there is a small number of cases in some DEDs, thus empirical Bayes estimate (EBEs) will be calculated to alleviate this problem.
Conduct a comparative analysis of the spatial distribution of schizophrenia and bipolar disorder by 'place at birth' and 'place at onset'.
Analyse cases by gender to explore if different aetiological factors are at work using social indices from the Census of Population.
To investigate the geochemistry i.e. the local bedrock, soil and hydrological profile, of the study area as a biogeochemical association between these disorders and the trace element selenium has been identified.

Development education in third level institutions in Ireland with a particular focus on the teaching of geography

Thérèse Kennedy Doyle – M.Litt

This research will examine courses and modules in development studies from the viewpoint of development education, (i.e. education designed to enhance awareness and understanding of global issues and, of the interdependence of countries in different parts of the world in relation to these issues.) The study will focus on development education methodologies, with particular emphasis on the identification of innovative and active learning methodologies both in current literature and in the delivery of courses and modules.

Evaluation of outcomes of courses with a development content (i.e. effectiveness of the pedagogical methodologies) will be undertaken to establish:

- Opinions of educators and students vis à vis aims and objectives achieved in a course/module
- Student performance
- Subsequent areas of employment
- Further courses taken
- Changed social values and behaviour

The methodology to be used will include in-depth interviews with educators and students, questionnaires, and the application of innovative development education and active learning methodologies in various pilot studies.

It is hoped that by examining values and attitudes of both educators and students, a link may be established between active learning and a changed understanding of global development issues, and will lead to recommendations for best practice in the field of development education, which may be applied not only in the teaching of geography but also in a broader educational realm.

The digital divide in Ireland: Implications for national and regional development

Conor Mc Caffery – Postgraduate Research PhD

The digital divide (the division between those who are information technology enabled and those who are not) is becoming increasingly central to the development process in the emerging 'informational age'. The proposed thesis will undertake a systematic analysis of the digital divide and its implications for planning in Ireland. The study will encompass: 1) an overview of the development of information technology and its growing role in the post-Fordist 'informational economy'; 2) an investigation into the demographic, social, economic and spatial influences on differential access to IT capability; 3) an analysis of the impact of

public policy measures implemented in the various jurisdictions designed to reduce or eliminate these differentials; and 4) a documentation of the digital divide in Ireland. These sources will be supplemented by structured interviews with key personnel from the various agencies involved in formulating the relevant public policy measures. Analysing the findings, the thesis aims to formulate a coordinated and concerted set of public policy measures to maximise policy effectiveness in significantly reducing the dimensions of the digital divide in Ireland.

How the festivals won: A tale of place marketing and festivals in Kilkenny.

James Monagle – Postgraduate Research PhD

This paper utilizes aspects of both Actor-Network Theory and Regime Analysis, to provide a qualitative exploration of the emergence and trajectory of place marketing and promotion in Kilkenny city. It investigates the multiple rational and non-rational motivations associated with the formation and practices of local development politics, heritage marketing and city promotion activities.

The paper traces the formal and informal group networking that occurred with and without governmental collaboration. It identifies

three phases in the changing navigational controls that have directed the course of Kilkennys' journey through various place promotional events. Tracking their development from loosely structured amateur interest groups to professionalised organizations it also outlines the linkages and networks associated with the inception and application of these selected place marketing activities that have had a major role in the production of – and changes to – the very geography of the 'City' itself.

Enculturation of Mission: Explorations of Irish missionary activity

Ann Nicole - Postgraduate Research M.Litt

Human geographers recognise that cultural meanings are a human construct but also take into account the central importance of power relations in the construction of contexts within which people make sense of their worlds. Possibilities for the production of knowledge are framed within discourses which are informed by contemporary hegemonic forces.

Missionary activity, which strictly speaking is motivated by ideals above the material context of life, formed (within its modern phase) a strong component in Irish cultural identity. Therefore an important area of research lies beyond mapping areas of mission to searching written and oral material at the height of this movement in the 1950's. The aim of such a study is to gain insight into the transfer of ideas between cultures, effects on non European

societies by the introduction of western systems of thought and material structures, representations of other cultures propagated through mission literature and the possible effects, which the reality of living within different cultural codes had on those working in 'primary evangelisation'.

Although some critical work has been done regarding the discursive framework which supported and fostered mission activity abroad, there is as yet little scholarly work on the essential nature of what was a significant movement on the world. Such research requires access to archival material held by religious orders and other missionary organisations, including not only administrative details on particular projects but 'formation' material used for training personnel, published and unpublished memoirs, personal correspondence and oral accounts. There is a certain urgency to accessing primary source material as some archives are under threat and there is a problem implicit in the increasing age profile of missionaries who may provide oral accounts.

Networks and the Development of the Irish Biotechnology Sector

John O`Byrne – Postgraduate Research PhD

Biotechnology is widely predicted to be one of the leading growth sectors in advanced economies in the new millennium. The proposed thesis will focus on the crucial networking dimension among the relevant actors in the Irish Biotechnology sector. The main components are: (i) a detailed description of the nature/structure of the Biotechnology sector in Ireland; (ii) an account of networking arrangements in the sector; (iii) an analysis of the efficacy of these networking arrangements; (iv) an examination of the spatial structure of networking in the sector,

with a view to identifying the extent to which mutually reinforcing agglomeration and clustering processes are in operation in the sector. The study will involve structured interviews with key industry actors. Analysing the findings, the thesis aims to formulate policy proposals for enhancing/developing networking arrangements in order to facilitate the strengthening and further development of the Irish Biotechnology industry maximising its contribution to national development.

Landscapes of Care

Andrew Powers – Postgraduate Research PhD

There are over 50,000 full-time home carers in Ireland, providing round-the-clock care for disabled and chronically ill children and adults. These carers are supported by limited and limiting government financial support and mainly third sector service provision. This doctoral project shall attempt to provide a critical geographical survey of the ideologies, patterns and spatial experiences of carer support services in Ireland. Working at four

scales -- international, national, regional and local -- the research will critically evaluate how carer support is spatially structured, the services provided, and the geographies of carers themselves. In doing so it will employ concepts of citizenship and social justice to consider the merits and limitations of how home care is institutionally and ideologically framed.

Inclusive/Exclusive Geographies: Segregated Education of people with learning/developmental disabilities, individual choice or societal determination.

Sheelah Watson – M.Litt

The 1998 Education Act provides a level of principled commitment to the inclusion and equity of children with developmental disabilities in the mainstream education system. 'The ideology of the necessity for segregated settings was fed by social policy in the mid 1960's in respect of societal responsibility to the education and care of people with developmental disabilities. The inadequacy of this segregated system to meet the needs of many individuals are now recognized and documented. 'Researchers and educators have developed legal, educational, ethical and psychological arguments to support the integration of young people with disabilities into mainstream schooling'

[1]International Special Education Congress.

(Shevlin, ISEC[1] 2000). Spatial variations in the provision and uptake of mainstream education and the availability of choice for children with developmental disabilities are as yet a very limited area of investigation in Ireland. This present research will attempt to ascertain parents' networks of communication re education and information on the choices available to them for their children's education and their decision making process. It will further attempt to look at the systemic processes of geographical exclusion of people with developmental disabilities. This will be viewed from the position of parents, social workers, service providers and Education policy and practice.
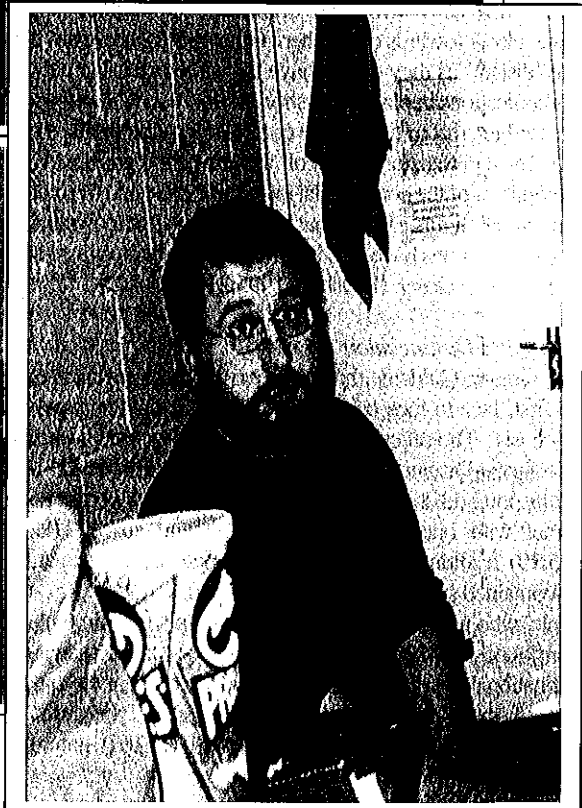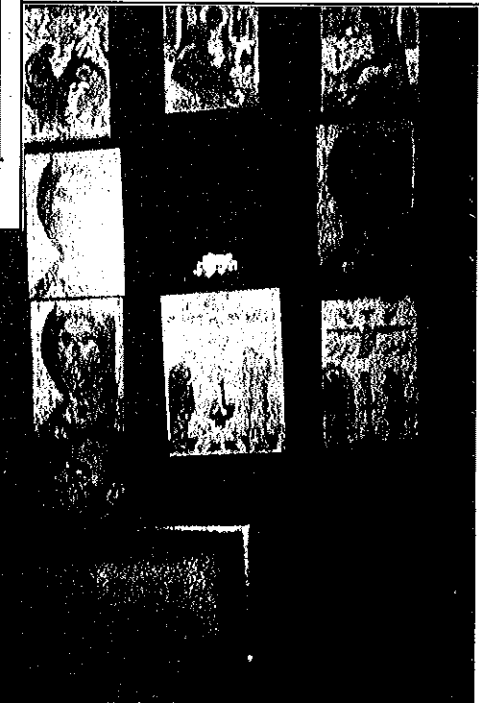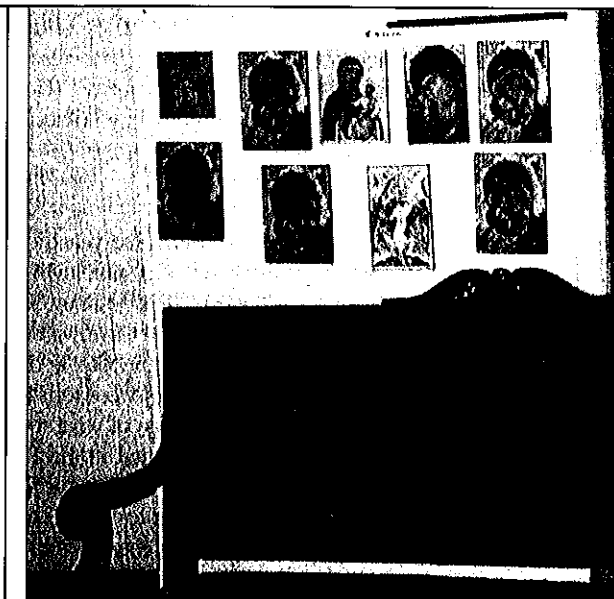
2002

BELLINTER 2002

Cyberspace:

Is the world speeding up or shrinking or both

Sorcha MacManus – 2nd Arts

Whilst there can be little doubt that certain parts of the world are speeding up or shrinking or both, to assume that this is the case for everyone world-wide is a very ethnocentric view. Caught up in the fast pace of life in the Celtic Tiger Ireland of today, perhaps it is easy to forget that there are people in this world who cannot travel easily, who cannot read or write and people who have never used a telephone or watched television. Following an explanation of the three time-space theories put forward by Janelle, Giddens and Harvey (Time-Space Convergence, Time-Space Distanciation and Time-Space Compression respectively), this suggestion of unevenness under the headings of travel and transport, media and communications, and finance will be examined. The three theories applied will be analysed to see if the world is speeding up and shrinking only for a few or for all.

Time-space Convergence
Time-space convergence was the term first used by Donald Janelle to describe how improvements in transport technologies brought geographical locations closer together – the time required to travel to a destination reduced, and as a result the significance of distance decreased. To support his argument, he compared the length of time it took to travel between Edinburgh and London in 1776 (4 days) and the late 1960s (3 hours by aeroplane). When thinking in terms of space-time, "distance is measured not in terms of absolute space, but in terms of the amount of time it takes to travel through space." (Leyshon in Allen & Hammett, 1995:18) Because of an extensive transport communications network, some places, such as Tokyo, San Francisco and Sydney appear to 'move' closer towards each other. Other places, however, become more 'distant' as they do not have the same extensive network of communications in place. (Leyshon, 1995:19) Increased interest in time-space compression was perhaps brought about by the transformation of the travel experience, with the development of the commercial jet in the 1950s, and the increase in international flights. Road construction, private car ownership and space explorations have also played their part in creating a sense of places moving closer. (Leyshon, 1995:21).

Time-Space Distanciation
According to Giddens, there are two types of social interaction. The first, face-to-face contact, is the type people engage in on a daily basis. The second type of interaction, which Giddens terms Time-Space Distanciation, is more remote and is "made possible by transport and communications systems, which permit people to interact with one another across time and space," (Leyshon, 1995:19) resulting in the interdependence of once separate and self-contained systems (Leyshon, 1995:19).
People, who are not present at a particular place or time may have an influence in shaping a place. For example, a manager in a multinational firm in the US may decide to open or close a branch plant of their operation abroad. In Ireland, because of the "dependent industrialization" (Wickham, 1983:167) nature of our

economy, this decision by US multinationals could result in the creation or loss of jobs.

Time-Space Compression
Harvey argues that the result of the unceasing quest of capitalists to find new markets for investment and reduce the turnover time of capital has resulted in what he terms Time-Space Compression (Leyshon, 1995:20). "It has been this competitive race for new markets and the drive to reduce the turnover time of capital in the search for profit which...have helped shrink the world in terms of time-space." (Leyshon, 1995:20).
According to Harvey, the improved communication and information flow enabled commodities to move through the market system at great speed, leading to increased consumption of both goods and services. "Instantaniety" (Harvery in Allen & Hammett, 1995:47) and "disposability" (ibid.) have become the norm in our society.

Travel & Transport
It is estimated that during the famine years, one million people migrated overseas and an additional unknown number to Britain (Harman Akenson 1996:18). This journey, across the Atlantic Ocean was particularly traumatic for many reasons. For one, the journey often took several weeks by boat, in dreadful conditions. The cost meant that most families were torn apart, never to see each other again. Also, knowledge of what to expect when they reached the US was scant and often in the form of newspaper reports or 'travellers' tales.'
The situation facing the emigrant to the US today is often very different. The journey is shorter, more comfortable with regular refreshment and choice of entertainment. Cheap flights make the return visit more accessible and, indeed, often allows family members and friends the opportunity to visit. Telephone and email facilitate instant communication. Television, including documentaries on people living abroad, travel programmes and other media, such as guide books, prepare the emigrant for the sights of the new country, removing some of the unknown from the experience. (Leyshon, 1995:13)
However, the recent tragic death of 58 Chinese men and women in the final leg of their journey from Zeebrugge to the UK, having travelled from China, (Irish Times) is not only an example of the barbarous exploitation of people seeking a better life but is also a sad illustration of how the time-space theories do not have relevance for some people in this world.

Media & Communications
Advances in media and communications provide a dramatic illustration of the application of the three theories, but again only in certain countries. It is possible to "acquire a sense of the world without moving very far at all." (Leyshon, 1995:14). News of famines, disasters and wars are on our television screens and in our newspapers within hours of the event. Satellite communications allow the viewer to see the "action" as it happens.

