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IASSIST QUARTERLY

The IASSIST QUARTERLY represents an international cooperative effort on the part of individuals managing, operating, or using machine-readable data archives, data libraries, and data services. The QUARTERLY reports on activities related to the production, acquisition, preservation, processing, distribution, and use of machine-readable data carried out by its members and others in the international social science community. Your contributions and suggestions for topics of interest are welcomed. The views set forth by authors of articles contained in this publication are not necessarily those of IASSIST.

Information for Authors:

The QUARTERLY is published four times per year. Authors are encouraged to submit papers as word processing files. Hard copy submissions may be required in some instances. Manuscripts should be sent to Editor: Karsten Boye Rasmussen .

The first page should contain the article title, author's name, affiliation, address to which correspondence may be sent, and telephone number. Footnotes and bibliographic citations should be consistent in style, preferably following a standard authority such as the University of Chicago press *Manual of Style* or Kate L. Turabian's *Manual for Writers*. Where appropriate, machine-readable data files should be cited with bibliographic citations consistent in style with Dodd, Sue A. "Bibliographic references for numeric social science data files: suggested guidelines". *Journal of the American Society for Information Science* 30(2):77-82, March 1979. Announcements of conferences, training sessions, or the like, are welcomed and should include a mailing address and a telephone number for the director of the event or for the organization sponsoring the event.

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C O N T E N T S

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Editor's Notes

Welcome to the first issue of the IASSIST Quarterly vol. 28. When talking about publication of the IQ we are still in last year as vol. 28 is 2004, and the articles presented here are also from 2004, mainly from the IASSIST conference. Three articles are presented in this issue.

From the IASSIST conference in Madison, May 2004, is presented a paper from the session on "Mapping the Past with GIS". After the W3 a conference presenter has here creatively come up with C3. The paper from Stuart Macdonald at the Edinburgh University Data Library has the title of "Counting Cows and Cabbages" with the subtitle of "Web-based Extraction and Delivery of Geo-referenced Data". The Geographic Information Systems are a growing area for the IASSIST community of data professionals. The paper demonstrates the scope of the Scottish Edina's data services, and readers can here find information and expertise in setting up the GIS services.

Several areas that are added to the normal data library services were presented in the conference session on "The Diverse World of Digital Libraries". One of the papers addresses "oral history". So we have now moved from the clean-cut quantitative numeric databases of the old days. The article is "Multimedia Oral History Database" by Zoltán Lux from the Institute for the History of the 1956 Hungarian Revolution in Budapest. The oral archive has tape-recordings and transcripts of about a thousand interviews with participant in the 1956 Hungarian Revolution or their children. The archive has since 2003 been carrying out some digitization of the materials (incl. photos). Judged by the publications presented on the website www.rev.hu there are many projects founded in these materials.

The last article is also from the IASSIST 2004 conference. A session presented data from Asia and contained presentations on Vietnam, China, and Korea. Daniel C. Tsang is the author of "Reflections on a Quest for Social Science Data in Vietnam". Dan Tsang is Social Science Data Librarian and bibliographer at the University of California, Irvine. The article is from his work during 2004 as a Fulbright Research Scholar in Hanoi, Socialist Republic of Vietnam. Dan Tsang was based at the Institute of Sociology, Vietnamese Academy of Social Sciences. The article mentions the many social science data sources that are available in Vietnam, most importantly a wealth of statistical data available in yearbooks (CD-ROMs) as well as surveys. Being a country in fast development not all features are as we expect them to be from a myopic western viewpoint. Dan Tsang mentions that from researchers he heard that "data is power" – but actually as it turns out "data is money" is more suitable, as many datasets are being marketed for a highest bidder.

Pay a visit at the IASSIST website on www.IASSISTdata.org. You can find information on previous and coming conferences, and the upcoming conference is in Edinburgh in 2005 (24-27 May). Among other features of the website is the possibility to access the articles of the IASSIST Quarterly as PDF-files.

Papers for the IASSIST Quarterly are most welcome. Papers can be from IASSIST conferences, from other conferences, from local presentation, etc. Contact the editor via e-mail: kbr@sam.sdu.dk.

Karsten Boye Rasmussen, March 2005

Counting Cows and Cabbages – Web-based Extraction, Delivery and Discovery of Geo-Referenced Data

About EDINA ¹

EDINA, based at **Edinburgh University Data Library**, is a JISC-funded national data centre. It offers the UK tertiary education and research community networked access to a library of data, information and research resources.

All EDINA services are available free of charge to members of UK tertiary education institutions for academic use, although institutional subscription and end-user registration are required for most services. Services include spatial data services; abstract and indexing bibliographic databases; multimedia and images databases; in addition to a number of geo-related development projects such as geoXwalk, e-MapScholar and Go-Geo!

The spatial data services offered include UKBORDERS (boundary datasets of the United Kingdom), Digimap (Ordnance Survey maps and mapping data) and the EDINA agcensus which allows downloading and the visualisation of grid square agricultural census data from as far back as 1969.

History of the Agricultural Census

Collecting livestock and crop information goes back as far as the Domesday Survey commissioned in December 1085 by William the Conqueror who invaded England in 1066.

In the Middle Ages governments did not collect statistical information for the benefit of the population, or even as a guide to policy but simply for tax and administrative purposes.

In 1801 an Agricultural inquiry coincided with the first British Population Census; the reporters were local clergy and a standard form was used to record areas of main crops. This continued into the first half of the nineteenth century where various attempts were made to conduct agricultural inquiries. In general these did not produce a good response. About the same time, the first Statistical Account of Scotland (which was published in twenty-one volumes between 1791 and 1799) was undertaken under the direction of Sir John Sinclair of Ulbster. Based on detailed parish reports, the statistical accounts enumerate and describe such topics as agricultural and industrial

by Stuart Macdonald *

production. The second *New Statistical Account* was published between 1834 and 1845. In 1864 Parliament agreed to the collection and publication of agricultural statistics in Great Britain and in 1865 allocated £10,000 to cover the cost. Thus the census began in its modern form in 1866.

The Agricultural Census

The Agricultural Census is conducted annually in June by each of the United Kingdom agriculture departments to help form, monitor and evaluate policy by providing information on the distribution and extent of crop and horticultural production and rearing of livestock.

Each farmer is obliged to declare the agricultural activity on the land via a postal questionnaire. The respective government departments collect the 150 items of data and publish information relating to farm holdings for recognised geographies.

Farm holdings above a certain economic or physical threshold are regarded as Major Holdings with the rest being regarded as Minor. The data provided from the respective government departments and converted by Edinburgh University Data Library correspond to Major holdings only.

Prior to 1998 data for England and Wales was provided by DEFRA. Farmers from both territories completed the same questionnaire. Since 1998 Welsh farmers complete a questionnaire supplied by the Welsh Assembly DEPC. Farmers in Scotland complete a questionnaire as supplied by SEERAD. Thus, due to each government department having responsibility for their respective questionnaire there is not complete comparability over the three territories with regard to census questionnaires. Similarly, due to changes in agricultural policy the content of the questionnaires within the three territories has changed over time. In addition certain census items have been aggregated in recent years to address issues concerning disclosure.

