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Information Flow and Peripherality in Remote Island Areas of Scotland

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Communities in the more remote parts of areas which themselves are considered to be peripheral may feel doubly isolated. Access to information can help reduce negative effects of living and working in such communities, but, in turn, this peripherality creates barriers to information access. The purpose of this PhD research is to gain a greater understanding of the relationship between access to information and the effects of peripherality; using four remote communities in each of Shetland and The Western Isles of Scotland as case studies. To this end, interviews were conducted with representatives of just over a hundred businesses, community and voluntary groups from these peripheral communities, and with in-

formation providers serving them. The research was not concerned with a particular type of information, such as business, market or community information; but with all types of information need from within the target communities. This paper examines some of the findings, which point to a strong interdependency between geographical peripherality and exclusion from information, in remote communities where accessing information is described as being both more difficult and more necessary. These findings were presented at the "Europe at the Margins: EU Regional Policy, Peripherality and Rurality", Regional Studies Association Conference, at Angers, France in April 2004.

Introduction and background

Access to information can help reduce the effects of living and working in remote rural areas, but, in turn, this peripherality creates barriers to information access. Mazie and Ghelfi (1995) see information as core for success in rural economic development for communities and individuals as well as businesses, Menou (1993) suggests that: "*Information is the most critical resource and plays a fundamental role in development.*" The Scottish Office (1996) proposes that "*a thorough assessment of the demands for information and advice in rural areas is essential when building effective services*" but comments that "*there was little evidence that demands for information and advice services in rural areas were systematically considered.*"

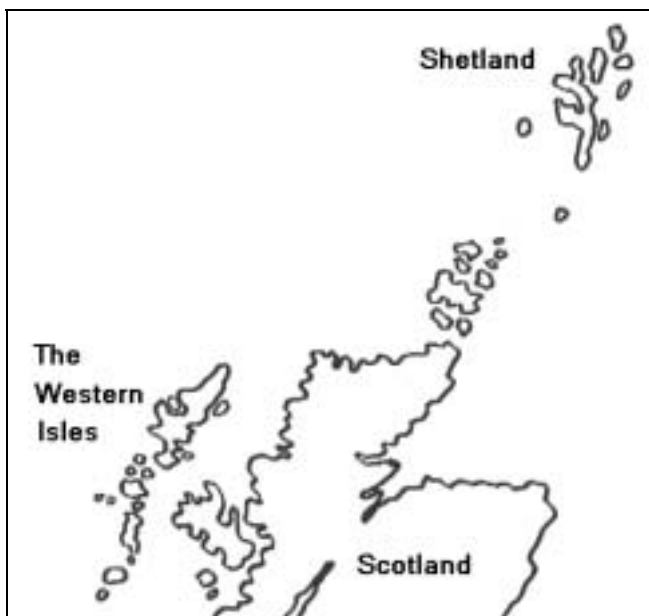
Farmer and Williams' (1999) study of rural information deprivation concentrates on health information, highlighting issues such as poor access

to transport as an important barrier in information provision. Marcella et al. (1996) look into the business information needs of companies in the north east of Scotland and describe how the vast majority of businesses used the telephone for information enquiries, and were reluctant to travel far to access information services; they also refer to the lack of research relating specifically to rural areas. As well as studies within a specific information field, there are a number of studies that look at rural information provision in terms of electronic provision, but none of these studies is specific to remote island communities, nor general in its consideration of nature of and means of access to information.

In summary, there is a lack of research, particularly related to remote island communities, and a recognised need for further study to develop understanding of the relationship between access to information and the effects of peripherality.

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Fig. 1. The Highlands and Islands of Scotland



This paper reports on a study, the aim of which is to gain a greater understanding of the role of information in reducing the effects of peripherality, the extent to which this peripherality makes it more difficult to access and disseminate information in peripheral areas, and the environments conducive to information flow. Considerable resources are being invested in the provision of information in rural areas, but apparently without systematic consideration of demand. What is helping the flow of information and what barriers exist? The study aims to answer these questions by asking both the users themselves and their information providers what the issues are.