This assumes that everyone owns a television or has access to and the ability to read a newspaper, which is not the case. A telephone, let alone a television, is still a rare sight in some places such as Niger and Cambodia (Allen, Hamnett: 1995:236). The 1999 Human Development Report, highlights that in 1997 more than 850 million adults were illiterate and with nearly 1.3 billion people living on less than a dollar a day, one billion people cannot meet their basic consumption requirements - the money simply does not exist for them to purchase luxury items such as televisions and newspapers, even if the communication networks were in place.
With regard to the **Internet**, it is estimated that the total number of Internet users by 1999 was between 150 and 180 million (Slevin 2000:40). Fraser (Nguyen 1996:106) has suggested that the Internet is giving rise to a greying of the calendar year – smoothing out differences between day and night. Whilst this might be the experience of some countries in the developed world, it most certainly is not the experience of everyone. The result of the inability of some countries to develop their information communications technology (ICT) has resulted in what Friedmann calls "techno-apartheid" and has divided the world into "fast and "slow" worlds (Breathnach p.1)
During the 1990s, 880 million people lacked access to health services (1999 Human Development Report) never mind Internet services.

Finance
Money, in its new electronic form, can travel quickly around the world, at very little cost. The ease and efficiency with which money can be moved has encouraged a "speed-up in the financial system," (Leyshon in Allen, Hamnett 1995:36) with investment managers transporting money around the world in search of investment opportunities. Banks and other financial houses have sophisticated equipment and software packages such as Bloomberg and Reuters which allow their staff to buy and sell securities regardless of their own location. The largest

concentrations of these financial houses are in London, New York and Tokyo (Cloke et al 1999:108). As money is more mobile, it is easier for investors to invest in the most attractive opportunities. The relaxing of foreign exchange controls on foreign exchange markets mean that national economies are tied together as never before.
The experience of some countries around the world could not be more different. Some developing countries, because of their failure to repay debts, were "effectively excluded from the global financial system as banks refused to lend them more money, while insisting on the repayment of the debts still outstanding," (Thrift & Leyshon in Allen, Hamnett 1995:42) resulting in "...the less developed countries...much further away from the 'West' in terms of economic and social space than they were a decade earlier," (ibid.) during the 1990s. One result of this exclusion is that about 840 million people in this world in the year 1997 were malnourished (1999 Human Development Report). Again, we have seen how the theories can be applied only to certain regions of the world, while others remain excluded.

Conclusion
The above outlined explanations of the three time-space theories and their application in the world of travel, media and finance can be used to determine whether or not the world is shrinking or speeding up. In some parts of the world, with rapid advances in air travel, communications, Internet facilities, and with the movement of money around the globe in seconds, it would be difficult to dispute that the world is indeed speeding up and shrinking. However, these time-space theories must have little meaning or relevance for the estimated 840 million malnourished people and 850 million illiterate adults in the world, or for the families and communities of the 58 Chinese people that paid the ultimate price for their search for a new life.

References:
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A Global Village?

Lorraine O'Reilly – 2nd Arts

We are living in the age of instantaneous communication, we benefit from financial services that can travel at enormous speeds and "we are all in each others backyard"(Featherstone, 1999). In this essay the term 'global village' will be defined and analysed as to how globalisation affects our lives under the headings of media and communications, the world of finance and the internet. To assist this analysis a definition and application of the three time space theories as developed by Janelle, Giddens and Harvey, time/space convergence, distanciation and compression respectively shall be used.
It is evident from the title, that we are making a generalisation with regard to who exactly this 'we' refers to and therefore on the how lesser developed countries do not benefit from globalisation and as

a result the time/space theories have little relevance will be commented on.

Finally, how 'McDonaldization' and traditional concepts have come to a compromise and coexist in many areas will be examined.

The Global Village
Following his research into the developments in communication, McLuhan has suggested "our world has become compressed" and "electronically contracted" and therefore "the globe is no more than a village" (McLuhan, 1962). Leyshon reiterates this, suggesting that social relations no longer need people to be

physically present to interact (Leyshon, 1995) – a point highlighted by the time space convergence theory.

Time/Space Theories (Leyshon, 1995)
The three time/space theories are as follows:
Time Space Convergence, whereby places are moving closer together because of new developments in technology and transport. (Janelle) *Time Space Distanciation*, showing places that were once separate are becoming increasingly interdependent. (Giddens). *Time Space Compression*, which tells us that the reason for convergence and distanciation is related to profits. (Harvey)

Media and Communications
This sector has benefited from technology and provides an excellent illustration of the time/space convergence theory. In present-day Ireland, thanks to advancements in communications it is not necessary to have people physically present to conduct meetings (teleconferencing). This can now be done with the use of technology such as television, telephone and computer. We are bringing the world at large into our homes. Kneale suggests to us that "television in the living room is one place where the global meets the local" (Kneale, 1999). We can see how satellite channels are bringing us current affair programmes from all over the globe, giving us an insight into their views, problems and concerns as the global becomes local.
We can also see how our own country has made the global arena with the production of "Riverdance". This performance has touched many parts of the globe and resounds the feeling of authentic Irishness. O'Connor in her article on "Riverdance" echoes how this is our very own example of local meeting global. She explains how "Irish dance...transformed by going global" and to achieve this had "to take the form of commodity". She goes on the say that "Irish dancing could assume the status of a global commodity only by mixing with other cultural forms by becoming a hybrid". I believe this reiterates the 'detraditionalisation' concept of McLuhan such that traditional values are diluted by other values and customs in order to become acceptable globally.

World of Finance
The relevance of all three time/space theories can be seen in the world of finance. The world of finance has evolved from the days of barter, to coin, to cash and most recent electronic form. "Money can now travel...at the speed of light." (Leyshon, 1995) . This speed links financially strong countries to such an extent that they are unquestionably interdependent. The financial sector is intensely linked by communication networks, with Tokyo, New York and London linked by convergence, distanciation and compression. There is a "sense of financial markets all over the world collapsing into a single entity" (Leyshon, 1995). In 1987 Wall Street Crash, shock waves were felt all over the world because of the interdependence within the financial community.
"The link between the cost of money and time has encouraged a speed-up in the financial system"(Leyshon, 1995). The result is that developed countries with the technological advances can stretch money to the limit, take risks and make more money.

The Internet
The internet has brought the concept of time/space convergence into a new light not by moving places closer together but rather transporting all places to a new plain. The internet is seen to link everyone, everywhere. It is the epitome of globalisation concept.

However, it is limited to those who can afford the technology and have the necessary education to use it. Kitchin and Dodge (2001) explain how "Cyberspace is an elite space, a playground for the privilaged". Technology is not available to all and therefore underlines the divides that presently exist. As such the internet is far from a place where you can assume a new identity but rather the migration of social divides to a new arena.

Uneven Development of Globalization
With regard to time/space convergence, distanciation and compression theories, the financial community has overlooked LDC's. Many people still live within their own communities without having the technology or even the knowledge to use it if the networks were in place. In some respects this seems to be land that time forgot. "The majority of places are not on the maps of finance" with "the vast majority of the world is off the map of multinational investment, in so far as technology and jobs are concerned."(Allen & Hamnett, 1995) Money is being made through the communications industry, a vicious circle whereby the lesser developed need capital, skilling up and education to break out of the trap. 75% of overseas investment is primarily controlled by 14% of the population (North America, Europe and Japan who only invest in certain "global regions") (Allen & Hamnett, 1995: 237)
"In Niger or Cambodia a telephone is still a rare sight" (Allen & Hamnet, 1995). Some parts of the world do not have the advances in telephone, e-mail and television and as such are not living in a global village. "Consider the vast areas of the globe with virtually no links of any kind going to them."(Allen & Hamnett, 1995). Surely the concept of 'detraditionalisation' cannot exist in places where local does not meet global due to lack of communication technology.

McDonaldization
"A new McDonalds restaurant opens somewhere in the world every three hours" (Daniels et al, 2001). From this we could assume that McDonalds is the ultimate global concept, with the same service, style and type of food. However, McDonalds does not just penetrate the site of a new outlet with its own franchise, but adapts to facilitate local preferences and tastes (eg McSpagetti in the Philippines). Daniels gives an account of how a concept similar the world over can be interpreted and used differently according to its market. McDonalds in America, is seen as a fast food outlet where teenagers 'hang out' with their friends. However, in Beijing McDonalds is a family restaurant with people eating, relaxing and chatting for hours. McDonalds is a global concept, but it is also locally specific being modified as deemed necessary to service its locale.

Conclusion
Arguably we, in Western Euope, are living in a global village, and as a result have our lives have been influenced by from time/space distanciation, compression and convergence. We can transfer money at the speed of light, communicate with people the opposite end of the world and have a Big Mac meal in most countries. The developed countries of the world have benefited from advances in communication, media and finance systems.
However, there is a strong fact that a generalisation has been made with respect to globalisation and the world as a whole. It is impossible for all countries to benefit from this concept in the same way. The developed countries benefit from globalisation to a greater extent, they have an advantage economically and can

benefit from the technologies to hand. The lesser-developed countries such as parts of Africa are excluded from 'detraditionalisation' and continue to be remote without the advent of extensive networks of communications.

Unfortunately, the divide between the developing and developed countries is still apparent. Globalisation applies to one sector of the community and excludes the other and this will continue to be the case until such time as all countries are equal. It is only then that globalisation will fulfill its ultimate role and be truly global.

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The Geography of Fantasyscapes

Thérèse Kennedy – Postgraduate Research M.Litt

Dreams, desires, wishes and hopes are regularly merged in fantasies which aspire to give reason to the fundamental question of humankind. Why are we here?
Humans have always looked for direction and purpose in their lives, striving constantly to dominate and attain ultimate knowledge and control over the unknown. This search for insight into the unknown has led us to question, rebel, act, and react, in order to find some meaning in what Samuel Beckett referred to as the 'universal void', which must be filled in order to make life more bearable. Incomprehension leads us to surmise and speculate. In doing so, we create our own images of idealism and perfection and claim to at least be trying to give meaning to the present. However, one person's fantasy is another's reality and so the uncertainty remains. We continue therefore to shape and change our physical world and to mould it into an image of our fantasies in an attempt to master it. We have never succeeded in achieving ultimate knowledge, but have found a means which allows us to dominate our fellow human beings and at least partially fulfil the desire for ultimate control. The power of ownership and control of space, place, and even the human mind satisfies to some extent the desire for control and helps fill the void. But at what cost?
Fantasy represents different things to different people. For many it signifies escapism, albeit temporary, from the rigours of life and reality. Some are locked in a half life of permanent fantasies whilst others try to give expression to their fantasy by attempting to construct and create it. Escapism from life might manifest itself in a visit to the cinema, a walk on the beach, the crafting of a piece of artwork or at the end of a vodka bottle. However, for most it is just momentary, and reality usually re-enters after a certain period of time. Fantasy is a private place where dreams can be played out at leisure. It offers a certain fulfilment, hope and reassurance, in the presence of uncertainty and allows one to feel in control.

Fantasyscapes are places that epitomise our hopes and dreams. Whether an area of natural beauty like a desert island, a constructed environment such as Disneyland or the Eiffel Tower, or even the moon, they also hold different meanings for everyone and so their geography is difficult to define. They exist in the individual psyche, and as such, can be manipulated and controlled by the individual to represent whatever he or she desires. Today however, fantasy and fantasyscapes are no longer the property of individual minds, as even these spaces are infiltrated by the media.
The media is a powerful vehicle that enables subtle penetration and manipulation of the subconscious. It crosses with ease the boundary between reality and fantasy, confusing and blurring meanings and images that were once clearly defined. Marketing and advertising, the essential working ingredients in today's capitalist society lure us to places and spaces which we believe to be crucial to our existence. Edward W. Soja refers to this process as,
...the diffusion of hyper reality from its specialized factories into everyday life in households, neighbourhoods, workplaces, shopping malls, voting booths, virtually everywhere in the city. Today, you do not just choose to visit the hyper real; it visits you wherever you choose to be (Soja, Edward,1995: p135)

Fantasy then becomes reality and a new cultural construct evolves which is media driven and deemed just as necessary as the water of life. It becomes the accepted cultural way of living and doing things, and is no longer seen as just a temporary escapism. The simulated experience becomes the fact and individual choice is imperceptibly removed. The confusion between reality and fantasy removes the element of escapism from the space of personal control as dreams are transformed into simulated reality that can be marketed and purchased. The message is, that fantasy *can* happen,......at a price!. The values of health, happiness and harmony are embodied in the newly conceived dream, which is

skilfully crafted by those in control and power. Power and control are achieved through capital. Money is therefore the password to dominance of the physical and subconscious world of man.

Fantasies are embodied in filmscapes, shoppingscapes, streetscapes, landscapes, and cyberscapes. They exist all about us encouraging us to spend and consume, providing us with multiple possibilities of 'buy now and pay later' financing. Instant gratification is packaged and sold as a desirable commodity. Consumerism has become synonymous with leisure and pleasure for those who can afford to pay. What better way to encourage consumers than through clever and subtle marketing which makes them feel good and allows them to think that they are making all the choices.

Shopping, perhaps the single most common leisure experience today, illustrates the workings of the greater forces of power and control. Visit any big shopping mall on a Sunday and you will meet countless families having a day out. The climate, landscapes and streetscapes of shopping malls are carefully constructed, controlled and monitored so that the shopper is made to feel as relaxed and at ease as possible. The microclimate is carefully adjusted to provide just the perfect ambient temperature. Street entertainment and music provides the perfect holiday atmosphere. Plants and trees grow alongside sparkling ponds and fountains where one can relax, but not for too long, as there is much to experience. Lifts, escalators, wheelchairs, and buggies are provided to make your stay more comfortable and accessible. Restaurants provide endless selections of international cuisine in settings that often vie with the most appealing tourist brochures. Cinemas, and beauty parlours offer further entertainment and relaxation to those who might still feel stressed. Children can enjoy painting, handcrafts, bouncing castles and climbing frames under careful supervision, whilst Mum and Dad enjoy the facilities. Closed circuit television provides assurance of a crime free stay and non-participants and undesirables are quickly moved on or ejected. After all, to experience this wonderful environment you must be prepared to participate. You can shop till you drop and then finish off with a reviving 'café latte' at a street-side café before it is time to say goodbye and head back to reality.

Disneyland, where dreams always come true and endings are always happy, is probably the most famous fantasyscape. On the one hand you are aware when entering Walt Disney World, that it is not real. However, once on the Main Street you slip into a Disney state of mind, adults and children alike succumbing to the world of make-believe, trying to cram in as many experiences as possible. Carefully orchestrated music, light and entertainment lead you from one area of consumption to the next where you can experience faraway lands and their people in just a few footsteps. For some, it is the perfect, crime-free, hassle-free way to see the world. As one visitor so aptly puts it:

I don't need to go to the South Pacific. I've already seen Tahiti at the Polynesian village (Hannigan, 1998:21)

Where are all the waste, catering and storage zones, changing rooms, maintenance areas, power supplies and numerous other essential organs of this heaving, living breathing dreamland. Paradoxically, they are all hidden away in an eerie underworld labyrinth of subterranean reality Carefully positioned doorways in tree trunks and castle walls lead to the real living centre of this fantasy land. Workers, grinders and grafters work their way to the topsoil where a carefully sanitized picture of mythology and idealism is presented to the public at the surface.

Whether located at Disneyland or not, themed parks, pubs and restaurants all claim to offer 'the real thing' to the consumer. The past can be restored and packaged to comfort and assure. Heritage, a thriving tourist attraction in Ireland is used to preserve and maintain all that we perceive to be good about the past in the present. Castles and villages such as those at Bunratty in Co. Clare permit the visitor to step back in time and savour life of previous centuries, without any of its negative aspects. Ironically, the reality of such places is, is that they only existed in the first place as a result of power, injustice and exploitation. You can visit the interpretative centre in Dunquin in Co. Kerry and explore the Blasket Islands of Peig Sayers without ever having to step foot in a currach, or risk your life in a crossing… Take a trip on the Maid of the Mist under Niagara Falls and relive the romance of Katherine Hepburn and Spencer Tracey. Fantasyscapes, once the preserve of all, now come with a hefty price tag, which excludes those who are unable to afford the dream.