Conversion Algorithms

Areal research in relation to the distribution of agricultural census data was carried out at the University of Edinburgh in the 1970's and 1980's by Professor Terry Coppock and

Jack Hotson, with the co-operation with MAFF and ADAS. The level of publication of the Agricultural Census data was the parish summary. Coppock and Hotson developed algorithms to redistribute the parish summary data into 5km and 10km grid square estimates, taking into account potential land uses. This was done for the following reasons

- the geographies (e.g. Scottish parishes, Welsh communities) vary in size, shape, the land use capability
- parish summaries may under- or over-report agriculture activity e.g. a farmer need make only one return, even if some land or livestock are remote from the main holding
- the census returns are a 'snapshot' of activity on 1 June
- grid square data aligned to the National Grid facilitate analysis of data over a number of years and with other data sets.
- the format of data obtained from the government departments is potentially disclosive

The key to transforming the Agricultural Census data into grid square data was the definition of each geography (parish) as 1km squares. This Framework was used in conjunction with a 7-fold classification of the land-use of the same 1km grid squares called the Land-use Framework. The resulting distribution of the data gave a good estimate at 5km level of "what was likely to be where", as well as protecting farmers' confidentiality.

Migration to a Web service

Up until recently data had to be extracted from a mainframe or local server, using a set of command driven extraction programs. The data could then be mapped using the interactive Gridmap utility, written in-house by Alison Bayley, building on the raster-type CAMAP software written by Jack Hotson for data retrieval and grid mapping.

However the emergence of desktop GIS and web technologies has enabled the service to develop further, making it potentially available to a newer and wider audience.

New EDINA agcensus

In spring 2004 preliminary work began on processing and reformatting existing data into a grid square format suitable for importation into and delivery from a MySQL database. Data from census years 1969, 1976, 1981, 1988 and 1994 was reworked from existing grid formatted data, while year 2000 data was converted directly into a suitable format from the area-specific data provided by the respective government departments. This allows analysis of change over time with intervening and more recent census data to be processed in due course.

Existing data processing algorithms were re-written in Java to allow for easy maintenance and migration between machines. The interface uses Java Servlets and JSP technology to enable clear presentation and access to the data. The options presented in the interface reflect the variation in censuses from country to country and from year to year.

The post-processing database holds a table for each country, year and grid resolution combination, for which metadata is held in two lookup tables. The lookup tables hold information about what tables are available, which census items occur in each country/year combination and text descriptions, groupings and units of analysis.

The data visualisation component of the new service uses image generation servlets which present the data in map form for the area, census item, year, grid size and bandings specified.

Decisions were made (and problems resolved) regarding the provision of an alternative visualisation for context mapping, and the use and development of the area select tool; allowing for both javascript and non-javascript functionality in addition to accessibility. It was also decided that the service would be more responsive if data were held in aggregate form rather than aggregated for each data request, after weighing up the issues of storage versus 'on the fly' delivery.

Two Bartholomew's raster datasets (1:200,000 and 1:800,000) were used as the context mapping for Great Britain. Land use data from the 1980's (for Scotland, England and Wales) were used to provide an alternative context.

The new EDINA agcensus service was launched on October 1st 2004 offering grid square Agricultural Census data to 3 client communities: the academic community (via an annual Athens authenticated subscription); commercial organisations, and research/policy makers (both via an EDINA controlled authorisation and authentication on a 'per project' basis) (see Fig 1).



Fig 1: The EDINA agcensus interface offering access to academic and non-academic customers in addition to a free demonstration version of the service

A free visualisation demo service containing all census items at 10km resolution for the most recent census year held enables potential users to preview distribution maps of chosen census items although no data download is offered.

Authorised users are presented with a simple interface offering two routes into the data, namely **data download** (ASCII delimited comma separated values) and **data visualisation** (distribution maps of census items) via a 7 step access procedure:

- Select country from Scotland, England, Wales (also GB for small subset of items)
- Select year from 1969, 1976, 1981, 1988, 1994, 2000
- Select census item(s) – at present only one census item can be visualised at a time. All (or a subset there of) of the census items for a chosen year at a chosen resolution can be downloaded
- Select grid size (level of aggregation) from 2km, 5km and 10km
- Select extent of data coverage (see Fig. 2)

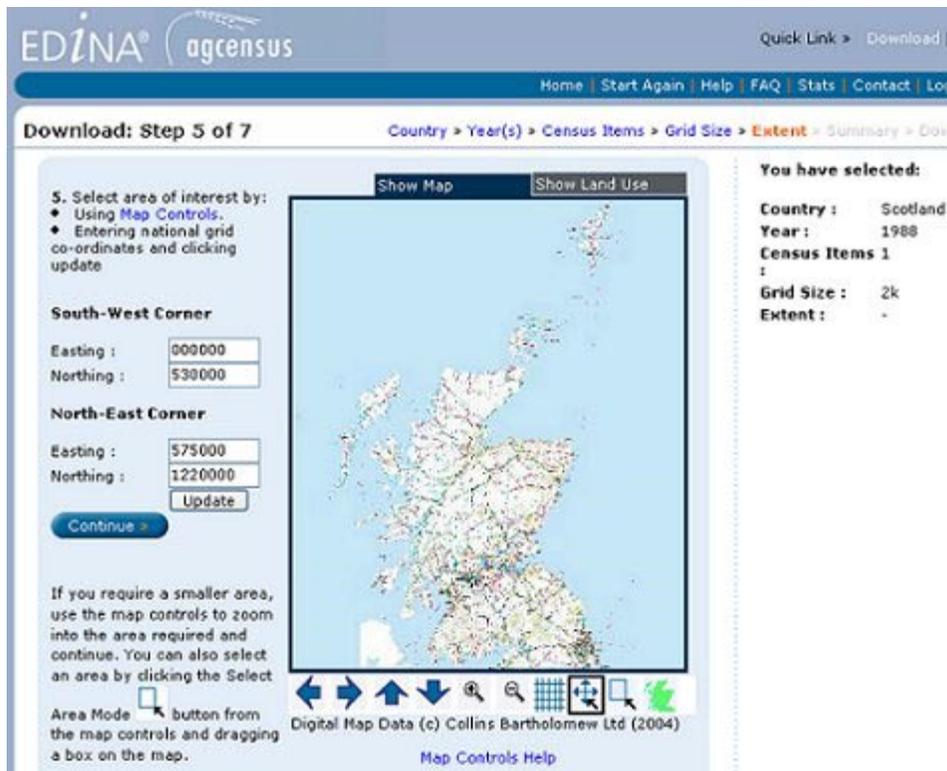


Fig 2: For small area analysis use the extent tool or enter British National Grid co-ordinates. Toggle between context map and land use map.

- Data selection summary (allows user to change chosen parameters)
- Download or visualise selected census data.

As an example, cattle distribution for the south west area of Scotland has been visualised (see Fig. 3). The image itself can be downloaded as a GIF file by right clicking on the image or printed off as a hard copy. In addition the unit bandings can be customised and the land use data for the specified area can be viewed. After visualising the chosen item for the selected area the corresponding data can be downloaded by clicking on the appropriate icon.