The communities considered in the research are all located in the outer islands of Scotland, they are: Walls and Sandness, Northmavine and the islands of Foula and Unst in Shetland; Ness, Uig and Bernera, the Bays of Harris and the island of Barra in the Western Isles. Of these, Uig and Bernera currently has *Initiative at the Edge* status (a Scottish Executive designation indicating peripherality and fragility), Northmavine gained this status at the beginning of April 2004 and Barra and Unst will be so designated from October 2004; the Bays of Harris was such a community until April 2004. (See the maps: Figures 1-3).

In theory, improvements in transport and communications infrastructure, structural changes including the development of the service sector, and recent rapid technology change have led to a

Fig. 2. The Shetland Islands



reduction in the cost of remoteness and the time and expense of travel; for example e-commerce is not location dependent, excepting that it depends on telecommunications infrastructure. However, despite these radical changes, the respondents in this study time and again brought up the high cost in time, personal energy and money of transport within the island groups and between them and the mainland as being their major barrier to information access.

It is very expensive and time-consuming to travel, both from Shetland and the Western Isles to the mainland, and within the island groups; for example, the overnight ferry journey from Shetland to its mainland port of Aberdeen takes 12 hours and the cost of an economy flight between Aberdeen and Shetland is currently £321.50. [1] In the Western Isles the shallows in Harris Sound mean that the ferries are daylight and tide dependent; in winter time, travelling to a morning meeting in Stornoway from Uist requires catching a ferry from Uist to Harris the night be-

Fig. 3. The Western Isles



fore, or catching a Highland Airways plane from Benbecula at a cost of £118 [2] return, and if travelling on from Barra, a further £62.90 [3] for the extra stage.

Internal distances in both Shetland and the Western Isles are frequently under-estimated by those who have never been there. Even within the larger islands, the journey from Isbister in Northmavine, Shetland to the airport is 100 kilometres (62 miles) one-way; from Brenish in Uig, Lewis to the ferry to the southern isles is 136 kilometres (85 miles). In order to travel to Unst from Mainland in Shetland, or Barra from Lewis and Harris, you have to catch two ferries or travel by plane.

The exclusion experienced by remote islanders in their information access and dissemination is complex in nature: a combination of physical and human barriers, including travel costs, failings in service provision and assumptions made about remote communities. In turn, this exclusion from information can lead to further isolation and greater feelings of peripherality. Conversely, particular local features such as small numbers within a community can help information flow. This paper examines these issues, as well as some of the new technological solutions to peripherality, and why they do not always appear to work.

Methodology

The research is in the form of a two-case study, where the two cases are Shetland and the Western Isles. George (1979) suggests that the comparative case study approach is useful for identifying causal significance in areas which lack theoretical formulation:

... if the existing literature on the problem singled out for study does not contain much by way of theoretical formulation or hypotheses, the major objective of the study may be "heuristic" (rather than hypothesis testing). Hence, the investigator's research strategy may be to examine a variety of cases ...

The "sub-cases" (the four remote communities within each case) provide this variety of cases. The approach taken is a qualitative one, with data collected from over a hundred business, community and voluntary groups and individuals within these remote communities and with information providers serving them. In order best to elicit their experiences of information access and dissemination, interviewing was chosen as the collection method, since this can be regarded

as a means of gaining direct access to an interviewee's experience. (Schwandt 2001)

and,

the common characteristic of ... qualitative approaches to interviewing is that the persons being interviewed respond in their own words to express their own personal perspectives. (Patton 1990)

Rather than ask questions of these respondents, an open interview format was followed, in

order that concepts, issues and theories might emerge from the interviewee's perspective. Interviewees were presented with 2 sheets of A4 (where possible in advance) outlining the aim of the research, asking in particular

I would like you to speak to me about your ideas on the role of information, on 'good practice/best practice' and on the disadvantages of peripherality in Shetland.

and giving the Oxford English Dictionary (1933) definition of the term "information":

'knowledge communicated concerning some particular fact, subject, or event; that of which one is apprised or told; intelligence, news.': as well as further explanations of its use.

The methodology evolved during the study; originally this had been envisaged as being an iterative process with interviews becoming progressively more structured. However, the richness of data from the unstructured interviews led to the decision to continue with this approach in both case studies, allowing for analysis of similarities and differences of experience, within and across the cases. The issues raised and the significance given to them by the interviewees did, however, dictate the subjects of interest, and were used to confirm and refine the methodology in line with the quality of the data. In this respect the methodology follows the "naturalist" approach described by Lincoln and Guba (1985):

Theory emerges from the inquiry for the naturalist; it is not given a priori. If the methodology must be resonant with the theory, methods can be clarified only as theory emerges, and the methods may very well change in the process of theory definition.