Money is synonymous with culture and power. The quest for larger profits generates even more of these simulated spaces, which redefine our cultural values. As we hold on to selective and perceived idealistic virtual images of the past or create potent and appealing images of the future, we ignore our present. The capitalist world holds the monopoly on fantasyscapes or 'what Edward W. Soja refers to as 'real fakes' (Idem, p.135), which are gradually being marketed to poorer and lesser developed countries, as the symbols of western success and achievement. Media, particularly television, reaches most countries of the world, transferring the cultural values of capitalist societies. Tourism and tourists bring it all to life as luxury hotels, clubs, and complexes are constructed in idyllic settings amidst jungles, deserts and teeming cities of the third world. All the positive elements of developed countries are encapsulated in these little microcosms of western tourism and all the negative elements are excluded. A Westerner, prepared to pay the local equivalent of a month's wages for a coca-cola in the foothills of Mount Everest, represents a powerful message to the woman who has carried the crate on her head up the mountain side, in the same way that she hauls water from the well miles away.

Fantasyscapes have little place between the equator and latitudes of 30 degrees where populations struggle to survive amidst droughts, famines, hurricanes and floods. Insurance companies in the west pay for research and long term weather predictions in order to safeguard their profit margins against such climatic disasters. In the USA the scale of disaster of a hurricane is measured in terms of dollars, whereas in underdeveloped countries, the cost is measured in terms of human life! In many cultures, land cannot be owned. It is on loan to everyone and therefore must be respected and nurtured and worked with care. In developed countries, land is a commodity, which can be traded by individuals such as developers, farmers or prospectors and handed down through families. The productivist era of farming has interfered with ecosystems and wildlife habitats. These have been disrupted and destroyed as hedgerows have been removed to maximize land cultivation and facilitate machinery, or when pollutants enter the water courses. The sight of a boundless field stretching to the horizon is a reassuring sight or dream for many farmers. Herbicides provide the magic ingredient for a crop of healthy golden wheat just asking to be eaten. Chemicals and fertilizers help to give depth and colour to the scene of lush grass and sleek Friesian cows. More milk and bread means more money.

Man's active degradation of his environment in search of greater wealth has caused damage to our atmosphere. The Kyoto protocol was set up to limit further damage to the environment from the emission of greenhouse gases. Newly industrializing countries in the third world following in the path of the western dream are told that they cannot use the same methods to achieve economic success. Their fantasyscapes are being denied by a more powerful and wealthy society capable of affording other methods to maintain economic success. Refusal of newly industrializing countries to sign up to the agreement as proposed by the economic powers is understandable.

Today our civic buildings, gated communities, zones of natural and constructed beauty are owned or controlled by someone with power. The power houses of finance and economic success exist at the cost of the poor, deprived, marginalized and non powerful who are carefully hidden away and ignored like the unpleasant aspects of Disneyland. Consumerism is the password to fantasyland and consumers are its positive and desirable inhabitants. Inability to consume is the downside and is dealt with by banishment of non consumers to the Gulag of harsh reality and social inequalities. As technology moves faster onwards, the gaps between the powerful and powerless widen. Cities work in isolation of their rural surroundings. Global cities operate through a network of finance, pension funds and other monetary services. They are powerful spaces, independent of their regional and national boundaries, functioning in the hyper reality of cyberspace and cyberscapes, controlling world economics.

Fantasy is a necessary calming reassurance of the human mind. Wonderful buildings, music, literature and art have evolved from people's visions and dreams. However, by making fantasy a constant reality is to diminish its intrinsic value, which is to provide palliative care to the mind. What better therapy for the human mind than to escape to a world of endless possibilities and then to return re-energized and refreshed, to face reality. This return is essential to validate the benefits of fantasy. The boundaries must be clearly defined between what is real and what is make-believe. Otherwise, the unpleasant is permanently denied. Social polarization, marginalization and deprivation are carefully hidden so that the consumer is not disturbed or made aware of the dualities that exist in society. The danger is that we begin to believe only what we see, leading to a carefully manipulated two tier society of consumers concerned only about the next purchase, and non-consumers concerned only about the next meal. The "been there, done that, bought the T-shirt" mentality prevails, as we stride through our fantasyscapes, collecting dreams and experiences, whilst those denied access, move unseen in the shadows of harsh reality.

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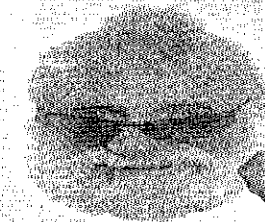The Economist, March 13th, 1999.
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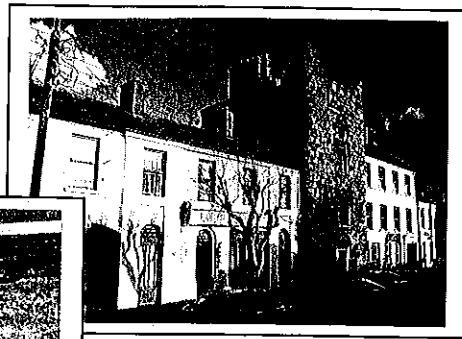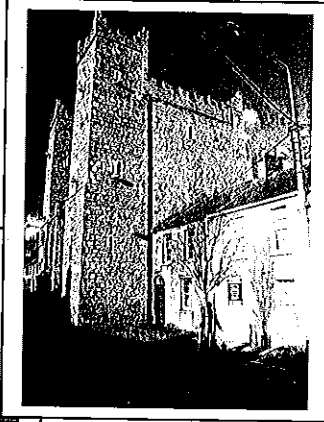Watson, S and Gibson K., (Eds.) Postmodern Cities and Spaces, Blackwell, Oxford, 1995..

Donegal Field Trip

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Christmas 2001

Dungarvan caters poorly for the needs of the disabled

Sheelah Watson – Postgraduate Research

On September 29th last (2001), seven postgraduate students of Geography at the National University of Ireland, Maynooth conducted a preliminary survey on how "user-friendly" public facilities and amenities in Dungarvan are for people with physical disabilities. Particular attention was paid to wheelchair accessibility and the availability of facilities for the blind or partially sighted and those with hearing difficulties. Note was also taken of the difficulties that may be encountered by the elderly, and persons managing children in buggies.

In general, it was found that, like many other towns and villages in Ireland, Dungarvan is a potentially difficult place to negotiate for people with disabilities. Pathways are frequently damaged and cracked. The height of kerbs is variable and unpredictable. Kerbs at pedestrian crossings are seldom dished and flush with the roadway and are therefore unsuitable for most forms of wheelchair use. In several cases where dishing was found on one side of a crossing, this was not the case on the other side. Tactile paving (which alerts the unsighted to the presence of a crossing) is non-existent at most crossings. At Grattan Square the new pedestrian crossing at the Bridge Street entrance only had tactile paving on one side, and this was poorly designed in terms of providing guidance for the unsighted.

Signal-controlled pedestrian crossings are rare. Where they were found, the audio function was operative on only one side at each junction observed. The signal to cross generally allowed a very short interval for those with impaired mobility. The Belisha beacons at new zebra crossing in the square were not functioning and thus of little use to those of limited sight as they would not easily be recognized.

Some supermarkets are equipped with automatic doors. However, parking for the disabled and pathways to the doors are typically poorly connected. Lips at doorways are very common, making safe maneuvering of a wheelchair difficult and creating trip factors for the blind or partially sighted. Floor tiling in the shops frequently sat a half-inch to an inch above the outside pavement level. Inside the shops, clutter was observed in many premises, with many obstacles placed in the aisles. Alignment of shelving and cabinets along the aisles and the height of shelves were also often poor. However, a good home delivery service was available in most supermarkets if desired. Many other retail outlets were too small to be negotiated by wheelchairs as many have narrow doorways, steps up to doorways and narrow aisles.

Education facilities in the town were closed as it was Saturday, but from what could be ascertained, facilities that were user-friendly to wheelchair students were available. However, in some cases access routes to the schools were hazardous and inimical to independent movement, due mainly to poor footpath surfaces or the complete absence of footpaths. The local FÁS Centre, which has responsibility for training disabled persons toward employment, sadly is inaccessible to many of the disabled due to its narrow doorway and poor layout within.

Similarly, places of entertainment and leisure, such as the pubs, night clubs, restaurants, take-aways, cinema, museum and tennis courts and even walking along the coastline are not user friendly to the wheelchair-bound. Local churches appear inaccessible without considerable aid to the disabled visitor. Health services, we believe, would prove difficult to access. Dentists, doctors, opticians and physiotherapists are typically located on upper floors. One surgery did have a ramp and open parking but one would need assistance to negotiate the steepness of the ramp and there was a lack of a platform at the top to allow for the safe opening of the door. Similarly, facilities at the local hospital would not allow for independent access of persons with disabilities.

Good news is to be had at some of the newer buildings and facilities in the town. The Library, the Credit Union, the Arts Centre and ATMs are accessible to all. Toilets for the disabled are available in these newer, well laid out, buildings, though not well signposted from the street. One automatic toilet is available at the bridge on the quayside but again pathways and poor finish has left problem dips and lips in the tarmac. Information on parking for the disabled was available at the library along with internet and computer access. All facilities here are user-friendly and the Arts Centre also has a lift to upper floors.

For the younger persons in the community a purpose-built playground has been developed at Walton Park. Many features here are excellent with well-cushioned ground beneath the apparatus. However, open-backed ladders in some areas and lack of a safety rail at the rope climb could be potential hazards for the less mobile. As with so many amenities in the town, again access was very poor. Children and parents/carers must cross a car park and bumpy uneven wasteland to enter the playground. Car-parking spaces block the route for the user and this could also make it difficult for an ambulance to access the grounds if required. No toilet facilities are available in the area, necessitating crossing a rather dangerous bridge should the children require the facilities of the public toilet at the quay.

Dungarvan is probably no worse than similar towns elsewhere in terms of how well it caters for people with disabilities, and in some respects is possibly better. The survey indicated a general lack of awareness of how the environment could be made better to include all members of the community. Street clutter, such as sandwich boards, cars parked on pavements or in disabled spaces, bicycles propped against walls blocking the pavements, deliveries left in the street, skips placed in the path without netting to warn the blind person using a cane, these all create transient problems that could be improved with a little thoughtfulness. Unfinished work was in evidence all around the town, creating unnecessary hazards. It was also clear that the needs of the disabled were not high in the priorities of the local authority, as indicated by the poor condition of footpaths, and poor design and maintenance of pedestrian crossings.

These are common problems all over Ireland, which performs poorly by comparison with other European countries in terms of how well we cater for the needs of those with disabilities. A general public awareness campaign is needed, backed up by active application of legislation and regulations. Hopefully this brief report will make some small contribution in this direction.

Diary - the life of a 40-something field trip leader

Shelagh Waddington

May 2001 Will Paul and I make a commitment? Somehow we know it is inevitable that we will do it, but we are both reluctant to take the final decision. We know that we are in the grip of forces too powerful to resist, so, swept along on a tide of conflicting emotions we go the planning meeting for the next academic year. Eventually the point is reached when the dread words are said 'Who is due to go on the week long field trip next year'. The cry goes out 'Paul and Shelagh!' Paul weeps and begs and the Admin. staff are sent to talk me out of the Ladies. Everybody insists - it's your turn, face it. Proinnsias looks awful big, Rob threatens to send us to cyberia - so we agree. Later we keep telling each other it will be alright - Prionnsias and Paddy came back last year, why shouldn't we?

July 2001 After a bit of time spent in therapy, we are prepared to contemplate our future together. We have to make proper plans - OK, we went to Antrim last time we did this, so we'll do it let' again. So, I telephone the Youth Hostel at Whitepark Bay. Does the warden remember us? Well, yes she does - or Paul at least. So her first question was 'Does he still get up at 5.30 a.m.?' I deny firmly any knowledge of his sleeping habits - what sort of a woman does she think I am? Anyway she agrees that we can visit the hostel again, so we are now committed.

Early September 2001 I decide that maybe I can cope with the trip if I can take my mammy - she will deal with any student who upsets her daughter. Anyway, I force her to go to Antrim on a reconnaissance trip. She is ideally placed to identify with the average NUIM student - she is co-operative, hard working, a truly warm and friendly person - where do I get my best characteristics from? After a few days in my company, she insists on being let out of the chains and going home - she may not be willing to come on the trip in February after all!

October 2001 I take my first look at the 2nd years - will I really have to go away for a week with some of these people? Can I insist that only those I like the looks will be allowed to go on the trip - those who are wearing Pioneer pins, seem serious, hard working and as though they have never been known to cause trouble in their lives. I ask Paddy if I can just take suitable students - he says that it would be a waste of department resources if I went by myself.
Paul says we need to book a bus. I ask why - I can take enough students for my taste in my Corsa. He breaks the news that we have to take all the Single Honours group. I cry for a while, but he says I need to cop myself on - unless I win the Lotto I need the job and I can't escape Antrim unless I resign. So I book the bus.

Later in October 2001 Rob arranges a meeting with the Single Honours group - I have to go, he works next door and he makes me come downstairs with him. I cling desperately to the door into the Physical lab, but he hits my knuckles with a copy of his latest book - it certainly isn't a virtual book, my hand is really sore. Eventually I force myself to open my eyes - they don't seem too threatening (especially after Rob has got them to put down their coshes and bottles of gin), maybe this won't be too bad after all. I say a bit about the trip - stressing the positive as my counsellor always recommends. I'm positive it will be cold, you will all hate it, it will cost a fortune, and you will not be allowed for a drink or any socialising on any night. Still they seem to want to go. What can I do?

November 2001 We arrange another meeting. Cunningly, I arrange to be teaching so Paul has to go by himself - I think that maybe he will decide to do the whole thing by himself. Later he is forced down off the roof and so we both have to go on the trip.

Christmas 2001 I flee the country [visit to Mammy - what a sad social life I have], but she insists that I have to go home again. Eventually she finds a locksmith who unlocks the handcuffs I am using to fasten myself to her house and I am sent back to Dublin airport. The security staff don't believe me when I say I am an asylum seeker, they don't believe my stories of my well-founded fear of persecution in Maynooth. So I come home and read a self-help book. It says that you should not waste your time complaining because life doesn't always give you what you want and you should be positive about what you have got. I resolve not to be a victim, and spend an hour a day saying positive things to myself, such as 'Whatever happens I can handle it, I will survive whatever happens' somehow these are not as reassuring as the author suggests. Can I get enough money to survive on by suing her for publishing dangerous lies? Paul says not, so I start thinking about what we can do in Antrim in February. I reluctantly conclude that my personal study of the insides of North Antrim pubs may not be adequate as a contribution to the academic side of the trip.

Start of term 2002 Paul and I have another meeting - what will we do with them? Paul said it will make a man of them to look at a few rocks - we will get them out to do studies of a few places on beaches etc. So I asked about follow-up -Will they do sand sieving and pebble measuring, Paul? A meaningful pause - Do you mean particle size and pebble shape analysis, Shelagh? Well, yes...... Maybe I need a bit more work on my physical geography street cred. Is this the first sign that our great relationship may not last? Are we likely to be incompatible? I sit in my room and worry for a while - is this a reason to drop out?
I decide to phone the bus company - maybe they have hired out the bus to somebody else - it must be too late to get another! Willie Doyle says - no there is no problem, the bus is all arranged. I cry a bit and decide to phone the hostel. Maybe they have closed down unexpectedly. We couldn't possibly find somewhere else at this time of year. Gretta says that the booking is for the correct time and we have the appropriate rooms. A few more meetings with Paul - I now have a project for them - some more visits to exciting places to find out about tourist development - they will love the rural ones. Antrim in February is so full of tourists and the sites have so many possibilities for enjoyment under cover. Fieldwork made me what I am - will it do the same for them? Will they sue?
We have another meeting with the students and make them pay up for the trip - poor souls, the true meaning of going to Antrim in February bursts on them - €300 and warm and waterproof clothing, no Bank link within 10 miles and no alcohol within two! Maybe they will all drop out - please.