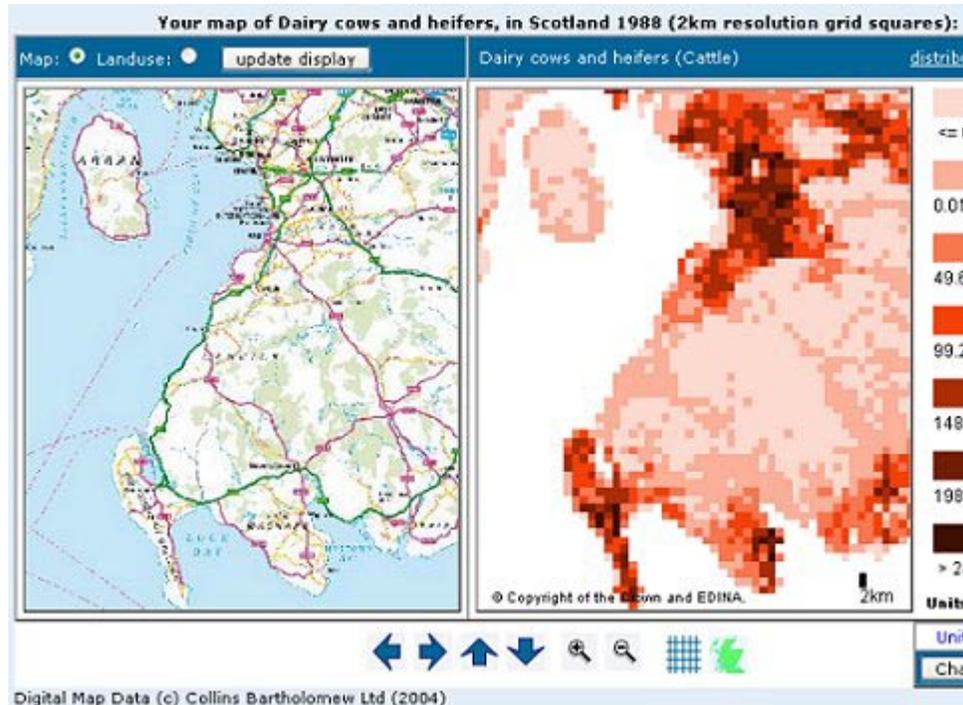


Fig 3: Distribution map of dairy cows and heifers in Scotland, 1988 at 2km resolution.

Service Issues

Prior to service launch the following key points were addressed:

Authentication. This was achieved via the Athens Access Management system which provides users from the UK tertiary education community with single sign-on to numerous web-based services. Non-academic authorisation and authentication to the service is managed by the EDINA helpdesk.

Documentation. Availability of online user guides, questionnaires and publicity material (and hardcopy on request).

Field Trialing. Field trials of the service were conducted by the Scottish Agricultural College using Nielsen-Norman Usability tests to precipitate feedback. Feedback from in-house testing was also implemented into the interface and functionality of the service.

Subscription Model. Unlike other EDINA services *agcensus* is an exception with regard to subscription in that commercial/policy/research organisations can gain access to the data. The JISC banding structure was employed for the academic audience. However those from the aforementioned non-academic institutions subscribe on a per project basis (allowing institutional access). Individuals from both academic and non-academic organisations unable to raise relevant subscription costs also have the option to pay on a per project basis.

Training/Outreach. Structured training events and workshops will be organised to both publicise and demonstrate the service. This will be done in conjunction with the EDINA Training Officer through liaison with external institutions. Online training materials will be made available via the EDINA *agcensus* website.

User Support. The EDINA *agcensus* service is supported by the EDINA helpdesk which adheres to a set of service level definitions. Enquiries are dealt with via telephone and email with service downtime, alerts, upgrades etc being posted on the EDINA *agcensus* website. Technical and in-depth service support are also available.

Accessibility. An Accessibility Statement explains EDINA's policy of working towards maximum accessibility for all users to all services.

Further Developments

There are a number of developments being investigated for Version 2 of the service. These include:

- introducing data that complement the grid square agricultural census datasets such as gridded meteorological data, species data, historic census data (at present data for the 1871 Scottish agricultural parishes are being digitised for processing)
- online visualisation of change over time for a chosen census item
- statistical reporting to provide summary statistics and enable rudimentary numerical analysis of the census data and predictive modelling
- combining more than one census item together for visualisation or download
- a teaching dataset for use in learning and teaching in the classroom, laboratory etc
- other visualisations such as histograms, pie charts, bar charts

The Bigger Picture

As a UK national data centre, EDINA engages in both projects and services, the former being geared to development activities which inform and develop the operation of EDINA national services, either producing new services or improvement in existing services. Projects are generally externally-funded and often in partnership with other institutions.

Three projects funded under the JISC 5/99 Programme relate to web delivery of spatial data to the UK HE/FE sector, and build on the national significance of Digimap (which delivers access to Ordnance Survey mapping) and UKBORDERS (digitised boundaries). These are Go-Geo!, geoXwalk and E-MapScholar.

Go-Geo!

With increasing amounts of spatial data being created within Higher Education, demand for managed access to this data is growing with GIS tools becoming more commonly available. However, two barriers confront the potential user of spatial data:

- how to find out what datasets exist
- how to ascertain their quality and suitability for use.

These barriers can be overcome by comprehensive, standardised metadata, available through the web-searchable portal.

Go-Geo! is a JISC-funded project run jointly by the EDINA and the UK Data Archive. As a Z39.50 compliant resource discovery tool it allows identification and retrieval of metadata describing the content, quality, condition and other characteristics of spatial data within and beyond the UK HE community. The Metadata Profile originally employed by the Go-Geo! project was based on UK NGDF Guidelines and the ISO 19115 Geographic Information Metadata Standard which was adopted in March 2003 and mapped recently to Dublin Core. Go-Geo! also acts as the academic node of the UK **GI**gateway service (hosted at EDINA) and can go beyond discovery to provide direct access to data in some cases (see Fig. 4).

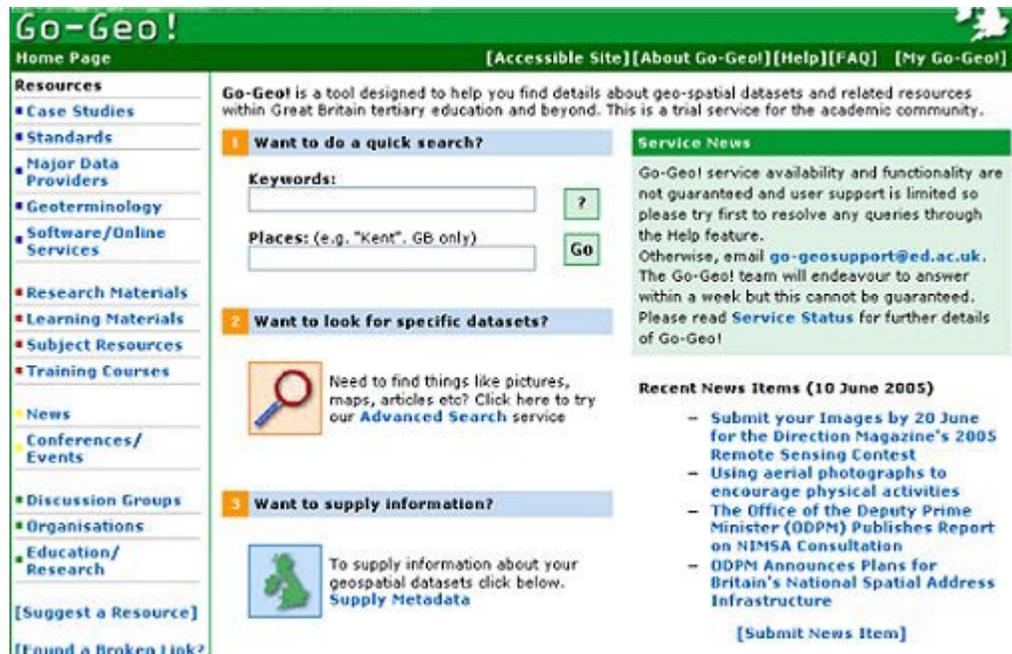


Fig 4: Go-Geo! portal offers both simple and advanced search options in addition to a 'library' of geo-resources including news items, case studies, learning materials, data providers, training courses and discussion groups.