Lincoln and Guba advocate the use of case study for the "naturalistic inquirer" for reconstruction of the "respondents' constructions", presenting to the reader "*a holistic and lifelike description that is like those that the readers normally encounter in their experiencing of the world*" and for providing the "*'thick description' so necessary for judgments of transferability.*"

The interviews, evenly spread between the two cases, lasted up to one-and-a-half hours; data from them were analysed using NVivo, the qualitative data analysis software package. An overview of some of the initial findings follows.

Peripherality issues

Travel

One of the main issues impacting on access to information highlighted by respondents was the cost of travel to the mainland. Many who were interviewed had various events outwith the isles that they felt they had to attend in order not to miss out on information; these included trade events, gathering and disseminating product information, training events to keep up-to-date with current regulations and legislation, meetings and seminars. Above all, they felt that by attending these events in person, they had the face-to-face contact, which allowed the discussion and clarification of information, sharing of best practice and reinforcing of network contacts. It was also felt that those in the mainland were in a better position to save money on travel to meetings, conferences and exhibitions abroad, as they could pick and choose between departure airports, an opportunity not available to islanders.

There was a general feeling that policy makers do not understand the ramifications of travel from the isles: even where the travel and accommodation costs of attending these events is met at a national level, the amount of time "away from the desk" might be, for example, three days, in order to attend a meeting of a couple of hours in Glasgow or Edinburgh. There are further considerations beyond the time and expense involved; the travelling is tiring, it can be intimidating to stay in a strange hotel and lonely in a big city for those that are not used to it.

Services

Many of the Western Isles information providers have local offices as well as those in Stornoway: the Citizens Advice Bureau has offices in Barra, Benbecula, and Tarbert in Harris; Western Isles Libraries have branches in Tarbert, Castlebay, Benbecula and Shawbost and mobiles in Lewis, Harris and the Uists. The local authority has offices in Tarbert and Benbecula, and a housing/social work office in Barra. Western Isles Enterprise and the Jobcentre have offices in Benbecula. The Scottish Agricultural College has a southern isles advisory officer and there are four local councils for voluntary service: Voluntary Action Lewis,

Voluntary Action in Barra and Vatersay, Harris Voluntary Service and Uist Council for Voluntary Organisations.

In Shetland the majority of information providers are based in Lerwick, Shetland's capital. The local authority does have four community development offices outwith Lerwick, but they are not as local as they might be, for example the West Mainland Community Development office that serves Sandness is in Scalloway, a 90 kilometre (56 mile) round trip away; and to get there by public transport would involve catching 3 buses each way, and cost £8.20 return. Shetland Enterprise's only office is in Lerwick, as is the JobCentre Plus. Shetland Library has branches at the junior high school in Brae and at the Royal Air Force in Unst open to the public for a total of 3 and 5 hours per week respectively, but they do have two mobile vans and have just launched an Internet library catalogue. The Citizens Advice Bureau has only a Lerwick branch; Shetland Council for Social Service in Lerwick is the only local council for voluntary service.

Both Foula and Barra rely on the plane for their mail and newspapers, Foula's service is very much weather dependent, Barra's airstrip is on a sandy beach and thus is tide dependent. Mobile telephone coverage and terrestrial television reception are poor in the more remote parts of the islands.

Degrees of peripherality and exclusion

Peripherality, isolation, exclusion and deprivation may be perceived as having successive layers; on the one hand at a county level those located in Lerwick and Stornoway complained about their exclusion from the information loop of bodies at a European, United Kingdom or Scottish level, on the other they themselves were accused of excluding their own outlying communities. For example, it was suggested that the Shetland Islands Council looked on Westminster as the Walls and Sandness Community Council looked on the Shetland Islands Council; each found it difficult to get information to answer questions from their respective centres of government.

At both levels there was a perception that "out of sight meant out of mind": because they were not able to be present at meetings, or ask questions in person; individuals and representatives from organisations and businesses felt that they

and their interests would not be represented, and that more information could be got if one were there in person. There was a general agreement that the further away from the centre of government (at whatever level), the less access there was to services.