Two days to go We have to buy the food - or we have to if we don't want to be killed when they find out there is not food. Paul pushes the trolley around Tesco - I grab things off the shelves and pay - who says Belfast people aren't generous to a fault! I go home and drink a bottle of wine - maybe I can tell Jim Walsh that I have a drink problem and then he won't make me go? Maybe he will anyway. I try to pack my clothes - somehow I am reluctant. If I pack, I will have to face up to going. Finally, after some more drink, I managed to do it.

Day before I phone the bus [they still haven't accidentally hired it to somebody else!] and phone the hostel [it still hasn't burned down]. I think I might have to go. I try to persuade himself to phone Paul to tell him I am sick -- he refuses to tell lies -- will my marriage survive the trip to Antrim? Should I stay at home to spend time with my family? The cats may get lonely.

Day 1 The alarm didn't fail to go off, I don't feel sick. OK, I have to get up and go. I eat three Weetabix and several Prozac and himself drags me out of the bathroom and puts me out the door. You can't be so frightened of them - are you a woman or a mouse? Squeak! I get to Rhetoric and meet Paul's partner leaving him in. I offer Dot the chance for some really high quality time with Paul - I will let her take my place - what self-sacrifice!. She callously laughs and drives off - how can Paul live with someone so cruel? The bus arrives - and all of the students - no mass attack of flu or student rebellion. We manage to get all the luggage into the bus and all the students. I suggest that there isn't room for me – Paul forces me into the bus. He tries to tell me that I should not be crying and begging in front of the students. Sadly, it has no effect on them and he tells me to 'cop myself on' – I have to go.
Finally we set off - our only delay was waiting for one Mammy to bring the camera - I begged her to delay us a bit longer. Was she sure that she was prepared to risk us taking her 'ewe lamb' away for a week? Didn't she think we looked dubious characters - no she didn't!
The bus did not break down and we reached Sprucefield. We got off the bus and they disappeared -- I hoped that maybe they wouldn't come back. In case they did, we bought food in M&S and waited. They did come back. We couldn't get back into the bus – I hoped that maybe we would have to go home on the train. Paul and the driver [Kevin] manage to open the door - what is the matter with these people? We explain to Lesley, that she has left Dublin now - it is different in the rest of the world and assure Emma that she will be able to see whether Will or Gareth become the Pop Idol. Yes, they do have TV in Antrim.
2.30 p.m. - arrive at hostel - notice says not open until 5 p.m. and nobody around. It's also spitting rain -I suggest we go home in disgust. We decide to go to the pub until we can find the warden. Maybe she has run away and we will be left in the pub for a week? Anyway Paul leaves a note and we go to the pub - he tells the students we will be going into the pub on the right - so they all go to the one on the left. I tell him there is a message here - they don't want us - can I go home? He won't let me - and the warden phones to tell us she is back. Paul drags me back on to the bus and rounds up the students. This time we get let into the hostel and I go and hide in my room until food is served.

Day 2 1 a.m. I finally got back from the pub. We went down in the bus at about 9.30 - just for one. The landlord offered to bring the driver back so he joined us - just for one. At 11.00 we went through to the lounge - just for one - and to listen to the group playing country and northern - eat your heart out Garth Brooks. The big attraction is take your pick - jackpot £500 - why did everybody who got called up turn out to be known to the man in charge? What a co incidence! I think about walking out in disgust or making a protest. Fortunately I didn't - he was the person providing the taxi service and it is a long dark walk back to the hostel.

Later on Day 2 OK maybe 7.30 isn't so early, but it is Sunday. Paul has only been up for a few hours, so he is still leaping about with energy. There is not a student in sight. I suggest that we leave it that way, but Paul insists that we wake them up - he is a keen man! After we have forced them out of bed (OK the job has some compensations!) we beat them onto the bus and abandoned them at various points on the

coast. Then we buy the Sunday papers and go back to the hostel - to prepare for further work. I spend quality preparation time in a horizontal position with my eyes closed and then prepare a cup of coffee - it's a hard life. Well, I can't go for a walk - it's raining. After lunch we throw out two students who try to get back into the hostel. What are they here for – if they don't get pneumonia or hypothermia, they will not have the full experience.

I think we should just forget about the rest of the students, but Paul and Kevin the Driver insist that we fetch them back (softies). Paul makes me give back the keys for the bus and so we collect them. I go out for a walk when we get back - I need to keep fit and avoid the possibility of talking to them!

Nobody goes to the pub. Can it be they are tiring - maybe they are going down with something and we can go home.

Day 3   Paul and I meet again at 7.30 - Emma gets up to eat her porridge, we get up to cook the rolls which we bought. Without Aisling (who is a non-standard student, as she can actually read) we would have tried to eat them without cooking them - maybe some students have their uses. Paul enjoys another sadism session - i.e. he gets to wake all the students. He makes me go round for a follow-up visit. Lesley has locked Emma out of the room after Paul woke her. He says Emma should make her unlock the door - I suggest that he should just lock the rest of them in too. Anyway, they do get up and we go outside - Paul starts talking and it starts to rain. I try to get back into the hostel, but Gretta throws me out, so I get on the bus. We drive to Portrush and I am allowed out the bus to go shopping. Some students want to come with me - they can't take the 'cold turkey' withdrawal symptoms from Blanchardstown. I try to find a shop in Portrush. If you describe a lively town as 'the joint is jumping', Portrush is barely twitching - however, I manage to get meat, etc. within the time limit of half an hour. I then go to the meeting place - everybody else has been to look at some 'rocky bits'. No bus – I consider leaving and returning home in disgust. I try to head for the station, but Paul sees me and forces me back on the bus. We go off to look at some more 'rocky bits' - Paul moves at amazing speed over beaches and over rocks - the students follow on taking his picture and writing down his every word. I am jealous of Paul having all the attention so I trip Darina and then carefully help her up. Everybody is so impressed that I am so caring - until I make them get out of the bus at Dunluce just after they have got warm. But I deserve some pleasure, surely!

We get to the Giant's Causeway and Paul tries to convince them that it is a natural phenomenon. I tell them that it was Finn MacCool - who else would have worn the Giant's Boot? They all carefully note down that FMcC was 16m tall - somebody used the size of the boot to work this out. I find this really reassuring - there are people who are even more in need of getting out than I am! I really enjoy the tea at the Causeway Hotel - Paul paid for it and it was in a warm room! Back to the hostel - we got in with no trouble and they seem quite tired and quiet - things are looking up.

Day 4   Some of them are even more quiet this morning - they visited a disco called 'Traks'. Apparently it was supposed to be a school children disco. They agree that most of the people there were wearing their own school uniform as the average age seemed to be about 15. However, two women were wearing G-strings, stockings and suspenders - is there a very progressive school in this area or what!? We enjoyed ourselves waking the dead again - maybe the trip has some consolations. Its my turn to organise the work, so I decide to send them to different places to draw up a tourism development plan. Overnight I have decided that maybe Dunluce was not a starter - there were no tourists, no shelter and nowhere to get a warm drink. I think it sounds most suitable for students - Paul said we really ought to try to bring some of them back in one piece. Despite my best arguments against this - he stays firm, so we take that group to the Causeway. They turn out to be the lucky ones. Kevin hit a rock in the road and burst a tyre. The rest of the group (plus me) wait in the shelter of a wall at Dunluce Castle for 1 1/4 hours while Kevin and Paul remove the wheel using the jack supplied, a jack provided by two passing metal workers, several spanners and a lot of blasphemy. We leave out the suffering students at Portrush and Portstewart and I arrive in Safeway in Coleraine with two dubious looking men - a visit to the wash room makes them reasonably acceptable. After doing enough shopping for an army, including birthday cake, candles and squeakers, we staggered back to the hostel and all retired with drinks to recover. The man working on the septic tank provided an interesting background - full 'smellovision' stuff. Maybe there are some reasons for being a fieldtrip leader after all. Paul insisted that we should collect the students at the correct time - I proposed that we just forget about them. They did all come back and it was great to tell them about their next public speaking engagements. I do get joy from my work sometimes.

They all eventually emerge from their rooms and apart from cooking dinner (a chicken curry with somewhat soggy rice). Michelle assures us that it is Thai rice (according to her, they like soggy rice). Who are we to argue, it's her birthday after all. After the curry we bring in the cake (or rather cakes) and avoid setting off the smoke alarms with the candles.   I realised earlier in the day that Michelle can't eat cake, so I thought it would be appropriate for her to watch while the rest of us enjoyed her birthday. Everybody else disagreed, so we put a candle into a small meringue. N.B. Don't try this one again - meringue breaks very easily!

Afterwards we sat down to a riveting account of pebbles and sand on the Antrim coast - who says I don't know how to have an exciting evening? After this I retired to my room and to my book, a text book of course.

Day 5   Apparently they then sat up to discuss the work until about 4 a.m. I'm not sure they all went to bed. Four of them were down on the beach when we got up - sadly they turned up in time for breakfast. Why has Aisling got no socks on? I refuse to believe that they were used to keep the fire going. Even more worrying is the shoes left just in front of the fire. Have they really burned John, feeding him into the flames bit by bit until only his shoes remain? Paul and I enjoyed waking the members of the group (thankfully including John) who had gone to bed. Thankfully? - am I mad, it would have meant several less students - one burned, the others arrested - maybe we could go home! Darina, a really helpful woman, decided to help us. It brought a warm glow to my heart to listen to her shouting at her colleagues. Again we left them out around the district. Just Kevin and myself on the bus, Paul had some quality time back at the hostel. He found some of the White Park Bay contingent still in the hostel at 9.15 - they were very concerned that he might have missed the bus - are they thoughtful or what?! After another fix of shopping, this time without the wait at Dunluce, I am let out for the day and spend time at Ballintoy harbour eating lunch and reading in a sheltered spot. There is really no end to the suffering on these trips! Eventually I force myself back to the hostel. The students return and I start bullying them about their presentations - again, life has some compensations. Paul decides that the students need some time by themselves, so (at great personal sacrifice) we go to Ballintoy to the pub for tea. We felt so lonely without the students that Paul had to have apple pie and I had

to have a glass of Guinness. We nearly consoled ourselves, but mean Kevin made us come back to hear the students' reports on their visits to tourist sites. Afterwards they callously refused to let us go to Kelly's with them. Fancy not allowing us to go to the biggest, least musical disco I have ever encountered. I felt really hurt and cried for much of the night. Paul just shut himself into his room and forced himself to watch TV.

Day 6   Last day - nearly softened and let them lie on for half an hour - but I forced myself to be strong - why quit when you are ahead? We got them on the bus - and quickly noted that Siobhan was asleep - can it be that they were late back last night? Great, so we got them out of the bus in Ballycastle -Paul told them all about the Tow Valley and assorted faults and folding - they are all taking careful notes (still) while propping up the bridge and their eyelids. It's really quite cold - they do look to be suffering a bit (dear me!). I head off leading them around the town - Paul gets to go in the bus - idler. All goes well - they trek along behind me - until we come to the children's playground. Emma disappears at great speed - I do my best to keep talking while she goes on the swings and roundabouts. When she has had her play, we head down to the seafront and get back on the bus. Paul hadn't persuaded Kevin to abandon us - he does want to go on walking - who says I am a gentle little soul!?

Next we head to a place for an early lunch – I think some of them had passed on breakfast. We stop by the turlough - there is ice on the edges of the lake so we encourage them to get out to take a look (maybe we can abandon them).   Only three of them respond, so we decide to let them back on the bus.

We press on to Cushendun, where Paul takes us for a walk along the beach. Oh gosh, Paul, more rocks! And I encourage them to look at the architecture and the tourist potential - they are overcome with excitement! Our final visit is to Cusendall where we finally let them loose for an hour - we suggest that they explore the tourist potential of the town. They decide that the best way to do this is a survey of the indoor facilities. Unfortunately, these seem to be confined to cafes and public houses. Being selective (you can't do everything in an hour, with a limited number of surveyors) they selflessly decide that we must do the cafes and they will take the pubs.

We drag them out of the pub and go home (well after all this time it feels like home). The chefs tonight make fish, potatoes and peas for tea and serve wonderful apple crumble and custard. I would let them have the credit (no way) but reveal to all that the food was all bought by me. They did provide good mash and roast potatoes, though.

After tea I force them to give their final reports (I have to have some enjoyment on the last night) and then they force me to go the other pub in Ballintoy. There they force me to drink Guinness and to dance to the disco. Nobody else in the pub dances. John invites one 'very' young lady to join him -her brother (or boyfriend) watches him very closely. When the dance is finished the young lady is removed never to return. John, emboldened by several lucozade sports, does not go out alone. Later on the landlord comes round to ask me if I am in charge of them. I try to persuade him that I was kidnapped and ask for his help to escape. Why doesn't he believe me? So I tell him that Paul says they are responsible adults - he laughs, why is this?   I try to persuade Kevin that he would get the biggest laugh of the evening by leaving them in Ballintoy - he refuses, so we come home.

Last Day   We have our final laugh - wakening them again. Everybody does get out of bed eventually, and we get the kitchen cleaned and the beds stripped. Each room is given a black bag - I tell them to put in anybody who has not made it to the end of the trip, but they seem to just put in other rubbish. We get them on the bus and finally do get to reduce our numbers by two. We even get Danielle to take her can of coke with her. She says that the police in Coleraine will arrest her for doing coke in the town. Louise tries to explain the difference, but the rest of us concentrate on getting her to stop inhaling the stuff as she is in danger of drowning.

 We set off home but are persuaded to stop at Sprucefield again (some of them have shopping withdrawal symptoms that are approaching terminal and we decide that at this point we might as well let them live). Darina gets off the bus in Slane – I think she lives there, but if not, I think she could learn to like it in time!

Finally, we get back to Maynooth. As they disappear Paul and I flee from NUIM, both thanking the powers that be that NOBODY will be able to force us to go again for years - and we mean that Jim!
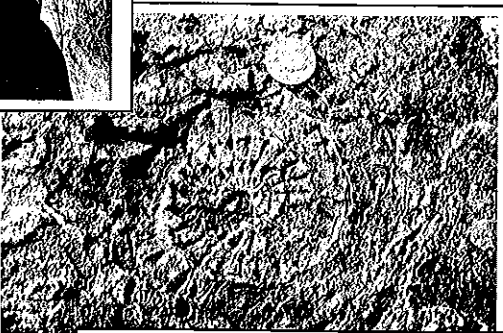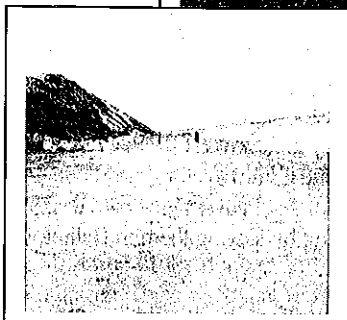
Afterword
In the hope of maintaining good relations with the student body - I would like to thank all of the 2nd year single honours group who went to Antrim for their willing co-operation both in the work and in the catering. I actually had a great time and I hope they did too and that they are still speaking to me after they read this diary.
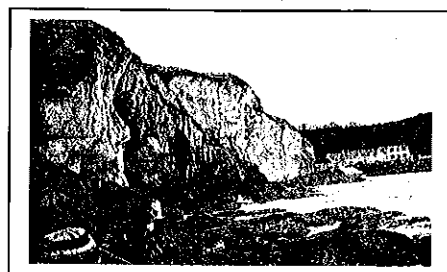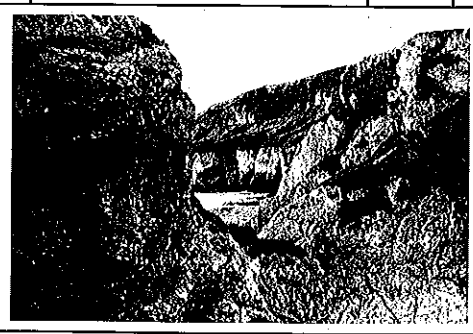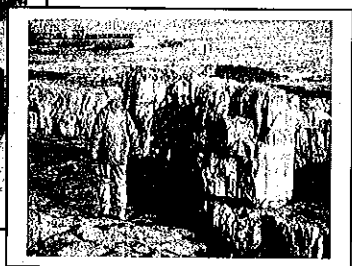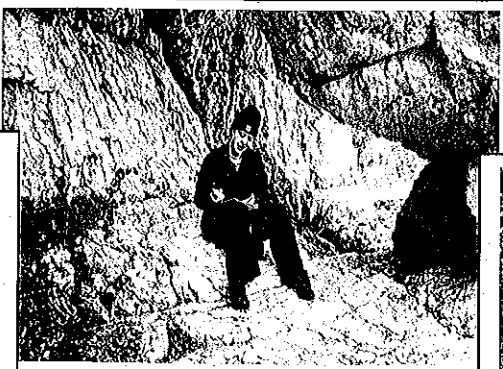
Antrim Field Trip

February 2002

The comforts of computerised data analysis in health/ medical geography

Frank Houghton – Postgraduate Research PhD

Working in the front line of the health services can be a distressing, and in many cases, a depressing activity. Therefore, where ever possible I have always purposely sought to distance my work from actually having to engage with patients and their suffering. I am pleased to say that the computer offers the perfect excuse tool for indulging in this self-protective behaviour. Cases of infectious diseases, deaths in road traffic incidents and cases of cancer can all be reduced to clean, tidy and rather insignificant dots on maps. Mortality rates, cancer incidence and the standardised rates of any condition can all be plotted in a gentle and artistic manner for any given area. Such maps produced on anything up to A0 size sheets, with titles, compass and legend all lovingly added, and finally laminated, have a grace and beauty that often belies the realities of the subject matter.