A simple keyword search for e.g. *agricultural census* retrieves a number of results allowing the metadata for chosen records to be viewed (see Fig. 5).

With the advanced search facility searches can be restricted by data type (maps, images, datasets, reference material, projects etc), location, text, data range.

In addition to cross-searching spatial databases from major data producers Go-Geo! also extends the data discovery function by providing access to a 'library' of other related resources of use to the user. These resources can be either local to the portal or found by searching the JISC Information Environment and other online information services.

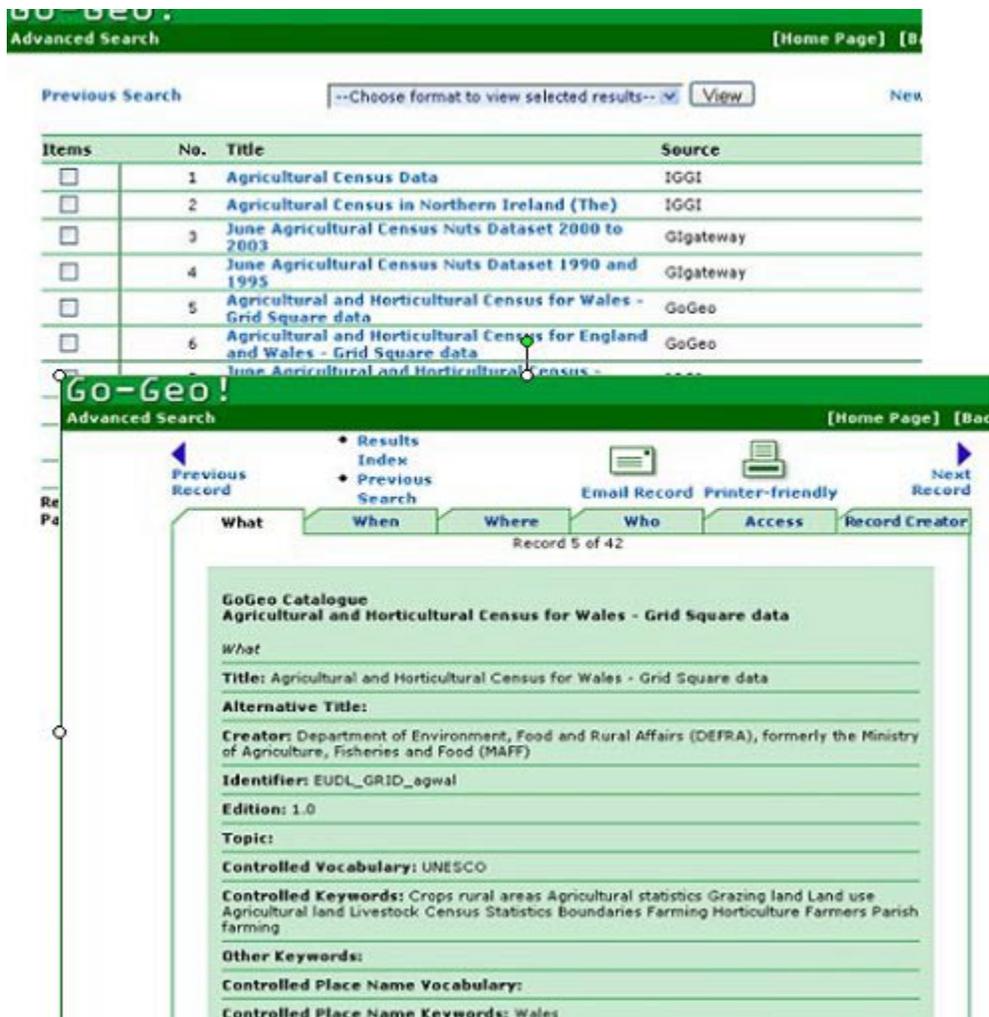


Fig 5: Retrieved results and individual record complete with 'what, when, where' metadata tabs

geoXwalk

The main purpose of this project was to provide a shared service within the JISC Information Environment (IE) that can support geographic searching. At present each information provider or service adopts different geographic coding principles (such as postcode, place name, grid reference). Thus the creation of an online Z39.50 compliant British and Irish gazetteer would facilitate a unified entry point into geographical searching in addition to providing researchers and teachers with an online reference tool.

The geoXwalk gazetteer itself contains a list of place names with their associated spatial location expressed in several ways (e.g. latitude and longitude co-ordinates etc). It also classifies features into types such as cities as areas, rivers as lines etc and stores an appropriate spatial 'footprint' against each feature. This introduces transparency to a geographic search by allowing the 'cross-walking' of these different geographies in addition to allowing searches to be conducted on a proximity/distance basis.

Integral to such a project was the need for a **geoparser**, software than can 'read' and automatically identify place names in an electronic document (e.g. a resource description or digitised historical document). Such identified place names can then be compared against the geoXwalk gazetteer entries thus providing access to 'alternate' geographies by the assignment of geo-tags (e.g. a grid reference) to implicit geo-referenced material (e.g. a place name). Thus the combination of the parser and the digital gazetteer has potential for powerful geographic based searching across a range of otherwise disparate resources such as those contained within the JISC IE.

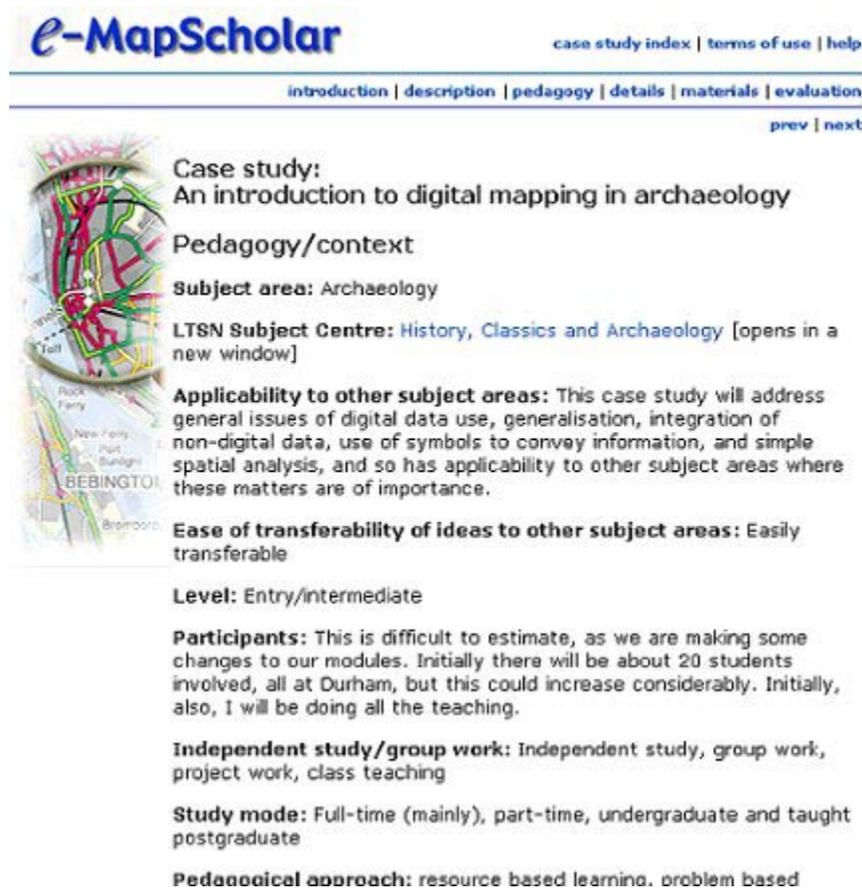
E-MapScholar

The third of EDINA's JISC-funded spatial projects, e-MapScholar, is a learning and teaching project.