IT Access

The assumption is frequently made that providing information on the Internet makes it available to everyone; however access to a computer can present a problem to remote residents, and although public libraries have computers with free access through "The People's Network", these may be inaccessible to those who rely on public transport. There are a number of computers in village halls, but unless there is a helper available these are of little use to those who have yet to gain computer skills.

Computer training is very expensive to deliver on a local basis to low numbers in remote locations and travelling to training without a car can be problematic. One interviewee spoke of an application for funding for basic computer training being turned down after a local councillor commented that "everybody" now knows how to use a computer, and "everyone" has access to a computer. Another interviewee spoke of commissioning research which showed that three distinct groups – individuals, community groups and local businesses – had all highlighted the need for basic IT training.

Telecommunications in both island groups are not available to the same standard as in mainland Britain. In the 1980s a fishing boat trawled up the BT telephone line between Shetland and the UK mainland, and hence the rest of the world; this has not been replaced. A microwave link provides a reasonable voice service, though short interruptions (mostly due to weather) can mean no contact with the emergency services, which were centrally relocated in the 1980s. The quality of connectivity demanded by data calls is not achieved by this link – e-business needs data connections that work all the time. Plans to install a fibre optic link to the mainland have been shelved, largely due to the cost.

British Telecomm, communications company THUS and Highlands and Islands Enterprise (the development agency for north and west Scot-

land) have formed a partnership to bring broadband to Shetland, Orkney and the Western Isles; they are promising access for Lerwick and Stornoway in May 2004, and further coverage in the island by summer 2005. However, whilst plans include Ness, Harris and Barra and for Unst, the other communities researched have no target provision dates.

Information

Applicability to area and context

A common theme from interviewees was the gulf between policy and information as it was provided and the information need of the remote community. Most information was seen as being created in "the centre", without an understanding of what would be useful, relevant or applicable for a remote audience; solutions might be provided, for instance, that would work in areas of high population density with good road communications or venues available where many people could gather; rather than for a sparse population in a geographically isolated area.

Mediation and the personal service

Information providers in Shetland and the Western Isles were in no doubt that the method that they would prefer to relay or interpret information was face-to-face, although this might not always be possible. Use might be made of intermediaries to interpret official documents where there was no local presence of large national or government organisations such as the Inland Revenue, or where it was difficult for remote inhabitants to access their "local" office in Lerwick, Stornoway or Benbecula. In the latter case particularly, information providers spoke of their clients' preference for dealing with somebody that they knew personally, at least in the first instance, and their diffidence at approaching "cold" somebody that they did not know. There was also a feeling by these clients that, since they were on the periphery, their business would not be important to those in "the power centres". Similarly information sent out from the centre was often ignored on the grounds that it was "not for us." Frequent mention was made of the value put on information exchange through personal contact,

particularly when there were aspects of advice or guidance involved, helping the client to interpret information rather than just the propagation of raw facts.

Human conduits and barriers to information flow

Anonymity and self-censorship

There are particular human features of living in a remote island community which impact upon information flow, including the reticence associated with being observed by one's neighbours, the desire not to hurt the feelings of those that one knows and a reluctance to be seen as "putting one's head above the parapet." The problems involved with anonymity were particularly apparent when it came to provision of outreach services; clients might prefer the anonymity of the town, or would visit mobile units at a neighbouring village, rather than their own.

Mention was made of barriers to the free exchange of information caused by close association and fears of breach of confidentiality. Journalists and broadcasters spoke of their reticence in speaking out in a small community in which they would continue to live, bluntly: "*You don't shit on your own doorstep*"; the corollary being that the broadcaster also knows his audience, and knows where they are and what they are doing when they listen to the broadcast.

Assumptions

Assumptions made about remote communities can lead to exclusion from access to information. These assumptions can be about geographical and physical considerations such as distance and travel, or cultural assumptions, which fail to take account of a more traditional lifestyle. Religious belief was cited as responsible for the censorship of information, for example sexual and mental health information. A number of business people expressed their frustration at the ignorance and arrogance of organisations by whom they were classified as "foreign" or "overseas" businesses.

Even misunderstandings about the timetabling of processes could be dangerous; it might be assumed by an information provider that a community knew the content of a letter that would

not be seen by the community council for another two months.