However, no matter how hard one attempts to distance oneself from the suffering of patients, inevitably cracks occur in such defences. This happened to me recently while I was working on an extract of data relating to E-code (external causes) admissions from the hospital data set for Limerick City. E-code admissions are a section of the International Classification of Disease (ICD) schema and relate mainly to accidents, but also include self-harm and assault. Unusually, the data set that I was working with included patient addresses, as the point of the exercise was to map incidence rates by Electoral Ward. Most data that I work with has usually been anonymised and as part of this process is stripped of both its name and

address. As I did not have an efficient geocoding software engine, I was coding the 1000 plus addresses by hand. To make things easier I had sorted the addresses into alphabetical order in Excel. As I had data on both, date of birth and address, when I began coding it became very clear that a high number of patients had multiple admissions over time. Almost all of these repeat admissions shared the same E-Code (E950), which I assumed must relate to road traffic incidents, as this was what I assumed would prove to be the major cause of 'accidents'. I produced various tables, maps and before completing the first draft of the report decided that I would just look up the ICD manual to check that E950 was the code for road traffic incidents (RTIs). I was truly horrified when I eventually located my ICD-9 manuals and realised that code E950 related to self-harm, rather than RTIs. Examining the results in a new light I was shocked by the picture they portrayed. Some patients had committed multiple acts of self-harm severe enough to have been admitted to hospital up to six times in just one year.

Whether there is anything wrong in trying to distance oneself from the grim reality of much of the work of the health services I do not know. However, either through purpose or accident it is important that some level of engagement with the subject matter is achieved, to reinforce our understanding of the seriousness and importance of the subject matter. Such humbling and disarming incidents serve to humanise and inform our work.

The NIRSA experience: The Lords of the Archives

Tom Byrne – Postgraduate PhD, History Department

'Many things have been forgotten that should not have been' could have been the Tolkien style motto coined during the mandatory grey and drizzle sodden days typical of Maynooth's post exam weather when a small band of intrepid adventurers from many departments, and indeed some from more exotic locations from beyond the bounds of our fair University shire, set off on a journey in search of knowledge.

The first batch of National Institute for Regional and Spatial Analysis (NIRSA) summer interns began their assigned missions as confident expectations of burning rays of June sunshine lancing through the ever present gloom were slipping away to be replaced with the realisation that another substandard Irish summer was wending its watery way into July.

In the words of NIRSA the 'The purpose of the Student Internships is to introduce undergraduates and recent graduates to the culture of academic research at an early stage in their university career' (http://www.may.ie/nirsa/news_events.shtml).

To achieve this interns undertake research projects which will develop and enhance their research skills and increase familiarity with research methods and resources. Each Frodo (and Froda?) Baggins embarking on this quest had his or her own guiding wizard (unfortunately without the pointy hats) in the shape of one of the NIRSA Associates from seven constituent departments constituting the arrayed forces of (interdisciplinary) Purity and Light (which is not to employ that the other departments are

havens of mindless depravity and Dark powers worthy of Lord Sauron's Mount Doom- except perhaps for some dodgy Orc connected elements in Classics) within NUIM: Economics, Sociology, History, Geography, Anthropology, the Centre for Applied Social Studies, and Mathematics or one of the collaborating third level institutions.

After fending off some initial confusion concerning why and what 12 *Nursing* interns were doing in Maynooth during the Monsoon season (without the slightest signs of appropriate uniforms or hypodermic needles) the fellowship of twelve set about their appointed task of finding out what the life and work of a researcher was all about.

To describe all of the diverse range of projects in detail and recount the rich variety of practical on-the-job learning experience of full time paid research that each person had the benefit of is beyond the scope of this article, besides involving far too much unwonted devastation to the remaining rainforests of the world. However the presentations given at a one day seminar in October demonstrated the rich variety of projects successfully undertaken, each of which underlined the resounding success of the first internship initiative.

One unique highlight that does stand out, on a personal note, for reasons beyond the rarefied realms of learning and experience, occurred when a crack hand picked unit of highly trained, multi-

skilled historians (those who set their alarm clocks and made it in time to catch the train) set forth on an epic journey across vast expanses of gleaming railtrack over immense stretches of arid landscape (Louth) to the far reaches of the fair city of Belfast to witness the wondrous efficiency of a properly funded Public Record Office in operation. An excellent revelation; a further revelation of an altogether different, nerve shattering, stomach tightening, kneecap quivering effect was the discovery that hostel designated as that night's base camp for the rest and relaxation of the footsore, print-drunk, straggling troop of pen-pushing, page-turning primary source pathfinders was situated in an area of East Belfast where everything, up to and including the traffic lights, came in shades of red, white and blue. Happily our gallant crew averted this Apocalypse Soon scenario by hoisting sail, arming themselves with provisions (a jar of beetroot) and decamping with all indecent haste for the safe respite of Queens' University.

The names of last year's twelve trailblazers are set out below. If you think you might be tempted to join this ongoing saga and embark on a mystical odyssey in the realm of postgraduate research and perhaps beyond this into a career in this area, the details of the NIRSA Summer Internships can be found at www.may.ie/nirsa. A creative and fruitful summer (a term used advisedly to describe that part of the 12-month rainy season where it gets dark that little bit later) awaits you!

NIRSA 2001
Student Interns Department:

Mr Thomas Byrne	Modern History
Mr. Geroid Coakley	Geography
Mr Anthony Coogan	Economics
Mr Frank Cullen	Modern History
Ms Margaret Deegan	Geography
Ms Elain Doyle	Economics

Mr Paul Finn	Geography
Ms Linda Howard	Modern History
Ms Deidre McCalister	Modern History
Mr Conor McCabe	Modern History
Ms Yvonne McDermot	Galway-Mayo Institute
Ms Marguerite Osborne	Galway-Mayo Institute

Research Tips (learned the hard way)

Frank Houghton – Postgraduate Research PhD

Pre-test your own questionnaires (never forget the importance of social class)

In the early 1990s I worked for about four years in Northern Ireland doing small pieces of poorly paid contract research for various research centres linked to the University of Ulster. Most of the work was concerned with issues of peace, conflict and equality. One lesson that I learned early on in this period was the need to personally pre-test any questionnaires that I intended to use in a research project. Much of the work I was involved in related to children, or was school based and involved the administration and analysis of standardized psychometric questionnaires. On one occasion I was contracted to evaluate the effectiveness of a series of cross-community holidays taking place over the summer period in various centres around Northern Ireland (such as Kesh and Rostrevor). I was contracted to conduct this work by the

Department of Psychology and therefore, not surprisingly, the work involved administering an extensive battery of questionnaires at the beginning and end of weeklong cross-community residential holidays. Obviously this was designed to provide 'before' and 'after' information that might indicate the success or failure of such schemes. At the initiation of the project I was handed a rather large bundle of questionnaires that was to form the test booklet. Knowing that the children we would be working with could be quite young and were specifically selected from educationally deprived backgrounds, I queried the length and complexity of questionnaires. I was however told that it had already been piloted on children and should take approximately 39 minutes to complete. Re-assured I prepared the necessary booklets and later that week travelled to Kesh for stage one of the administration process.

What followed was a monumental disaster. Although I had carefully explained that this was 'not a test' and that there were no right or wrong answers, several of the children burst into tears at the sight of the questionnaire booklet. This distress spread to other children who in turn began to cry. It quickly became apparent that illiteracy was a serious issue, as was the concept of completing answers on a scale. Although the children involved were familiar with answering 'Yes' or 'No' in such a format, trying to answer questions that involved them selecting whether a given statement was 'A lot like them', 'Quite like them', 'Not really like them' or 'Not at all like them' proved too hard for many. After a painful 90 minutes of me reading every question and answer and providing extensive explanations I had to abandon further testing (at that point).

The following Monday I gave feedback on the weekend's disaster and began revising the test booklet and amending the questionnaires. When I subsequently challenged the complexity of the questionnaire and queried the pre-test that had already been conducted, I was told that it had been the lecturer's own children that had formed the test sample. Needless to say these children were middle class and well educated.

Leave plenty of time (or get a decent car)

In 1994 my wife and I moved from where we had been living as part-time students in Northern Ireland (Portrush) down to Dublin so that my wife could pursue further postgraduate studies. For both my wife and I this meant a significant drop in pay. However one factor that helped to even-out this difference was the absence (at this point in time) of any legal requirement for cars in the Republic to have passed a MOT/NCT. The wisdom and safety of such an economic 'saving' was however sorely tested on one occasion when, in order to augment a rather boring MA thesis with the grand title of 'The Future of UN Peacekeeping', I arranged to travel out to the Irish Army's UN School in the Curragh to interview key personnel. By this stage our car was approximately 8 years old and already had over 120,000 miles on the clock (it would eventually reach 166,000 miles before we finally let it die in peace). It was also in need of some quite essential repairs. I set out for the Curragh and was making good progress along the Naas dual carriageway when the engine coughed and began to lose power immediately. This was no particular surprise as by this stage our car suffered from two serious drawbacks. The first of these was a faulty fuel gauge that perpetually read empty, while the other was a hole in the top of the fuel tank. This left us in an awkward situation because, whereas an easy cure to a faulty fuel gauge (other than paying to get it repaired) is to just keep the fuel tank topped up, this was not an option when filling the fuel tank anywhere near full resulted in petrol slopping down the side of the car. Therefore my wife and I engaged a perpetual game of trying to guess how much fuel we had in the tank. Two people using the same car made this guesswork particularly difficult. However we were prepared for such contingencies and I simply added the gallon or so of fuel that we kept in the boot to the tank and continued.

About three miles further on the car once again began to behave erratically and I realized that I now had a puncture.

Once again, given the state of our car, this was no particular surprise. The iron rims of the car wheel were by this time so rusted (where we had lived in Portrush was subject to sea-spray) that it was no longer possible to get a seal tight enough to prevent the car tyre deflating. We had therefore taken the 'budget' option of inserting an inner tube into the car tyre. However by this stage the wheel rim was so badly rusted that occasionally flakes of rusted metal would pierce the inner tube. I pulled over and quickly changed the tyre. This had become at least a once-a-month activity, so there had been plenty of practice. Upon returning to the car I went to open the door and as I pulled up the latch, saw the lock engage instead. This was another idiosyncrasy that occasionally occurred in our car. Now having changed the car tyre I found myself locked out of my car, with a clear view of my keys in the ignition. Needless to say the other door was also locked. Once again this was a fault that had occurred enough times that we always left a key dangling on a lace from the grill at the back of the engine. I therefore retrieved the key opened the door and managed to drive the remaining few miles to the Curragh without incident, still managing to arrive on time.

Know your equipment & bring spares (if it isn't broke don't fix it)

Alas although I reached the Curragh in good time, in some ways it might have been better had I not. I had conducted quite a number of interviews over the preceding 2 or 3 years. For each of these I had used a simple tape recorder/Dictaphone. However, about a month before travelling to the Curragh I had started doing a small amount of lecturing in the Department of Communications in DIT Aungier Street. When I mentioned to my colleagues there that I was heading out to conduct some interviews they insisted that I used a Sony Professional recorder instead of my usual tape recorder (this machine has a separate microphone to help improve sound quality). Being a group particularly interested in sound quality, I was soon left feeling that I had no alternative but to accept their advice and wondered how I had ever managed with inferior equipment in the past.

Therefore after greetings, introductions and refreshments I began the interviews. Things progressed well throughout the morning. After lunch I continued quite happy in the knowledge that things seemed to be going well. There is however no greater sinking feeling than realizing half-way through an interview that although the tape recorder is on (and displaying a reassuring red light), the microphone which has its own power switch (and should also be displaying a red light) is sitting there turned off. At the sight of this my heart dropped, particularly as the interviewee in question was by far the most useful and informative so far. I leaned across in as nonchalant a manner as possible, coughed, folded my legs and attempted to flick the switch of the microphone in as subtle a manner as possible. Needless to say this pitiful attempt at subterfuge was seen through immediately. I am pleased to say that my interviewee obviously took pity on me and had the courtesy not to mention the incident. Alas things did not get any better. I had only anticipated about four 30-minute interviews and had only brought a limited number of tapes. As the day wore on I was forced (in order

to save what little 'face' I had left) to tape record over the mornings interviews to make it appear as though I had enough cassettes.

Do your literature review thoroughly (pay attention in class)

A standard conclusion in most research projects is a call for more research. However care must be taken in such calls. In the early days of my undergraduate degree I was taught a unit in SPSS that used a sample extract from the 1901 Belfast Census as its raw data. However one glance at the curriculum confirmed to me that this second year unit in history was actually considerably easier than a first year psychology unit on the same topic that I had completed the year before, while enrolled on a combined social science degree. I therefore largely disengaged from the unit and as the assessment mechanism was based solely on a project, decided to focus on this instead. Obviously a large amount has been written on economic inequalities between Catholic and Protestant inequalities. Feeling that this area had been examined in depth I decided instead that examining intra-Protestant economic differences on the basis of denomination might be of interest. As I had effectively disengaged from the unit, I never heard the lecturer responsible for the unit talk about his research interests or even took any particular notice of the lecturer's name. The low mark that I received for my project came as little surprise after I realized that, whereas I had called for research on this topic because none had to date been carried out, the lecturer of the unit had focused his research energies into this field for some years, having produced one book and several journal articles on this issue.

Subsequently in units where I was taught by lecturers who had also published on the unit topic in question my strategy changed. I found that gaining a 2.1 was a simple affair of finding out what the line of argument the unit lecturer had proposed and then arguing a point of view diametrically opposed to this. It is my belief that most lecturers thought that a mark of 2.2 or below might indicate subjective bad feelings, while a first was out of the question because they fundamentally disagreed with what was written (and my work no doubt wasn't up to this mark anyway). Thus one could achieve a raft of middle of the road 2.1 marks with relatively little effort and some certainty.

