Report of the Fieldwork Data Sustainability Project (FIDAS)

Linda Barwick and Tom Honeyman (PARADISEC, University of Sydney)
Steven Hayes (Archaeological Computing Laboratory, University of Sydney)

http://www.apsr.edu.au/fidas/fidas.pdf

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1. Introduction

The FIDAS project was funded by APSR January to December 2006 to assist field researchers to implement international standards in data creation and description in order to facilitate a sustainable workflow for creating Submission Information Packages under the OAIS model. This was planned through development of a data model for academic field research, a middleware tool "FieldHelper", and dissemination of the project results to the research community through a workshop and guidelines.

FIDAS addressed the following APSR Program specifications:

1. Program Milestone: Develop implementation of generic tools to facilitate interoperability and sustainability;
2. Program Objective: Develop middleware and tools to enable sustainability;
3. Program Deliverable: Middleware and tools to facilitate sustainability;
4. Program Strategic Task: Develop and implement appropriate middleware and tools to enable demonstrators.

The FIDAS team was led by Linda Barwick (PARADISEC, University of Sydney) and Ian Johnson (ACL, University of Sydney) with considerable input from Tom Honeyman (PARADISEC), Steven Hayes (ACL) and Kim Jackson (ACL).

2. Rationale and objectives

Fieldworkers typically collect data in a rather ad-hoc way during fieldwork, often leading to patchy and highly variable metadata quality at the time of submission to a digital repository. It can be very difficult or even impossible to reconstruct some of this information at a later date, yet these resources are often unique and unrepeatable records of highly significant events collected at considerable expense of researcher time, effort and resources. From the repository perspective, lack of metadata (including preservation metadata) can have serious implications not only for ingestion into a repository, but also for subsequent archival management and dissemination of archival information. This project aimed to extend the scope of the OAIS model to facilitate sustainable data collection and description of digital objects from the time of creation during fieldwork, and to integrate this workflow with repository ingestion, management, and dissemination requirements.

Objectives formulated at the beginning of the project included:

1. Development of a data model for description and organisation of field data, leading to a tool "FieldHelper" that will prompt fieldworkers to record relevant preservation, description and structural metadata about their resources and their inter-relationships at the time of data creation in the field, and from this to output METS documents to accompany submission of

their digital data to relevant repositories. This will be based on APSR-approved standards (e.g. METS and OAIS), and interface with the University of Sydney testbed repositories (PARADISEC, Archimage and Usyd D-Space), but should also be applicable to other APSR projects and repositories;

2. Fieldtesting the model and FieldHelper tool with various ARC-funded data-intensive field research projects, including the National Recording Project for Indigenous Performance in Australia, Aboriginal Child Language Acquisition, the Angkor Project, PARADISEC and others (including training of researchers , gathering and assessing feedback to feed into further development of FieldHelper);

3. Knowledge transfer to the wider research community through a) an international workshop "Sustainable Data from Fieldwork", b) website publications and c) a final report including a recommended workflow and guidelines for field researchers.

3. FIDAS Activities, 2006

3.1 Development of the data model

In Semester 1, PARADISEC project coordinator Tom Honeyman undertook a series of interviews with researchers undertaking fieldwork in a variety of disciplines, including linguistics, ethnomusicology, archaeology (GIS) and botany, to ascertain the amount and typical formats of digital data collected during fieldwork. In conjunction with Steven Hayes (ACL) he undertook analysis of researcher requirements and a number of relevant middleware tools already available, with a view to identifying the key needs to be addressed in the tool development. Since researchers are already dealing with complex contingencies and variables during fieldwork it is desirable to avoid adding to researcher workload by:

- matching and supporting existing workflows;
- automating as far as possible extraction of technical metadata about file formats and resolution
- focusing researcher input on describing resources according to their own categories to make the most of their expertise and time
- making the user interface appealing and easy to use to encourage regular timely addition of metadata while in the field.

Hayes and Honeyman also reviewed relevant standards and XML schemas including MODS (Metadata Object Description standard) and METS (Metadata Encoding and Transmission Standard). The data model in diagrammatic form was circulated for comment to various researchers during semester 1 2006, and an initial interface concept design was completed in June 2006, with subsequent documentation, including an annotated MODS schema and MODS to Fieldhelper stylesheets, released through semester 2 (see Appendix 1: Timeline and Resources below). See also further discussion under 3.2. and 3.4. below.

3.2. FieldHelper Data Model: METS profile and the structural map

(Tom Honeyman)

For this project we consulted with researchers from a number of disciplines to see what kinds of digital and analogue data they might collect. Most notably we investigated the kinds of files created in linguistics, (ethno)musicology, archaeology, and botany. What is quite clear is that currently fieldworkers, especially in the humanities, collect and collate their data in fairly idiosyncratic ways.

Generically, in a typical field session a fieldworker might collect a variety of audio-visual and textual data, which would form a base of primary *research* data. *Analysis* materials ranged from notes (textual), to complex temporal-spatial mappings such as linguistic transcriptions or GIS paths. Analysis files are created using primary research data. In addition this, materials may have been used in the creation of primary data. We call these *stimulus* materials.