A problem referred to by two journalists in Shetland was that “everybody” thought that “everybody else” knew “everything”; this meant that important news stories were not brought to their attention because it was assumed that they would already have been told about them by another source.

Good practice in information sharing

Small communities can provide an ideal climate for sharing information, but unfortunately there was a perception that there were some organisations and individuals who were failing to share information effectively, perhaps because they wanted to retain control or glory, at the expense of effective client support or partnership working.

Community groups and information providers in the Western Isles spoke of what had been learnt and passed on from one group to another, particularly when it came to good practice in applying for funding for community and voluntary projects. In both island groups many individuals served on a number of different committees, and this potential for shared knowledge could be a great asset for effective action.

Community groups spoke of high response rates in community appraisals, one with a 90% return rate.

Identity, knowledge of community, thirst for learning

There are positives associated with living in a small community, which help the flow of information. In particular there is the advantage of knowing whom to contact for information, or for referral to the right person. The useful bank of people with a wealth of experience in one field was not only seen as helping in the effective exchange of good practice, but also as helping to confirm the sense of identity that many respondents felt helped people who want to access information. There was generally seen as being a higher than average desire for information and learning in both island groups.

Shetland in particular was considered by many to be very cosmopolitan in its outlook, and to have a historical background of international out-

look, through, for example, its trading with the Vikings and the Hanseatic League and, more recently, through the large number of men serving as merchant seamen and through exchange and twinning visits with Norway.

Policy and information provision

There was an understanding by respondents of the importance of information provision to remote rural communities in the islands; though some people felt that information provision was not given the priority it deserved, and questioned whether agencies understood why it was provided.

A number of people complained at the amount of their time that was taken up as a result of their voluntary and/or community activities in consultation processes which required information to be sent back to organisations at a more central level. This was blamed partly on the failure of such organisations to target their consultation documents, but also on the fact that the indiscriminate e-mail sending of large consultative documents was virtually cost free to the sender, the cost of printing being borne by the receiver; whereas traditional posting of printed material was costly to the sender and more likely to be to-the-point.

One of the keenest arguments for effective provision of information is that without good information, effective decisions cannot be made. One respondent suggested that dissemination of such “good information” by public agencies could lead to reasonable demands being made of them, and to a greater meeting of expectation.

But in order to allow effective information provision, the infrastructure must be there, as one interviewee said:

The death of distance can only really take place if you have the services to put it into place. And if these services are not satisfactory, then distance is still a problem.

Technological solutions to peripherality

In their report *Wired for Work* for the Joseph Rowntree Foundation, McQuaid, Lindsay and Greig (2004) consider the use by policy makers of the Internet and other new technology solutions for delivering services where:

The geographical remoteness of many rural communities limits the availability of public services, which tend to be concentrated in highly populated areas. The scattered and sparsely populated settlements that are typical of many rural areas also generate specific practical and financial problems for public agencies charged with delivering services.

New technology can provide some solutions to problems in information access due to physical peripherality; but many interviewees spoke of problems that these solutions can bring with them.

E-mail and discussion fora

E-mailing can get round some of the disadvantages of distance, but there are problems with disseminating information through this method as not everybody has equal access to e-mail. Particular difficulties spoken of were in contacting local authority and social care workers and other union members who did not have an office with a computer. Nor is everyone willing to use e-mail, one example being in agriculture, where there was perceived to be a particular reluctance to engage with IT.

Even of the people that are using new technology, not everybody has the same degree of comfort using this medium. For example in online discussion groups it was felt that the majority would remain as observers, where in person they would have taken a more active part.

E-mailing does not allow the same nuances in communication; information providers spoke of watching the body language of enquirers to ensure their understanding and interpretation of information provided during face-to-face sessions, and of the extent to which they listened to the change of tone on the telephone. Further, e-mailing was seen as being ambiguous, inefficient and allowing of misunderstandings because of the lack of negotiation and two-way communication.

Video-conferencing

Video-conferencing can provide some solutions to the expenditure of time, energy and money, both in travelling within the islands in Shetland and the Western Isles, and travelling to the mainland, but it brings its own difficulties. The problems brought by lack of telecommunications

provision and poor bandwidth and line quality have already been touched on, and many people are diffident about seeing themselves onscreen. Respondents spoke of the necessity for changing the way that meetings were conducted to include video-conferencing, including more rigorously enforced agenda; and warned that poor line quality might lead to missing nuances of tone.