Travel in pairs and carry a mobile phone (or stay in the office)

This advice is based on the experience of a friend of mine who was studying psychology in Northern Ireland. Periodically, students on his course would be called on by academic staff to visit towns that had suffered either high or low levels of political violence, in order to collect data. Upon arrival in such towns the students would complete a general mental health survey with the town residents by going door-to-door and asking people to participate. It was quite normal in these encounters for people to invite the student researchers into their homes. After several relatively boring hours of data collection my friend knocked on a door and asked the elderly gentleman who opened it whether he was interested in taking part in the

survey. He was answered in the affirmative and invited in to a sparse kitchen that contained a large table and a fireplace. My friend sat at the table opposite the man and began asking questions from the mental health survey. Things were progressing well until the question "Do you ever consider taking your own life?" was asked. At this point the interviewee became exceedingly agitated, stood up and walked over to the fireplace where he picked-up a cut-throat razor that had been sitting there unnoticed by my friend. He proceeded to open the razor and hold it diagonally across his own throat, while answering, " I think about it every day". The only thought going through my friend's mind at that point was that this man was now standing between him and the door. Barely containing his panic my friend admits to announcing that the survey was now over, thanking the gentleman for his help, and very carefully edging past him to escape out of the house and in to the nearest pub. There he met most of the other students who had not been so conscientious in their data collection.

Promote yourself (or boost your credibility)

Some readers may be appalled at what may be thought of as encouraging misrepresentation and deceit. However 'needs must'. While completing my literature review for the MA in Peace Studies mentioned above, I found that accessing up-to-date information on UN peacekeeping operations extremely difficult. This was 1994 and the world-wide web was obviously less developed at this point. I contacted the UN repeatedly trying to obtain recent data on peacekeeping operations. Letters stressing the urgency of my need, offering to pay for documents, postage and packaging all failed to elicit a response. However with a deadline approaching I decided to try and gain a response by promoting myself to Dr and stating that I needed the information in order to complete a journal article. Once again I offered to pay any costs. My sudden self-promotion obviously made a dramatic difference as countless key documents began to arrive through the post to me from the UN, all free of charge.

Beware of working in schools (they are strange places)

In 1996 I was employed as a Research Officer in the MWHB as part of the investigation into possible adverse health effects of environmental pollution in the Askeaton area of County Limerick. It was quickly evident that no computerized health information systems existed that could adequately answer any questions about the health status of the population in the area. One area of particular concern was child health, where even less information was forthcoming. In the absence of better data it was decided to examine National School attendance records as a proxy measure of retrospective health status in the risk and control areas. This study involved my colleague and I each visiting about 25 National Schools to record annual attendance information on all pupils. By the end of this project we had collected information on over 10,000 pupils (with up to seven years information per pupil). Due to Department of Education & Science regulations the registers that we were working from had to remain on school premises. We therefore spent an extensive amount of time sitting in schools throughout counties Limerick, Clare and Tipperary N.R. This proved a bizarre experience.

Great fun was to be had in finding these country schools, as the national sport in the rural areas of county Limerick seemed to be realigning road signs. When visiting National Schools, I was regularly amazed at how the personal interests of a Principal could dictate their entire focus. Thus, I visited various schools dominated by either science, music, religion, or sport.

Some of the schools that my colleague and I visited were so small that there was physically nowhere for us to sit, so we were forced to sit in cars completing data forms. In other instances I visited schools that had only one adult chair, and so spent half-days perched on two chairs designed for baby-infant classes. I met a great number of teachers throughout this work. In some instances my colleague and I were aggressively challenged to answer, "What exactly is a researcher? What are the qualifications necessary? How does one become one?". In others I met teachers who could keep an eye on their cattle from their classroom and seemed infinitely more interested in that herd than the herd of children facing them in the classroom. In one school I was shuffled between what was quite literally a broom cupboard and the staff room at the Principal's request so that none of the other teaching staff would know I was there. The reason for this subterfuge escaped me then and still puzzles me.

My strangest experience in this project involved visiting a school in a rural area of County Clare. I had tried without success to find a phone number for this school, but being unable to do so, had written in advance stating that I would visit at some point before the end of the school year, and explained the nature of the research project. After

considerable difficulty I eventually located the school and went in to talk to the Principal, who turned out to be a woman approximately 20-25 years older than me. The hostility that greeted my arrival was tangible. She informed me coldly that I had arrived without an appointment. I stated that I had written to her letting her know that I would be coming and that I had been unable to obtain a number for the school. She replied that if the number were available "Parents would only phone it". It was hard to argue with this logic, so I continued apologizing for the interruption and re-specified the data needs of the project. After a protracted negotiation she eventually agreed that I could use one of the spare classrooms to complete my work. I settled down and hoped that the information was in a legible and tidy state that would make this visit as brief as possible. I then noticed that about every few minutes her face would appear at the classroom door. Several minutes later she returned and asked me if I would like a cup of coffee to which I agreed. She brought the coffee and sat down beside me, ostensibly to read what I was working on. She eventually returned to her classroom, but continued to peek through the window every few minutes. Eventually I completed my data collection and made hasty preparations for departure. I returned the registers to the Principal and thanked her for her co-operation. She then suggested that I take the school phone number in case there were any problems. I stated that there was no need, but under pressure agreed that 'just in case' I had better write it down. As I retreated to my car she came running out and insisted that I take her home telephone number in case there "was anything she could do". Personally I found it easier to deal with her when she was just plain hostile.

Geography Society 2001-2

Maureen O'Sullivan – 3rd Arts

The Geography Society 2001/2002 came into being in late April 2001. We were all under exam pressure at the time and decided that becoming a member of the Geography Society was a good idea, 6 people turned up to that meeting and 5 of those 6 are now the organisational members of the Geog Soc. They are Julian Bloomer, David Minton, Ciaran Martin, Yvonne Murphy and myself Maureen O' Sullivan. We took over the reins from the girls from last year and we were enthusiastic and bubbling with ideas at this early stage. All thoughts of the Geog Soc were shelved exams approached and the long summer break loomed. As we parted the words "we'll sort it in September" were used to describe the Geog Soc. September arrived and still we were enthusiastic, fairs day came and went and we had now about 60 new members, so far so good. The first event that we organised for 2001/2002 was a Geography Careers talk with Proinnsias Breathnach and Loretta Jennings of the (Careers Office). This went very well and was well attended by about 110 people so our membership had also increased we were very happy with ourselves and we felt that the world was our oyster. But then reality-hit home we had some of our finals in a few weeks and still essays and projects had to be done. But this didn't stop us our plans were well underway for our "Christmas Quiz" to be held in early December, but Murphy's Law struck and every

thing collapsed around us all our plans in pieces, the hall was booked up until January. There went the Christmas Quiz, Oh well its back to concentrating on our exams.

January and a new lease of life again plans were made and this time at least one of them came to fulfilment. We organised an evening lecture given by the two visiting South African lectures, Ronnie and Kate. This again was well attended especially by second years that were in the process of doing the course. This lecture went very well indeed. So here we are in February and even more work lies in front of us, essays, thesis and projects have to be done and where does that leave the Geography Society, well we are determined to have at least two further events before the end of the year including the Milleau launch.

Looking back, the fact that we are all third year single honours students has had its drawbacks, we just didn't have the time to organise any highly exciting events. For next years Geog Soc. I would hope that many more people will get involved in the running of the society, people from each of the three years should take part. Personally I have enjoyed being part of the Geog Soc and I hope many of the people who will read Milleau will be encouraged to join the Geog Soc. And to be come more active in the actual society itself.
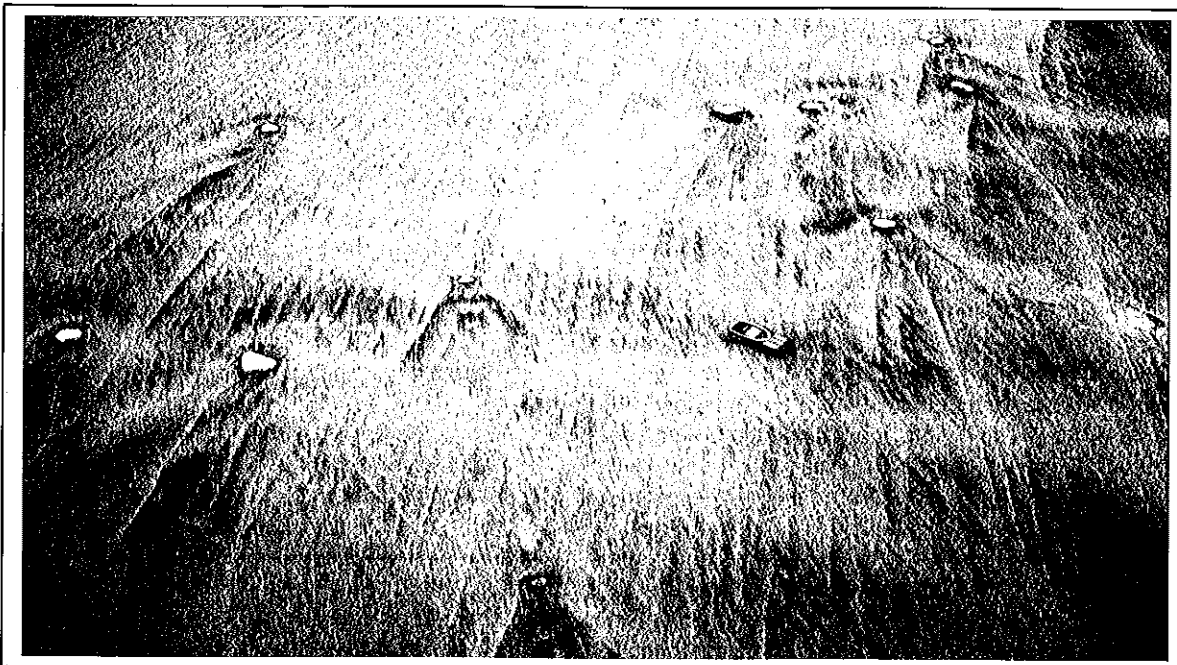
Now, all that is left is……

Climate Hazards and Human Adaptation in the Developing World

Professor Greg O'Hare
(Geography Division, University of Derby, UK)

Introduction

This paper focuses on the impact of, and adaptation to, extreme climate/hydrological events by poor communities in the developing world. Of particular importance in such adjustment are the factors that influence the **vulnerability** and the **adaptive capacity** of systems and communities to extreme external stimuli. It will be shown that communities and individuals that fail to adjust or which adjust only slowly to external climate impacts suffer reduced levels of development. Two climate hazard-society case studies are given to illustrate the theoretical points made: one dealing briefly with rainfall induced **landslides** in the valley of La Paz, Bolivia, and the other with a more detailed analysis of **hurricane** impact in the Godavari delta region in eastern India.

Climate Impacts and Society

Spiralling real economic costs from global natural hazards particularly in the developed world ($2.0 billion in 1960 rising to $20 billion in 1990) allied to unacceptably high human losses in developing countries (1000 deaths per hazard in 1947-67 increasing to over 2000 deaths per hazard in 1969-89) have alerted us to the growing vulnerability of communities and regions to the threat of the environmental hazard (Degg, 1992). Increasing impact and loss from climate/hydrological disasters are a response to three different factors.

1) There is a realisation that in a globally warmed world, the frequency and intensity of climate extremes (storm, flood, drought) may be increasing although good statistical evidence for this is still not available.

2) In recent years, increasing populations, growing poverty, poor land use planning, and environmental disturbance, including deforestation, have conspired to **exacerbate** the effects of the climatic hazard the world over (Comfort et al, 1999).

3) There is increasing realisation that current mainstream approaches to **hazard management** have been rarely successful. As a result, there is a real need to seek new approaches to hazard mitigation and to programmes of sustainable development.

Adaptive capacity and system response

The **adaptive capacity** of a community refers to the potential or capability of that community to adapt to the effects of environmental change (McCarthy et al, 2001). In relation to climate change impacts, the adaptive capacity of a system is dependent on three interrelated variables. One depends on the severity of the climate event itself and whether the event is prolonged (such as the long lasting pervasive drought in the Sahel of sub Saharan Africa) or highly frequent (such as El Nino impacts in the Pacific and elsewhere). A second factor is the vulnerability of the community, or the inherent ability of the system to cope with the climate hazard. For instance, countries and communities in the developing world with limited physical, economic and institutional resources, have little capacity to adapt and are highly vulnerable to

climate change. A list of people and communities that are highly vulnerable to climate change are shown in Table 1. In general, climate change will have a greater effect on the very old and young, on the disabled, on marginalized groups, and on those living in extreme poverty. These groups have low adaptive capacity because they are unable to prepare in advance for, and protect themselves from, an adverse climate event, and to respond or cope with its effects. Many sectors and groups that are vulnerable to climate change are also under pressure from other forces such as population growth and resource depletion.

Table 1: *Groups most vulnerable to the environmental Hazards*

- Low cast communities
- Women, especially those who may be widowed or deserted
- Aged men and women
- Children, particular female
- The disabled
- People dependant on low or daily incomes
- Those in debt
- Those most isolated from infrastructure, eg. transport, health services

A third factor embraces the availability of external support systems and structures to enhance low indigenous levels of adaptive capacity. Suffice it to say here that existing 'top down' approaches to the disaster problem, that see solutions (since the Industrial Revolution and more particularly since the 1950s) through the application of physical measuring and monitoring techniques, and the use of structural management programmes involving large engineering works and architectural design have rarely been successful. They have been criticised for being inappropriate (environmentally, socially, economically) in many development contexts, and for reinforcing the dependency of recipient upon donor, leading to the development of underdevelopment (Hewitt, 1983). The introduction of large-scale engineering solutions to the disaster can override community feelings about the nature of the disaster and can escalate community vulnerability to loss, perpetuating and even exacerbating the disaster issue (Oliver-Smith, 1994; Comfort et al 1999). Thus a more people centred or 'bottom up' perspective calling for greater community awareness and participation in vulnerability reduction may be a more effective approach. In the face of global environmental change, societies are thus increasingly being encouraged to learn to live with nature rather than fight against it with increasingly big technology, necessitating a greater community awareness of, and involvement in, environmental processes and their mitigation (Pulwarty and Riebsame, 1997).

With this view, non-structural solutions to disasters are recommended including careful land use planning, risk assessment and management, and insurance.

Case Studies

1. Rainfall and Landslides in La Paz, Bolivia

a) **Slope Characteristics and Settlement in La Paz.** The city of La Paz is the capital of Bolivia and is located in the northern edge of the Bolivian Altiplano (the high plateau between the Andean mountains). La Paz itself, however, with its one million or so inhabitants, is sited in the spectacularly steep sided valley of the river Chuqueyapu that has cut deeply down through the soft unconsolidated sedimentary materials that form the Altiplano. The city thus descends in a series of tiers between the altitudes of 4000 metres and 3200 metres. On the highest and steepest slopes, from the heights of the Altiplano at 4000 metres to around 3700 metres live a number of distinctive ethnic groups (Table 1) including the Aymara Indians and various mestizo communities (a racial element of white and Indian characteristics). Many of these are fairly recent settlers to the city having migrated from the surrounding countryside over the last 50 years or so. These high slopes are also the coldest (the temperature falls close to zero on most nights) and wettest, and their unconsolidated surface materials are the most unstable within the valley. The middle classes, primarily composed of whites but with mestizos groups as well live in the heart of the city at around 3600-3700 metres near the administrative and commercial centre (CBD). The middle classes occupy an elongated zone of much gentler but still loosely consolidated slopes materials in the bottom part of the valley. Several miles further along the valley to the south east of the CBD at between 3,200 and 3500 metres are residential districts where an affluent and largely white population lives in expensive houses surrounded by gardens whose upkeep is favoured by a more temperate climate.

b) **High rainfall and Saturated Slopes.** Landslides are a serious problem for housing and local communities in La Paz. When the unconsolidated surface materials of the slopes become saturated with water, they become lubricated and can slide under gravity down-slope (like a mass of wet porridge!). Slope materials can be wetted to saturation in two ways: one from heavy convective showers that develop over the northern Altiplano in summer (October to March) and secondly, on the western side of the valley, from water seepage from neighbouring Lake Titicaca especially when lake levels are high.