From an earlier project (the JISC Electronic Libraries (eLib) Digimap Project) it was identified that there was a skills/concepts gap between creating a map and downloading and using digital map data in a GIS. Thus the aim of e-MapScholar was to fill this gap by developing tools to promote the use of spatial data, including OS digital map data available from the EDINA Digimap service, initially within tertiary education. However the model could be applied to other levels of education. It would support both those learners who need to progress to using a GIS in addition to those whose needs are more straightforward.

This spatial data literacy project has four components:

Teaching case studies which consist of the data and materials used by the learners, along with descriptions of how the data and learning materials have been integrated into a variety of disciplines, and evaluations by staff and students (see Fig. 6).



The screenshot shows the e-MapScholar website interface. At the top, the logo 'e-MapScholar' is on the left, and navigation links 'case study index | terms of use | help' are on the right. Below this, a secondary navigation bar contains 'introduction | description | pedagogy | details | materials | evaluation'. A third bar at the bottom right has 'prev | next'. The main content area features a map of a region with various colored lines and labels like 'Rock Ferry', 'New Ferry', 'Port Sunlight', 'BEBINGTON', and 'Bombarde'. To the right of the map, the text reads: 'Case study: An introduction to digital mapping in archaeology', 'Pedagogy/context', 'Subject area: Archaeology', 'LTSN Subject Centre: History, Classics and Archaeology [opens in a new window]', 'Applicability to other subject areas: This case study will address general issues of digital data use, generalisation, integration of non-digital data, use of symbols to convey information, and simple spatial analysis, and so has applicability to other subject areas where these matters are of importance.', 'Ease of transferability of ideas to other subject areas: Easily transferable', 'Level: Entry/intermediate', 'Participants: This is difficult to estimate, as we are making some changes to our modules. Initially there will be about 20 students involved, all at Durham, but this could increase considerably. Initially, also, I will be doing all the teaching.', 'Independent study/group work: Independent study, group work, project work, class teaching', 'Study mode: Full-time (mainly), part-time, undergraduate and taught postgraduate', and 'Pedagogical approach: resource based learning. problem based'.

Fig. 6: An example of a teaching case study “An introduction to digital mapping in archaeology”

Online learning and teaching materials such as tutorials have been developed with interactive tools which enable users to develop skills in the use of digital map data and knowledge of spatial data concepts such as integration and visualisation.

A **teaching content management system** has been developed which allows teaching staff to customise and re-purpose the online learning materials to suit their curriculum.

A **virtual work placement** has been designed in which students can carry out an assessment of the visual impact of wind turbines at the Nant Carfan development in Wales. This provides the opportunity for learners to develop workplace-related skills in the use of spatial data, using problem-based learning techniques.

At present the JISC are funding a follow-on project to look at ways in which they might be able to make the products from the e-MapScholar available in a service environment.

Summary

The EDINA agcensus service forms part of a growing number of geo-data resources utilised within UK academia and has evolved using web technologies to enable data access to an expansive audience. Projects related to spatial data services such as Go-Geo!, geoXwalk and eMapScholar aim to raise awareness of geo-data and associated resources. Additionally they enhance access to, and use of geo-resources to those both within and beyond the academic sector. Such resources highlight the role of data service providers, such as EDINA, in offering and strengthening networked access to a collection of data, information and digital materials to the UK tertiary education and research community.

Comments on the EDINA agcensus service are welcome. Email the author at: stuart.macdonald@ed.ac.uk.

Footnotes

¹ All URLs and acronyms are listed here in the Appendix.

Appendix:

URLs

EDINA National Data Centre:	http://edina.ac.uk
EDINA Digimap:	http://edina.ed.ac.uk/digimap
EDINA UKBORDERS:	http://edina.ed.ac.uk/ukborders
EDINA agcensus:	http://edina.ac.uk/agcensus
The Domesday Book Online:	http://www.domesdaybook.co.uk
Statistical Accounts of Scotland:	http://edina.ac.uk/stat-acc-scot
Go-Geo!	http://www.gogeo.ac.uk
geoXwalk	http://www.geoxwalk.ac.uk
e-MapScholar	http://edina.ac.uk/projects/mapscholar/index.html
GIgateway	http://www.gigateway.org.uk

Acronyms

JISC	Joint Information Systems Committee
DEFRA	Department of the Environment, Forestry and Rural Affairs (previously MAFF)
SEERAD	Scottish Executive Environment and Rural Affairs Department
DEPC	Department for Environment, Planning and Countryside
MAFF	Ministry for Agriculture, Fisheries and Food
ADAS	Agricultural Development and Advisory Service
GIS	Geographic Information Systems
NGDF	National Geospatial Data Framework
OS	Ordnance Survey

* Paper presented at the IASSIST Conference, Madison, May 2004, by Stuart Macdonald. Contact: Stuart Macdonald, EDINA National Data Centre & Edinburgh University Data Library, Tel. 0131-650-3304 | e-mail: Stuart.Macdonald@ed.ac.uk

Multimedia Oral History Database ¹

This Internet-accessible multimedia oral history database (<http://server2001.rev.hu/oha/index.html>) forms a slice, or cross-section, of the database of contemporary history held by the 1956 Institute in Budapest. Its basis is the Oral History Archive (OHA) established by some of the founders of the institute decades ago.

There are about a thousand life interviews, divisible into three main groups. About 500 interviews were made with participants in the 1956 Hungarian Revolution. Many of the rest were done with their children. Others were life interviews made under a leadership research programme in 1981–5, with those thought likely to have a career ahead of them in the communist party or state hierarchy.

The interviews were tape-recorded. Transcripts were made from these recordings, which up to the end of the 1980s meant that they were typed. In the 1990s, the transcription was made using computer word processing, so that the texts have survived in digital form as well.

In 1991, to assist orientation among the interviews, we developed a database using 3–5-page abstracts whose information could be searched and recovered in detail. The purpose of this database was to record the interview content as accurately as possible. It was not possible to archive the

*by Zoltán Lux **

full texts or the sound materials in digital form because of the memory constraints at that time.

In 2003, the institute's successful application for competitive funding under the eVilág project of the Ministry of Informatics and Telecommunications allowed a sizeable proportion of the interview materials to be digitized. This funding will allow the Institute to digitize the texts of interviews available only on paper as well as old sound materials. The project involved more than archiving, as the public part of the database is being placed in the public domain via the Internet.

Before the project began, we were developing a database handler into which we could transfer the old oral history database. This Oracle-based database can now receive the full interview texts and the sound documents. This database not only assists with making the content and technical data of the interviews searchable, it is becoming increasingly suited to fulfilling the complete archiving function and digital storage of all the related text and audio-visual documents.