Video-conferencing was seen as a poor substitute for physically attending meetings, as those who could not attend in person would miss out on exchanging good practice and on networking opportunities.

A trade association respondent thought video-conferencing might be suitable for community work, but not for business; conversely a community worker felt that it was appropriate for focussed business meetings where decisions had to be made but not for exploring issues and group work.

The technology does not always work; sometimes it was felt that it was only the people in the periphery that had the vested interest in the video-conferencing technology working; those in the centre would not bother to make the effort to use it just for the sake of having the attendance of one person from a remote location.

Training can make video-conferencing more effective, and this was something that was spoken of with particular enthusiasm in the Western Isles, where video-conferencing was used frequently for meetings; for example, different methods for chairing and sitting were needed.

Unfortunately there was also the suggestion that the people who would be undergoing the training were those who already understood most about effective use of this medium; those with the most to learn were in the "core" (whether it be, for example, Lerwick and Stornoway, Inverness, Glasgow and Edinburgh) rather than in the "periphery". Again the feeling came across that there was the perception in the core that those in the periphery were "a minor inconvenience" and that there was a limit to the amount that would be done to ensure inclusion.

Other technological solutions

There are other means of dispersing information that rely on new technology, and one youth information provider is trying a number of these to

get round transport difficulties through the use of a website with chat-rooms, a young persons' radio show with a live phone-in and a joint venture with the CAB in a pioneering text-messaging enquiry service, to allow an anonymous service to those who have access to mobile phones but not to e-mail facilities.

Another pioneer presents a national radio show from Shetland while his production team and engineers are in Aberdeen, using new technology to give the back-up of visual communication in the event of technical breakdown, as well as the advantage of non-verbal communication.

Conclusions

Travel from Shetland and the Western Isles to the mainland of Scotland and beyond is time-consuming and expensive, and can be exhausting for the traveller; this affects the ability of island residents to access information. For those in remote parts of these island groups, their need for information may be greater, but their opportunity to access it is further diminished by distance from information providers and training, inferior telecommunications, erratic electricity supply and poor public transport; this can be exacerbated by intolerance on the part of those that are centrally located who do not all make allowances for the needs of their more remote clients through flexible provision of information services.

Strong networks and intimate knowledge of who does what within the community allow individuals and groups to reach the "right" person to answer their information enquiry, and the long service record and continuity of staff helps facilitate the sharing of appropriate knowledge, as does the commitment of many individuals to a number of committees, coupled with good partnership working. However, as in many communities, some organisations and individuals may gain the reputation for abusing their position and withholding information to meet their own agenda.

Information disseminated to the periphery was often felt to be inappropriate to the needs of the rural community: urban solutions were provided from the Scottish Central Belt that had no meaning in the islands. Similarly assumptions were made about circumstances in the isles based on

extrapolation from the experience of city dwellers, leading to further exclusion. Poor targeting of consultation documents meant that time was wasted sifting through inapplicable or inappropriate information.

Although providing a personal or face-to-face service may be expensive, on some occasions it can be more easily achieved through local, generalist, information intermediaries; care should be taken that IT solutions to information access do not exclude those remote users who may need this access most, due to their location, to poor service provision or to lack of access to computers or IT training.

Access to better telecommunications, ideally broadband, was identified by many interviewees as being crucial to effective information access; the peripherality indicators most often referred to as providing the barriers to information flow, were, however, the traditional spatial indicators such as travel cost and accessibility.

Above all, the exclusion issues which have emerged from the research can be recursive in nature; for example, an IT solution may be envisaged for a remote islander who has difficulties in travelling to access information in person. Even after they have achieved a robust electricity supply and access to a computer, and telecommunications service of sufficient bandwidth to access the Internet, it may be that a lack of local public transport provision will still deny them access to the training they need to make effective use of this new technology in order to gain this information.

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Notes

1. URL: http://www.britishairways.com/travel/fx/public/en_gb [viewed April 9, 2004]
2. URL: <http://www.highlandairways.co.uk/services/prices.htm> [viewed April 9, 2004]
3. URL: http://www.britishairways.com/travel/fx/public/en_gb [viewed April 9, 2004]

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