To date, over 30 sites in the city have had their ground surfaces rearranged by serious landslides, and have been identified by the municipal government as sites prone to the landslide hazard. Every one to two years or so major landslides occur in La Paz, sweeping away houses with loss to lives and property. Landslides can suddenly develop in both rich and poor areas of the city. For instance, in June 2000, major land subsidence seriously damaged over 100 expensive properties in the middle class area of Alto Seguencoma, just south of the CBD, with the result that several dozen homes now lie abandoned. The most frequent landslides and certainly those causing the greatest loss of lives and livelihoods occur however on the higher steeper slopes where many poor Indian and mestizo communities live. The poor are made vulnerable to the landslide hazard for a number of reasons.

1. They are first of all forced to build on the higher steeper slopes, where land has a low market value and is not in demand by commercial, industrial or high-class residential use. New poor migrants from the countryside continue to settle in these areas and to swell the population living in the most hazardous zones.

2. The landslide hazard is made worse for many poor communities and individuals because such steep slopes are not prepared in advance for building by the city authorities – no formal landscaping, terracing or soil drainage takes place on the high slopes (unlike some sites occupied by the rich in the southern part of the city where some hillsides have been terraced and drained).

3. Many poor and illiterate communities are rarely aware of proper building regulations and good construction procedures. They are seldom informed by the planning authorities about building regulations or design (the same authorities however give them permission to build, and charge them for their chosen building plot) and often construct their dwellings on land without any real foundations.

The Cotahuma Landslide

On 6th April 1996, a serious landslide occurred in Cotahuma, a district located high up on the steep slopes on the western side of the Chuqueyapu valley (Figure 4). After heavy summer rainfall (October-March, 1996) water levels in Lake Titicaca and in the associated surrounding water tables of the Altiplano were raised to dangerous levels. With large amounts of water seeping from the Lake's ground waters through into the western side of the valley and with continuing heavy rainfall, it did not take long for the Cotanhuma slopes to become completely saturated. Although warnings of impending disaster were given by the municipal authorities, many families did not take heed of them (some were socialising, others believed they would be saved by their religious beliefs) so that when the debris flow suddenly developed during the late evening, over 20 people were killed in the landslide.

Although as a rule compensation is rarely offered by the local authorities to poor families in La Paz who lose their homes in a landslide, compensation was given to certain of the Cotahuma victims. Government support was differentiated according to the wealth and land titles of the house dwellers themselves. Approximately one third of the 90 families affected by the landslide that produced their land titles first and whose papers were in order were moved to a new location in San Antonio, a relative landslide free area near the CBD. Another one third of the affected families, also with legal titles to the plots they occupied, were offered other hazardous sites in La Paz, but chose to move to the neighbouring city of El Alto (a new but very cold and rather desolate city) situated on the flat plain of the Altiplano where they were given land plots. The poorest one third of the families, however, who were without official land titles (they were thus regarded as illegal occupants or squatters) have still received no compensation at all. They have been temporarily (permanaently?) housed in poor dwelling units at the bottom of the landslide zone in a new cleared patch of land.

Unless the La Paz municipal authorities can raise the adaptive capacities of the poorest communities living on the high steep slopes of the city, including the provision of technical support (terracing and land drainage) construction advice (how to make their property as safe as can be managed in the circumstances) and educating people to the risks involved in living in a hazardous zone, then landslides in La Paz will continue to destroy lives and livelihoods of the poorest communities and groups.

2. Tropical storm damage in Eastern India

(a) Agency: tropical storms and hurricanes Apart from Bangladesh and West Bengal, the coast of Andhra Pradesh, eastern India, is the most hurricane prone region in south Asia. As shown in Table 2, over 20 tropical storms (with wind speeds between 17-33 m/sec or about 38-74 mph) and hurricanes (with wind speed > 33m/sec or >74 mph) have impacted over the region between 1978-96, causing great loss of live and property. Of particular interest is the Bay of Bengal hurricane, named 07B, which made landfall over the Godavari Delta region of central Andhra Pradesh during 6/7 November 1996 (Figure 1). It can be seen that over 7 million people (out of a total population of just under 10 million) were affected in some way by the hurricane. More specifically, over 1000 people died in the hurricane, mostly from tidal waves, strong winds totally destroyed two-thirds of a million homes in the delta, while almost one quarter of a million acres of crop land (mostly under paddy rice ready for harvest) were ruined by subsequent flooding. In all, total economic losses reached about RS 61 billion (about £1 billion). Records show that the Godavari hurricane of 6/7 November 1996 was not an isolated event - 11 hurricanes have made landfall over the delta in the last 100 years.
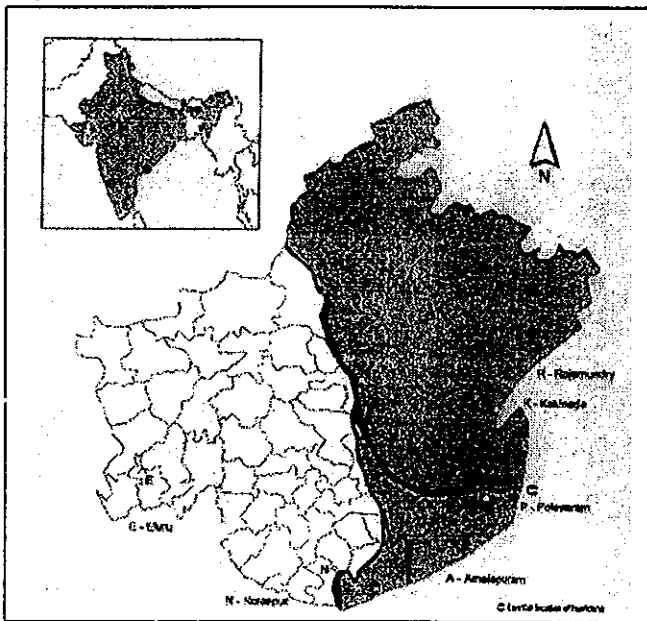

Figure 1: Godavari Delta, Bay of Bengal

b) Vulnerability and adaptive capacities The devastation wrought by hurricane O7B is thought to have set back development efforts in the delta by at least ten years. Such general statements although critical to the evaluation of longer-term progress and sustainability, fail to indicate the locations, types of individuals and social groups most affected by the storm hazard and their response to it (O'Hare, 2001). Death rates and house damage for instance were far greater in the coastal reaches of the delta than further inland. Most hurricane damage occurred in the coastal zone because the hurricane force winds here were greatest (57m/sec or over 125 miles per hour). Once the storm moved inland, wind strength decreased rapidly as the system's source of energy, from the heat and moisture of the ocean, was progressively reduced. The coastal lands also took the brunt of the damage since population densities near the coast are the highest in the delta region (1000-1400 persons per sq mile with a growth rate of 2.2 %). With a high percentage of the region's population engaged in primary economic activity (67 %), most of those affected were poor farmers and fishermen and their families with incomes a good deal less than the regional average of about £180 p.a. per annum.

One particularly vulnerable group were low-caste, female migrant rural labourers, (Table 1) from the northern State of Bihar who were employed in rice cultivation. When the paddy was destroyed their source of income effectively disappeared. According to O'Hare (2001), they adopted a number of individualistic coping strategies in the face of the storm disaster including selling their few possessions (mostly personal, but non expensive jewellery), seeking other sources of local income (predominantly as domestics), or as with most of them migrating to other neighbouring rice growing areas unaffected by the storm.

The social group to suffer most were poor fishermen and their families living in a number of coastal villages along the mouth of the delta where the highest death rates occurred. The great majority of the 1000 people to die in the hurricane lived in these villages and were drowned by the hurricane's storm surge i.e. the tidal waves generated at the front of the hurricane as it makes landfall. This group adopted quite a different set of coping strategies in the aftermath of the hurricane disaster. As the fishermen and their families live in tightly nit community groupings, they were able to adopt a number of more collective strategies including local support from relatives and friends (for food and house rebuilding), and drawing on collective resources, such as using village fishing boats not lost in the hurricane and the communal resources of the sea (few fish died in the storm!)

(c) Raising adaptive capacities Traditional 'top down' and large scale institutional methods employed to reduce the effects of storm damage in the delta, such as early storm warnings, evacuation procedures and rehabilitation measures proved, as in the past, largely ineffective. The reasons are not difficult to find. Although, a series of storm warnings were made by TV and radio, tele-printer, telex and phone, the poorest and most isolated groups in the delta do not have access to these forms of communication. Many fishermen carry radios but most need batteries or do not work! In addition, National, State and local governments in India do not have the financial resources to carry out large-scale evacuation and rehabilitation programmes. The introduction, increasingly by non government organisations (NGOs), of more localised 'bottom up' community based programmes which seek to improve the risk awareness and risk avoiding abilities of affected individuals and groups would be much more beneficial. These could include local programmes of education and self help methods to better understand and cope with the timing, onset and impact of future hurricanes.

If more appropriate community-based mitigation measures to decrease the vulnerability of people living along the eastern coast of India and in the Godavari Delta are not implemented, then major human disasters in this region will continue to occur. Witness the massive hurricane disaster in eastern India (in the State of Orissa) during late October-early November 1999. In view of the relatively high frequency of major hurricane impacts along the cost of eastern India, it seems very unlikely that people here will be unable to improve their lifestyles in any long term sustainable way. A more likely scenario is that many of the most vulnerable communities in the region will experience a slow long term development decline or at best be able to maintain an existence whose quality is far lower than it would be in the absence of the environmental hazard.

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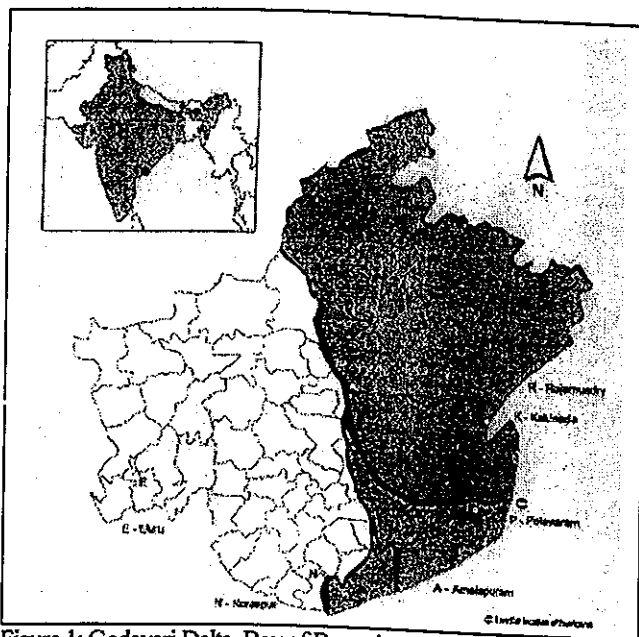

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Conclusion

This paper has shown that climate/hydrologial hazards profoundly effect the socio-economic status and thus the development sustainability of communities and regions. Activities that seek to raise the adaptive capacity of communities and regions to climate extremes are equivalent to those promoting sustainable development. Enhancement of adaptive capacity is a necessary condition in reducing vulnerability, particularly for the most sensitive regions and socio-economic groups. Vulnerability can be reduced and the coping range expanded with new or modified adaptations within a system e.g. improvements in socio-economic and technical provision including better infrastructure, as well as local community action and regional institutions to deal with a crisis.

Using the two case studies of landslide hazards in La Paz, Bolivia, and hurricane impact in the Godavari Delta region of Andhra Pradesh State, eastern India, it has been shown that the poorest and most vulnerable groups in society (i.e. south American Indians and mestizo groups from the Bolivian Altiplano; and in India, rural migrant female labourers together with fishermen and their families) have little capacity to adapt to and recover quickly from severe or recurring climate/hydrological impacts. Their situation is exacerbated in the absence of suitable physical, economic and institutional measures to combat climate/hydrological extremes. Because of this, poor communities the world over tend to suffer long term development decline or at least a development experience far lower than they would do in the absence of the environmental hazard.

Table 2 The impact of cyclonic depressions, tropical storms and hurricanes along the coast of Andhra Pradesh 1978-1996

Year of cyclone heavy rains and floods	Districts affected	Population affected (000s)	Human deaths	Livestock loss	Houses damaged	Crop area damaged (000s ha)	Estimated loss Rs million
Aug. 1978	16	49	92	1465	22 000	951	1500
May 1979	10	n.d.	706	n.d.	748 000	n.d.	2426.5
Aug. 1983	8	150	58	1726	94 218	714	895.6
Feb. 1984	3	1900	7	3976	8244	192	555.3
Dec. 1985	11	1175	16	4	3196	214	409
Aug. 1986	13	n.d.	309	22 000	423 000	853.2	16 867.4
Nov. 1987	10	3204	119	n.d.	110 550	961	1264.8
July 1988	11	2343	88	4233	10 621	906	245.1
July 1989	22	8944	232	10 905	227 000	593	9135
May 1990	14	7781	817	27 625	1 439 659	563	21 372.7
Aug. 1990	10	1245	50	n.d.	76 420	171	1798.6
Oct-Nov. 1991	9	10	192	n.d.	97 470	499	3673.2
Nov-Dec. 1993	5	n.d.	n.d.	n.d.	n.d.	52	1304.5
July-Aug. 1994	6	281	n.d.	n.d.	n.d.	52	1304.5
Oct-Nov. 1994	7	286	3	n.d.	2587	452	6259.3
May 1995	10	256	26	3260	42 665	320	4718.6
Oct-Nov. 1995	19	230	229	3663	146 525	665	9170
Oct. 1996	5	137	338	n.d.	450 000	1029	8432.7
Nov. 1996	2	7100	1059	6845	646 000	236	61 264.7

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The geography of industry of Ireland from 1960 to the late 1990s

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In the 1950's a dramatic reappraisal of Irish industrial policy occurred. The government changed its policy from one of protectionism to a policy that promoted export driven industrialisation. The key aspect of this policy would be the attraction of foreign direct investment into the Irish economy.

This paper looks at the differing geographic locations that foreign investment filtered into and the economic significance of the investment. The first sections looks at the time period 1960-1980. The second section looks at the 1980s. The third section looks at the 1990s and the evolution of the "Celtic Tiger" economy. Finally the conclusion will wrap up the previous sections and comment on what policies should be followed to keep Ireland's branch plant economy thriving into the future.

Section one: 1960-1980

Following the dismal performance of the economy in the 1950s when manufacturing output grew by 1.7 percent per annum (O'Malley 1994). The Irish government decided to change the policy towards an "open door" policy of export orientated growth. The Government set up the Industrial Development Agency (henceforth the IDA) to take charge of getting foreign companies to invest in Ireland. However the government also needed a strong regional component. The government wanted most of the industry to locate in its own classified underdeveloped regions; it used a three-sided policy to persuade the companies to locate in these regions (Walsh and Breathnach, 1994)

The first tool was to show the locations it wanted the firms to locate in first of exclusively. So the IDA decided that small rural locations would be shown first, hoping that the Trans-national corporation would choose this site. The second tool used by the IDA was that of prebuilding factories in those locations it wanted firms to locate. This policy was highly successful with 87% of the prebuilt factories being occupied by 1987, (Breathnach 1987).

The government also offered a sliding scale of incentives and grants. The grants received would be highest in the least industrialised regions and lowest in more industrialised. For some areas there was no grant available. Hence a lot of employment went to the less developed regions in the country. In the West 52.8 percent of employment was in foreign firms the North West had 49.2 percent and the Mid West 57.9 percent (O'Malley 1994).