The oral histories comprise only part of our database of

The screenshot shows a web browser window with the URL http://server2001.rev.hu/oha/index_eng.html. The page features a dark header with the number '56' and the text 'magyar english'. Below the header, the main title reads 'The Institute for the History of the 1956 Hungarian Revolution' followed by 'private history' in large letters and '1956 AND THE KÁDÁR PERIOD' in smaller letters. A sidebar on the left contains a navigation menu with items like 'PRIVATE HISTORY, 1956 AND THE KÁDÁR PERIOD', 'PREFACE', 'GLOSSARY - PERSONS', and 'GLOSSARY - CONCEPTS, EVENTS, INSTITUTIONS'. The main content area is titled 'INTERVIEWS: [1/12]' and lists four entries:

- Ebinger, Endre** (1932), Teacher, physicist. 1956: member of the National Council, Town of Mosonmagyaróvár, sentenced to 6 years' imprisonment. [Public] >199< 1989. 140 pages and attachment, Adrienne Molnár.
- Farkas, Vladimír** (1925-2002), 1939-1945: lived in the Soviet Union. 1946-1955: lieutenant-colonel, State Security Office. 1956-1960: imprisoned. [Closed] >200< 1988. 300 pages and attachment, Gyula Kozák.
- Gyenes, Judith** (1932), Librarian. Widow of Pál Maléter. Dismissed from her job and spent several years as an unskilled worker. [Public] >694< 1998. 100 pages, Adrienne Molnár.
- Horváth, Csaba** (1932), Worker, economist, translator. 1956: Chairman, Workers' Council of SZIM Machine Works in Esztergom, 1958: sentenced to 10 years' imprisonment. [Available for research] >236< 1990. 300 pages and attachment, Adrienne Molnár.

contemporary history. The other elements of the database include the photo archive (some 15,000 digitalized photographs with technical and content descriptions); the historical chronology; the biography archive; the trial documents archive; the video archive; and the bibliography. Each of these database elements is closely associated with the interview subjects. There may be a photograph of the person interviewed, a biography of the subject, photographs of events, or a chronological description.

'Private history' content: '56 and the Kádár period

Based on these interconnecting database 'elements', we produced a content service entitled 'Private History. 1956 and the Kádár Period'. The content basis for this is a partial set of the interviews in the OHA, the basic data in these interviews, and details and sound documents edited from the full interviews. In these interviews, the subjects speak from the viewpoint of people once condemned for their actions during the Kádár period. The Internet content service also demonstrates the connections between the interviews and persons, perhaps linking an edited biography from the biography archive with photographs from the photo archive. Based on the database, we are able to produce a book-like block of information via the Internet, whose 'technical organizer' is a subset selected for a specific attribute of the elements of the interview set. Within this system and based on such attributes, successive new 'books' will be possible.

Main features of the framework system:

1. The system allows 'almost complete' digital archiving of the documents, based on Oracle database handling software. The internal database maintenance program allows for the loading of the full texts of documents (which will also be archived), digitized files of related audio-visual documents (sound or video recordings), details of the full text edited according to various criteria, and descriptive data on the documents' content and technical characteristics.
2. It provides an immediate framework system for Internet publishing, fine tuning of a grading system for user accessibility (fully public, or full access only to researchers or staff of the data owners) and secure handling of 'sensitive' non-public data.
3. In developing the data structure of the documents, attention was paid to offers to do with qualitative data archiving from DDI, Dublin Core and TEI, and it is suitable for preparing XML outputs compatible with further development of the system.

Problems and solutions during development:

1. The life interviews were conducted in Hungar-

ian, which confines them to a relatively small audience. However, the basic data in the interviews and the biographies of the subjects have been translated into English.. We have also translated some of the interviews themselves. Of course it would be desirable in the long term for such tasks to be performed by an automatic translating program, but such devices are not yet sufficiently developed for long texts in the Hungarian language. Native English-speaking translators are being used for the time being and the translations are loaded into the appropriate English fields. (Developed translating programmes would confine the native-speaker translators to checking and editing the texts linguistically.)

2. The life interviews contain references to many events. These can sometimes be linked with actual chronological events, but in each case, what appears is a subjective interpretation. The connection with the actual event has to be signalled, but the data discrepancies also need to be recorded.

3. The many connections between the edited interview texts and other elements of the database (photos, biographies, events) should ideally be found automatically by the program among the requisite objects in the databases, allowing for further exploration through these references. Some of the photographs have been linked singly to the appropriate references, but these references are also embedded in the database. There is a complex problem with footnotes to interpret and explain the text. In some cases, a section of the text has to be explained, elucidated or possibly interpreted. Such footnotes are individual and of no use elsewhere in the text. Other sections of the text call for footnotes that expand on a concept, institution, event or person. These can be applied elsewhere in the text as well and often exist already as data records elsewhere in the database (as entries in lists of concepts or biographies or in a chronology etc.) In the latter case, a cross-reference is needed to the appropriate record. This facility has not been created under this project, partly for technical reasons, and partly due to incompleteness in the content. However, the problem has been addressed with data storage between meta-references in the individual footnote texts. It may even be possible to pick these passages out automatically from their texts, during later development (for instance, with a separate data table).

4. Some parts of the database (OHA interviews, trial documents) also contain confidential information. It was very important for the internal data maintenance module to operate according to a well-defined, graded user-entitlement system, so that such information cannot be accessed from the Internet in any way.

5. The interview texts and interview subjects provide much data of a statistical nature for qualitative sociologi-

cal researches. We would like to ensure the possibility of making the data available to various analytical programs partly through requisite exchange formats (with coding if need be) and partly directly. For the time being, direct access is ensured for programs capable of linking directly with the database. (We are experimenting with Mineset.)

6. The problem of data archiving. The really desirable solution would be for all objects for archiving to be loaded into the database. However, the databases still contain only 'simplified' versions of the digitized photos and sound documents. Full-sized digitized photo files with authentic colour can approach 100 MB in size, not to mention the size of long sound documents. These original files are kept at present in external data stores (CD-ROM, DVD-ROM, DLT). Photographs are available within the database as 300 x 300 thumbnails and 600 x 600 viewing-size pictures. The sound documents are stored in highly condensed WMA format versions.

7. We intend to install an XML format output for connecting with other databases, for data conversion and for data exchanges. This is not yet ready. We are seeking other institutions to provide similar historical or social scientific content, so that we can develop a modern-history portal service that is as broad as possible or join a similar service ourselves.

Acknowledgements

The inspiration for the online multimedia database of the 1956 Institute's Oral History Archive (<http://server2001.rev.hu/oha/index.html>) was the Edwards Online project (<http://www.qualidata.essex.ac.uk/Edwardians>). Special thanks are due to Marcia Freed Taylor, director of ECASS, for providing a scholarship in 2003, and to Louise Corti, associate director of UK Data Archive, for arranging, during the scholarship period, for me to examine digital archiving and content service practice of the UK Data Archive and Qualidata. No less important to implementing the project were the contributions of the Oral History Archive staff—the framework system for the digital content service crystallized in its final form after long, intensive and fruitful discussions with them. Of the Institute staff, thanks are due in particular to Adrienne Molnár, head of the Oral History Archive, and to Judit M. Topits, who acted as the daily operative coordinator and organizer for the whole project.

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Reflections on a Quest for Social Science Data in Vietnam

As a developing country likely to enter the World Trade Organization in a few years, Vietnam is, perhaps not surprisingly, awash in social science studies, as government mandates, donor-funded projects, and new research opportunities contribute to a renewed focus on a country seeking very hard to enter the global mainstream. Indeed, as I suggested in my Fulbright research proposal or “project statement” drafted in 2002:

As Vietnam moves toward entry into the World Trade Organization, and its economic system becomes more mixed, social science research data can be expected to play an increasingly important role for scholars interested in understanding and analyzing Vietnamese society, as well as for policymakers within Vietnam and those in the United States [and I might add here, elsewhere.]. Scholars and their students will also be interested in using such data for secondary analysis.