The locations that the government chose also suited the corporations. The location in Ireland didn't really matter to them, since the Irish market itself was of little interest. It was that the corporation could sell into the United Kingdom without any trade barriers after the 1965 Anglo-Irish trade agreement. When Ireland joined the European Economic Community in 1973 another surge of investment occurred as Ireland was a cheap base to export into the rest of the EU from.

The firms liked their small locations because they could avoid trade unions and be monopoly employers in the area. These locations also gave large pools of female labour. This was important to the corporations because female labour was seen as being less militant when compared to their male counterparts. So from the Trans-

national's viewpoint women were seen to have more nimble finger and to have higher boredom thresholds for the repetitive tasks they were doing (Breathnach, 1993). This newly adopted policy was successful when considering the amount of jobs that it brought into the country. Manufacturing employment in the country had risen from 178,000 in 1961 to 237,000 in 1981 (Walsh and Breatnach, 1994). Also the rate of manufacturing employment growth was a good 2.4 percent between 1958 and 1973. It fell back to 0.8 percent between 1973 and 1979 (O'Malley, 1993), this was most likely a response to the OPEC engineered oil crises.

Manufacturing output was also much improved on the early 1950's level. Between 1958 and 1973 output grew at 6.7 percent per annum. It then slowed to 5.1 percent per annum between 1973-1979 (O'Malley 1994), the oil crisis affect can also be seen here. In 1971, 41 percent of total manufactures were being exported. However even though the new firms investing in Ireland were high technology (electronics, electrical engineering and pharmasuiticals) this is especially true of firms from the United States after 1973, only the less skilled parts of the production chain were located in Ireland. Two thirds of the workers in these plants were called "operatives" which suggests that they had jobs operating machines and that not a high level of skill of human capital was required to do the job (Breathnach, 1988). These branch plants were not very well embedded into the host Irish economy. There were few links either forward or backward, since the firms sold 90 percent of their output abroad and sourced 80 percent of their inputs of the production chain.

The geographical effect of this new investment was profound. The more rural areas attracted more of the investment that the urban core areas. This was going completely against the grain of Ireland's neo-colonial structure with Dublin as its primate city. IB fact Dublin lost 10 points of manufacturing employment. This was a combination of not getting much new foreign investment and indigenous industry starting to shed jobs. The more urbanised counties of Louth and Cork also lost employment during this time period.

All of these factors show that Ireland at the time was being used, and was acting like an export platform. In fact the whole concept of an export-processing zone was created with the establishment of the Shannon free trade area which at the time was the first in the world.

Section two: 1980s

While the 1980's dawned the global economy was emersed in a recession. So as the 1980s progressed massive corporate restructuring occurred. Ireland suffered during this period of global economic transformation, with manufacturing employment falling from 237,000 in 1980 to 194,000 in 1987.

New Computer based systems such as computer-added design and computer aided manufacturing, were now being introduced around the world. This transformation of the production system affected Irish firms, whether they were indigenous or foreign owned. Domestic firms were mainly fordist in nature and were producing

technological mature products. This meant that they were losing substantial market share. This result in employment levels dropping from 143,000 to 111,800 in indigenous manufacturing during the course if the early to mid 1980's (O'Malley, 1992).

Foreign firms were also affected, however this crisis didn't affect their output that much during this time period. These firm's output actually grew by 69 percent between 1980 and 1987, (Breathnach, 2000). Also by 1987 foreign firms accounted for 43 percent total employment, 52 percent of manufacturing employment and 74 percent of manufacturing (O'Malley, 1992). However during this time period economic restructuring meant that jobs were being lost due to automation and plant closure (Breathanch, 1993). This was a new lean production system that was very much en-vogue during the 1980s.

The fact that the plants in Ireland were only routine assembly plants meant that they were expendable on a corporate level. Two thirds of all employees were classed as operatives (Jackson in Breathach (1987)) these industries can be located wherever the foreign Trans-nationals wanted that function to be located.

This low level of skill inherent in production in branch plants is one of the major points made by the Telesis group in their 1982 report on industrial policy to the government. The report turned out to be a damning indightment of industrial policy.

It called indigenous industry backward, because it had not developed export markets. The report was also highly critical of the foreign sector. "Foreign owned industrial operations in Ireland with few exceptions do not embody the key competitive activities of the business in which they participate, so not employ significant numbers of skilled workers, are not significantly integrated into sub-supply industries in Ireland" (Telesis Consulting Group, 1982:151). The most shocking comment was that industrial policy had taken the wrong slant. Policy was only interested in creating jobs, where as it should have been looking to create value added into the economy instead.

The group's recommendations were that Ireland should develop a broader industrial base of indigenous firms. Also grant assistance should be more selectively given, and when should be less capital intensive. When foreign direct investment was sought it should only be the higher order functions that were to be brought into the country. Also the department of Industry should make industrial policy and not the IDA was their final recommendation.

These comments while at first glance appear harsh were fair. This was due to the fact that only 10 percent of foreign firms in 1982 conducted research and development in a formal department, in the country. This along with the low level of both forward and backward linkages within the economy where 90 percent of output and 80 percent of input were sourced externally. This meant that sub-supply industries had not developed around the Trans-national corporations (Breathnach, 1988). In the time period also profit repatriation started to grow hugely. In fact it reached £1,360 million in 1986 up from £228 million in 1979.

The government was now faced with a dilemma, should it change its industrial policy and if so how? The government introduced certain measures. The National Linkage programme was created to provide suitable Irish suppliers for foreign branch plants. In the late 1980s fixed asset investment grants became a lot more selective. However the Telesis target of 75 percent of all investment in indigenous industry fell well short (O'Malley, 1992). Further changes in industrial policy did not occur and as a consequence when another industrial policy report was published a decade later in 1992 some of the same recommendations were made. This later Culliton report had a much more geographic aspect than the Telesis report. Taking from the work of Michael Porter it said that

tightly confined industrial clusters were the way forward. Countries have advantages in certain industries; these have usually evolved for historical reasons. But they have a very strong geographic focus, such examples are the auto industry in Detroit and Motorcycles in the Hamamatsu region in Japan (Enright, 1998).

Hence industrial policy should be based on fostering these clusters within Ireland. These clusters should be geographically concentrated and contain no gaps, on other words all the inputs for the central firm should come from the suppliers in the cluster, there should also be competition within the cluster as well as co-operation so that the whole cluster does not get overtaken by other clusters (Porter, 1994).

Government policy however has not changed in relation to its investment. It will invest in individual firms who look like being able to be economically competitive regardless of industry. However the National Co-operation Programme can be seen to be the first step towards support of this clustering concept.

The traditionally underdeveloped regions of the Northwest, Mie West and West suffered due to the closure and automation of their foreign branch plants. The more urbanised regions in the country gained back some of the employment lost during the 1960s and 1970's. However there was an interesting occurrence in small towns an hour to two drive away from Shannon airport, they were developing international BackOffice functions that were employing 75 to 100 people at each location. This was a small indication of how important the service industry was and how vital it would be for the next decade.

The 1990s

Irish society reached never before seen levels of economic prosperity during the 1990's. This has been caused by massive amounts of foreign direct investment arriving into the country. The reasons for this investment are many and a lot of discussion has occurred around which are the most important. The government and most economists favour domestic reason, which have attracted in this foreign investment. These arguments are the low corporate tax rate, increased levels of human capital through greater levels of education and Macro-economic stabilisation (Breathnach, 1998).

The Irish corporation tax rate of 10 percent was at the time the lowest in the European Union. All corporate tax rates will be harmonised at 12.5 percent across the Union. This low tax rate increases profitability of the foreign firms. It does cause a lot of transfer price manipulation; this is where a corporation sells cheaply into the Irish economy and at a much higher level to other branch plants outside of Ireland. Thus making most of the profits in Ireland (Breathnach, 1998).

In the 1960's the Irish government brought in free second level education for all people in the country, this in turn lead to a rapid increase in the levels of human capital in the country. Education levels jumped from 50 percent of the country having a second level education in 1950 to 80 percent having a second level education currently. The amount of people with a third level education experience rose from 10 to 50 percent over the same time period (Breathnach 1998). Consequently that country now has a much higher stock of human capital, which is very important when attracting high skilled jobs into the economy.

The third factor is Macro-economic stabilisation. This is where the government sorted out the public finances in the late 1980s and introduced the partnership agreements, which ties unions, employers and central government together. These measures made the country more financially stable. This is very important, that investors feel safe in what country that they invest in. Other factors were of greater importance to firms now locating in the country.

Scheonberger (1997) and Dicken (1998) argue that it is a country's location in a global contest that is important. Ireland is in the semi-periphery of the global economy. It is close to the core regions of central Europe but does not share the same high costs, this is illustrated by Breathnach (1998) when he shows that Irish wage levels have fallen 40 percent when compared to French and German wages over the period 1986-1996.

This is the main reason that Ireland was chosen, it lies in the global semi-periphery. However it was the domestic factors of low tax rates and a cheap skilled work force that lead to Ireland being chosen over other countries in this semi-pericpery .There are two types of foreign investment that have powered the Celtic Tiger of the past decade. There are the high paid jobs on software and manufacturing, as well as this there are fewer wells paid jobs in the backofficing and Tele-services. When both sectors are combined, the total wage bill into the Irish economy rose from £1,934 million in 1993 to £2,981 million in 1998 (Breathnach 1999).

The IT and software sectors provide good jobs with high levels of pay and multiplier affects. £28,000 is the average wage of people working in this sector. Which is double the average industrial wage (Breathnach 1999). It is also estimated that 100 direct employment jobs in the foreign sector support 150 indirect jobs. These jobs also provide employment through induced income affects as well (O'Malley 1992).

The service industry has two main components: the financial services sector and the Tele-services and backofficing. When put together the employment in this sector has grown from 5,600 employed in 1989 to 27,300 in 1998. The financial services sector is the best paid, and is almost completely located in Dublin at the International Financial Services centre. It directly employs 6,300 people and supports another 2,500 people (Breathnach 1999).

Dublin has 30 percent of the entire pan-European call centres. This sector is not as well paid as the financial services sector with wages at the average industrial wage of £14,000 per annum. This sector does not give the same wages despite the fact that the levels of education are comparable to those in the financial service arena. These teleservices are the new service equivalent to the manufacturing branch plants that dominated the country, in terms of pay.

The nature of foreign investment is much different that it had been previously. The branch plants locating in Ireland during the 1990's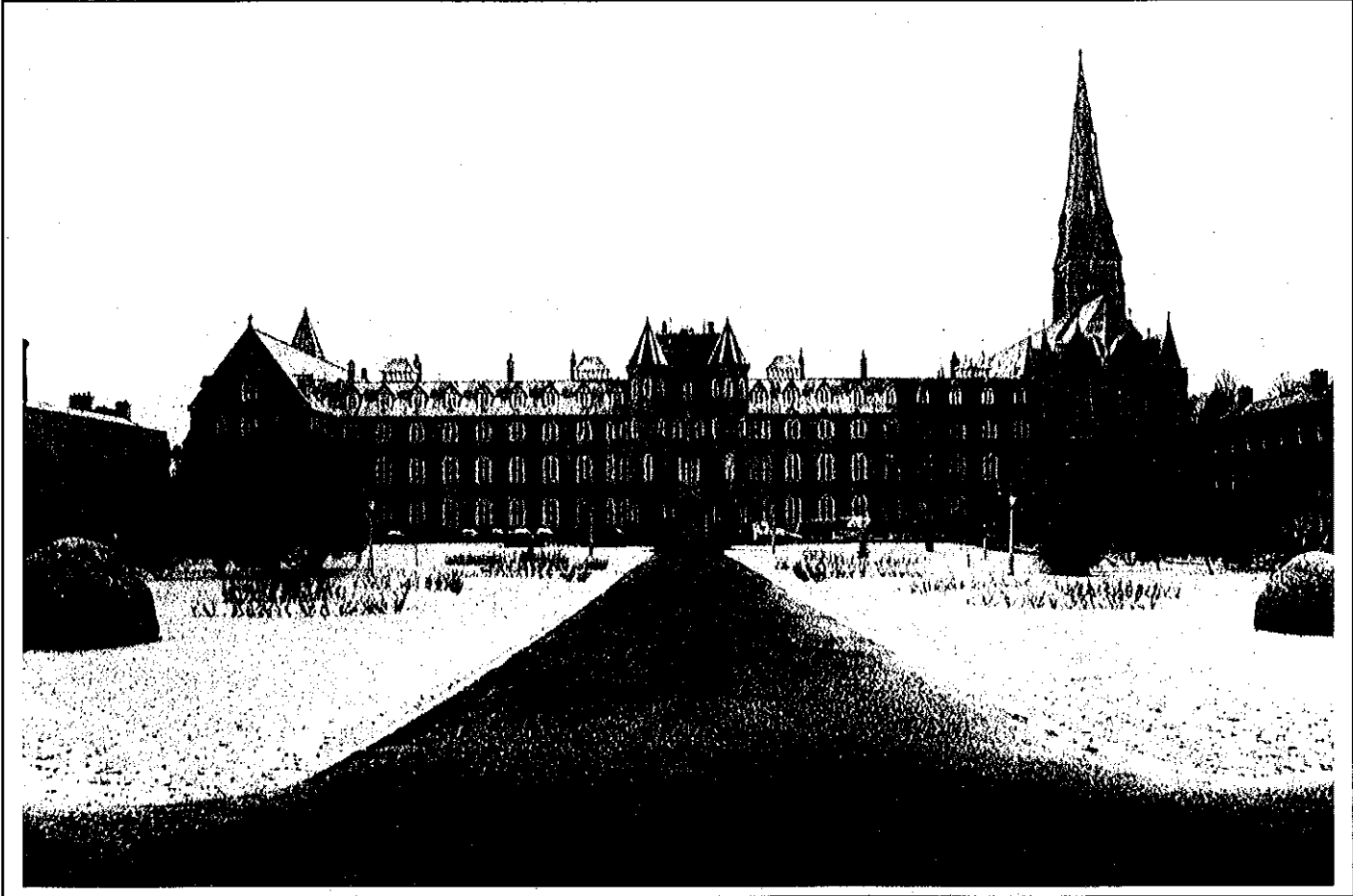 were of a much higher importance in the over all corporate structure than the branch plants of previous time periods. This is due to the fact that they employ more skilled people. These plants are also more embedded in the host Irish economy. The services industries with the exception of the I.F.S.C. are not of the higher order function that the new manufacturing plants are.

The regional affect of this has been very profound. Dublin has gained most of the jobs. Other large urban centres such as Cork and Limerick have also gained. This is because the new investment requires a lot of cheap skilled labour. These resources are not available in small peripheral locations. Hence Ireland's neo-colonial structure has once again lead all the economic activity to the Primate City of Dublin. The rural areas have lost out and the "Celtic Tiger" is mainly evident in the large urban areas. The latest round of European Regional Funding backs this up. The traditionally deprived areas of the Border, Midlands and West, are receiving status one objective area funding while the rest of the country is status two.

Conclusions and recommendations

The evolution of industrial policy has tried to create a spread of industrialisation across the country, however industry is mainly concentrated in urban settings and metropolitan Dublin. The I.D.A. has shifted policies when approximately 15 years ago after the Telesis report was published. The I.D.A is now trying to embed the foreign companies. This is because the country has reached full employment.

While the branch plants currently operating are of a higher order function than the plants historically associated with Ireland they are still not at the highest level of their corporate structure. They have only a limited decision making capacity and very few research and development departments. So the government should provide grants for the setting up of R and D departments in the existing transnationals. Also investment in indigenous firms in a clustering manner should be attempted. So the foreign firms will have crucial suppliers in this economy that they would be unable to get these supplies if they were to leave, thus tying them to Ireland further. This should be done quickly because it takes clusters a while to form and foreign countries in Eastern Europe could soon have a similarly educated workforce at a much cheaper wage rate and be in the European Union. Thus taking away our current advantage. More research needs to be done on this topic especially on the suitability of cluster formation within Ireland.

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