Vietnam has already embraced the Internet. The country has an educated, motivated, and increasingly urbanized sector of the population, although it remains basically an agricultural society. But even in some rural areas, and certainly in urban enclaves like Ho Chi Minh City and Hanoi, Internet cafes have proliferated in just a few years, many with high-speed ADSL connections.

Donor agencies have for the last several decades poured millions of dollars into Vietnam. With the American embargo lifted a decade ago, the U.S. has now become the biggest trading partner with Vietnam, with more goods exported to the U.S. than vice versa.

Cable or satellite television has penetrated not just the expatriate community but also working-class neighborhoods. In fact, in my own apartment, while flipping the 16 channels on my TV one day, I saw the Dalai Lama in a news clip speaking to students at my university while wearing a cap with the school initials, UCI. That was on CNN; in addition to three Vietnamese-language channels (one of them aimed at overseas Vietnamese), others included CCTV from China, Deutsch World, and TV5 (France).

by Daniel C. Tsang¹ *

I mentioned that Vietnam is “awash in social science studies.” One indication of that is the prolific output from the country’s General Statistics Office (GSO), which publishes many times a year thick compendia of socio-economic statistics, gathered from national surveys and administrative agencies.

Annually, it publishes a bilingual (Vietnamese/English) *Statistical Yearbook*, now available in a CD-ROM edition as well. One compendium I was able to pick up was *Major Socio-economic Information Obtained from Ten Large Scale Surveys in Period 1998-2000*. Hanoi: Statistical Publishing House, 2001. It was a heavy volume; it ran over 2,000 pages and included data from not only the ten different surveys but also “main socio-economic indicators of 61 provinces and cities.” The chapter headings for the ten surveys, taken verbatim, give some idea of the proliferation of survey data in just three years in Vietnam:

1. Land census 2000
2. Population and housing census 1/4/1999
3. Labour and job survey 1/7 1998, 1999, 2000
4. Development investment capital survey 2000
5. Results of inventory forest 1999
6. Industrial complete survey 30/6/1998
7. Survey on state-owned trade and services companies 30/6/1998
8. Survey on non-state trade and services companies 2000
9. Poverty survey 1999
10. Survey on infrastructure of communes in rural areas 1998, 1999, 2000

An earlier volume covered 1990-1996.

Most importantly, the GSO in December, 2004 published a bilingual (Vietnamese/English) and massive 4,856-page, three-volume compendium, *Vietnam Statistical data in the 20th Century*. The first two volumes covered socio-

economic data from 1901-2000. Volume 3 featured results of 21 large-scale surveys and censuses.²

In addition to data in tabular format, reports from GSO-conducted surveys have been made available in print and, occasionally, online -- for example, *Vietnam: Demographic and Health Survey, 2002*. While the GSO sells the print volume of the report, its electronic PDF version is downloadable for free from the MEASURE DHS+ Demographic and Health Surveys Web site [URL: http://www.measuredhs.com/countries/country.cfm?ctry_id=56], which also makes the 1997 survey report available.

Similarly, the report from the well-respected Vietnam Living Standards Survey 1997-1998 is also downloadable for free from the Web, despite the fact that the GSO sells the paper edition in bookstores in Vietnam. The URL for the report and associated documentation is: <http://www.worldbank.org/html/prdph/lsms/country/vn98/vn98docs.html>. The report from an earlier living standards survey, that of 1992-93, is also available with related documentation on the Web at: <http://www.worldbank.org/html/prdph/lsms/country/vn93/vn93docs.html>.

Unfortunately, the datasets themselves from which these reports are derived are not available online for free distribution. They can be acquired, for a fee, from the GSO itself. A graduated fee structure is detailed on the World Bank living standards site, depending on whether the requester is a Vietnamese or foreign organization or individual and whether they are located in a developing country or not. Fees range from \$200 a dataset to \$2,000.

The conditions for use include the unremarkable (e.g., "The user must respect the copyright of the data and should not allow other users to use the data without permission of the GSO") but also the potentially problematic: "The user is requested to send to the GSO the results of use of the data at least one month before their publication."³

Although not commenting directly on the Vietnam data, but rather on data access to all living standards surveys, the World Bank notes on its Web site⁴ that "According to our best information, a substantial proportion of data requests have been denied, left unanswered, or answered affirmatively only after substantial delays, or there is not yet an established track record."

That is not to say that researchers seeking to acquire all GSO datasets have to go through numerous hurdles. In a striking example of data sharing that bodes well for the future, a GSO team⁵ worked with historian Bob McCaa at the University of Minnesota to make the 1989 and 1999 Vietnam census available in 2002. As a result, the two latest decennial censuses of Vietnam are available via request to IPUMS International [URL: <http://www.ipums.umn.edu/international/index.shtml>]. The survey instruments are

available here: http://www.ipums.umn.edu/international/source_materials.shtml.

In addition, the GSO is the lead agency working with other government and non-governmental data producers in Vietnam in an exciting new venture, gathering and contributing data on a host of socio-economic indicators to the UN Development Program's DevInfo/VietInfo database, which will initially be disseminated on a free CD-ROM.⁶

The GSO has also improved its marketing, publishing a handy and colorful 22-page bilingual (Vietnamese/English) pamphlet, "Introduction of Main Statistics Products and Services of Viet Nam General Statistics Office" (Hanoi: General Statistics Office, 2003), listing its print and CD-ROM products. According to information from the pamphlet itself, 1,000 copies were printed. How it was distributed remains unknown to me. A new website provides, in Vietnamese and English, latest statistical developments as well as socio-economic data [URL: http://www.gso.gov.vn/default_en.aspx?tabid=491].

I was able to obtain a free copy of that guide while managing to locate, on GSO premises, its unheralded newly established "GSO data center," where researchers as



well as members of the public can obtain tabular socio-economic data from the helpful staff, at least one of whom spoke English. It was also there that I was able to purchase the latest GSO publications and CD-ROMs.

Realistically speaking, many hurdles remain before data sharing can be a fully realized reality in Vietnam. A common refrain I heard from researchers is that "data is power," giving rise not to a culture that values sharing data for free or at reasonable cost, but on that seeks to sell it to the highest bidder. This is, of course, exacerbated by the fact that local salaries are quite low (a state employee

may earn around US\$40 in basic pay monthly). Thus, the temptation to supplement meager wages is ever-present.

In addition, donor agencies and government directives merely require the end product of a project to be the creation of a published report, with no attention paid to the datasets used to compile the reports.

Furthermore, the infrastructure for broadband connectivity to the Internet in Vietnam needs to be improved. The Vietnamese Academy for Social Sciences has yet to implement broadband access for all its component research institutes (let alone libraries), and in some universities, the server serving as the Internet gateway remains intolerably clogged like some California freeway at rush hour.

Also, it is unclear how stricter Internet regulation in Vietnam, as recently reported, will impact scholarly Web sites within Vietnam.

Finally, there is as yet no in-country, accessible data archive at either the national or the sub-national level that could serve as the location to store the data. Much of the library world attention in Vietnam still is on digitizing print material, if the digital library is at all part of the dialog, and not yet on data files.

However, other selected data and/or metadata (documentation) have made the migration to the Web, in addition to the GSO data already mentioned. These include University of Washington sociologist Charles Hirschman's Vietnam Living History Survey 1991 (URL: <http://www.csde.washington.edu/research/vietnam/vlhswebdocs/data.html>) and his Vietnam Longitudinal Survey 1995, conducted in collaboration with the Institute of Sociology in Hanoi. In addition, in 2001, my school collaborated with the Institute of Human Studies in Hanoi to conduct, for the first time, the Vietnam component of the World Values Survey [URL: <http://www.democ.uci.edu/democ/archive/vietnam.htm>]. Papers relating to that survey are available on that site, and the data are available from ICPSR (<http://webapp.icpsr.umich.edu/cocoon/ICPSR-STUDY/03975.xml>). Another Vietnam wave will be conducted in 2005.

I am indebted to Cristina Negrut at the Davidson Center at the University of Michigan for her U.S. National Science Foundation Web site that serves as a gateway to business and economic datasets and/or documentation relating to "transitional" or "emerging" economies, including Vietnam. I am in the process of creating a Web site dedicated to Vietnam social science data, and a preview of some of the resources to be included is available on the "Data Sources" page of the UCI Social Science Data Archives [URL: <http://data.lib.uci.edu>]. Scroll down to Vietnam or click on V in the alphabetical listing on the Data Sources page to reach the Vietnam data section.

Indeed, exciting data developments can be anticipated in Vietnam, which hosted a major GIS conference, "GIS Ideas 2004" [URL: <http://gisws.media.osaka-cu.ac.jp/gisideas04/>] in September 2004. The conference was the International Symposium on GeoInformatics for Spatial-Infrastructure Development in Earth & Allied Sciences, which includes among its goals the development of spatial databases and analysis of spatial data relating to natural and social environments. Press accounts of the gathering included this dispatch from the official Vietnam News Agency:

According to Dr Hoang Dung of HCM City's National University, while GIS projects have shown remarkable results, the Government is yet to create a detailed plan for its further application.

"Though the 70 GIS projects, at a total value of VND85 billion (US\$5.4 million), have achieved remarkable results, the Government and the Ministry of Science and Technology (MoST) have not created a detailed blue print for its further exploitation, either in localities or at the national level," he said.

"The MoST has to make a plan to develop a GIS data warehouse and link it with localities and international organisations," suggested Dr Tran Vinh Uoc of the National University, HCM City.⁷

Also, a Vietnam Economics Research Network [URL: <http://www.vern.org.vn/>] has been set up. Its Web site includes a link to the Hanoi-based Institute of Economics' Vietnam Trade Database [URL: http://www.vern.org.vn/TradeDatabase/About_Database_E.htm], where one can search [URL: <http://www.vern.org.vn/TradeDatabase/Search/searchE.asp>], import, and export data online. It was created with technical support from the GSO.

I don't want to end without saying this: Data sharing is not a one-way effort, not just for researchers in the rich countries to obtain data from the developing world. It needs to be a two-way road. Yet researchers I met in Vietnam are unable to afford data from the West. We in the data sharing and data archiving community must do better in not only technology and expertise transfer but also in seeking ways to establish the infrastructure necessary for making western data available to developing countries at greatly reduced costs, following the example of UNESCO in developing countries. Many print libraries I visited, for example, use library cataloging software distributed gratis by UNESCO.

For example, could the major U.S. data archive, ICPSR [URL: <http://www.icpsr.umich.edu>], consider a membership pricing scheme that encourages use from researchers, institutes, Nongovernmental Organizations (NGOs), and government agencies in a developing country

like Vietnam? I am told that ICPSR considers this on a “case by case” basis. Or in the realm of technology transfer, could licensing for the data publishing utility, Nesstar [URL: <http://www.nesstar.com>], be priced to make its software available more widely? I understand they are open to this.

In addition, it doesn't make sense for donor agencies to continue to pour money into producing surveys, just to end up with a printed report. The problems faced by researchers seeking to acquire the World Bank's Living Standards surveys have already been alluded to. Donor agencies must look beyond the paper product. It would make more sense to have granting agencies require, as a condition of a grant, deposit of the data and associated documentation, for example, in a data archive, even an emerging one, in-country or abroad, with the additional condition that the data be made shareable at minimal or no cost. A certain percentage of the grant can be slated for data cleaning, archiving, and dissemination. And why not devote another percentage toward a fund to set up an in-country data archive so that data are not “lost” but can be preserved and made shareable? It is unproductive for donor agencies to fund projects that “reinvent the wheel” each time.

We need to think creatively about what else we can do to make data sharing a more realistic option for our colleagues abroad, especially in Southeast Asia and other developing countries. Otherwise, we perpetuate a world of data haves and have-nots. That is the challenge I leave with you.



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Footnotes

¹ The author is Social Science Data Librarian and bibliographer in Asian American Studies, Political Science,

Economics and Asian Studies (acting) at the University of California, Irvine. He did field work from January to early May 2004 as a Fulbright Research Scholar in Hanoi, Socialist Republic of Vietnam, where he was based at the Institute of Sociology, Vietnamese Academy of Social Sciences. He did follow-up work in August-September 2004 in Vietnam. With several dozen scholars and fellows (students) each year, the Fulbright program in Vietnam remains, remarkably, the best-funded Fulbright program in the world. The author is especially interested in hearing from others working on data sharing in Southeast Asia. Write him at: dtsang@uci.edu.

² *So Lieu Thong Ke Viet Nam The Ky XX = Vietnam Statistical Data in the 20th Century.*

Hanoi, Vietnam: Nha Xuat Ban Thong Ke, 2004. (See: http://www.gso.gov.vn/default_en.aspx?tabid=494&itemid=2235&idmid=1.)

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⁵ “Vietnam Census Microdata Integration Project,” Integrated Public Use Microdata Series International [URL: <http://www.hist.umn.edu/%7Eermccaa/IPUMSI/vietnam/index.html>] Accessed 5/21/04.

⁶ Information from Nguyen Bich Ngoc, UNICEF Vietnam, in a meeting September 8, 2004, at UNICEF Vietnam in Hanoi, Vietnam.

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IASSIST / IFDO 2005 Edinburgh

IASSIST/IFDO 2005 - Evidence and Enlightenment

24-27 May 2005, Edinburgh, Scotland

<http://datalib.ed.ac.uk/iassist/>

The 2005 IASSIST Conference (International Association for Social Science Information Service and Technology) is being held in association with IFDO (International Federation of Data Organisations) at the Holyrood Hotel in Edinburgh, Scotland from Wednesday 25th to Friday 27th May, hosted by Edinburgh University Data Library & EDINA.

The conference, which takes place in Europe on a rotating basis, is relevant to data managers, creators, and users, as well as librarians and other information professionals who now have responsibility for providing support for the use of research data, especially in the Social Sciences and other observational disciplines.

The conference will include plenary sessions, parallel sessions, a poster session and workshops.

See <http://datalib.ed.ac.uk/iassist/programme.shtml>

for the full programme and social events. The conference will be preceded by optional skills-building workshops on Tuesday 24th May. (Conference attendance not required -

see <http://datalib.ed.ac.uk/iassist/workshops.shtml> for descriptions.)

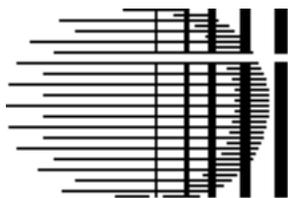
A weekend in the Scottish Highlands will follow the conference for those wishing to add to their experience of Scotland and network further with delegates.

Please register for the conference in advance, at

<http://datalib.ed.ac.uk/iassist/registration.shtml> or email

iassist05@ed.ac.uk with any questions.

We look forward to welcoming delegates to Edinburgh.



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