Roughly speaking these three classes of files (stimulus, research and analysis) fall on a time-line respectively before, during and after the period of actual fieldwork (although in reality real fieldwork is not so straightforward and contained).

Complementary to this is the notion of sessions and streams. Sessions are the discrete event around which stimulus, research and analysis files cluster. Streams are the groups of files created on single devices, such as a stream of audio recordings.

For further discussion of this terminology see Sessions and Streams and Field Helper Interface Concept Version 3 DRAFT.

The other tension in creating a structural map is the needs of the archive. For instance, archives such as PARADISEC impose a different structure over a collection of fieldwork data, to say, what DSpace is capable of. Therefore the data model needs to be abstract and flexible enough to output METS packages to match the requirements of a variety of archives.

3.3. Fieldtesting of the FieldHelper model

Various researchers associated with the project (including Linda Barwick and her collaborators) used a simple spreadsheet including the core descriptive elements of the data model to track creation of fieldwork data during a number of field trips in August-September 2006. As a result of this testing various changes were made to the core metadata set.

3.4. Development of the FieldHelper application - The design and production process in 2006

(Steven Hayes)

Steven Hayes and Kim Jackson of the ACL became involved in the FIDAS project in March 2006 and were specifically tasked with designing and creating the FieldHelper application.

In broad terms, the majority of the time allocated by the ACL to creating the application was taken up in conceptual design. The requirements for the application as initially presented suggested a number of solutions. In order therefore to set a clear programming path there were a good many discussions involving group based conceptual design work with white boards – predominantly with input from Tom Honeyman. Perhaps the defining breakthrough in the design process came in late May with emergence of the idea of "drag & tag" which was first documented in the June 7th "Field Helper Interface Concept Version 3 draft" and circulated amongst APSR stakeholders for comment. At this early stage of conceptual development, Ian Johnson's detailed interface design suggestions in response to this document were invaluable. Many of the specific suggestions made by way of a multi page email and a hand drawn sketch were directly integrated into the design to the extent that the first Alpha release looks surprisingly similar to the pencil sketch.

In late June Steven Hayes and Tom Honeyman travelled to ANU to exchange ideas with the Bidwern development team. This meeting also involved presenting for the first time general architectural concepts for Field Helper along with a mock-up of the user interface. Feedback was positive and many suggestions were integrated into the overall design.

While conceptual design work was progressing, Kim Jackson worked to assess various development platforms and methodologies for Field Helper. After considering alternatives such as development in C++ and Delphi and discussion with other experts at the ACL, Java was chosen for its broad support on the Windows and Macintosh platform and because of the fact that many associated libraries were available in this programming language - Jhove probably being the best example here. In order to streamline development and provide a consistent look and feel across both operating systems, SWT was chosen and the basis for the Field Helper GUI and Eclipse was chosen as the project IDE.

In late August the first submission was made to the new Field Helper CVS repository but coding work did not seriously commence until early September. By that stage there was a clear enough understanding of the required architecture to allow development to proceed very quickly. Coding style has focused on simplicity and reusability of classes and this has resulted in a fairly small code base which relies heavily on pre built interface widgets drawn from SWT libraries and the use of XML and XPATH to store and retrieve data. Certain development targets were not met due to the vagaries of programming and the tightness of the project timeline however, a solid and apparently bug free Alpha release was possible in

early December which has generated sufficient enthusiasm and support to allow these deficiencies to be made good over late December and early January.

Field Helper was first demonstrated as a working application to the participants of the annual APSR end of year meeting in early November as part of a Power Point presentation. The immediate response to the perceived simplicity and useability of application for the handling of complex metadata was very positive – Colin Webb, Director of Preservation Services at the National Library of Australia was for example moved to make contact with the development team to request that he be involved in early alpha testing with a view to using the application on a key NLA project.

After a further month of development a more polished version of the application was alpha released to a group of 50 participants of the Sustainable Data from Digital Fieldwork conference. Initially a Power Point presentation which included a live demo of the application was given and this was followed up with a hands-on workshop session where users were taken through downloading and installing the application and following the step-by-step documentation. The success of this release can be gauged by the 20 participants who immediately signed up as alpha testers for the application.

Field Helper was initially conceived of as a specialised tool to assist practitioners of specific academic disciplines while gathering digital data in the field. With a greater understanding of the underlying structures being handled and the capabilities of the interface and its governing technologies, the designers have incorporated the needs of a broader audience and are now emerging as a powerful and easy to use generalised metadata enrichment tool.

3.5. DSpace Video Ingestion Trial

For a trial ingestion we gathered and collated video files from a number of ethnomusicological projects for ingestion into the Sydney eScholarship Dspace. Many recordings for this project needed to be digitised, and so digital provenance data had to be compiled at the time of digitisation. These files had extensive metadata prepared for them, using the core descriptive metadata categories developed in the FieldHelper data model, and this was merged with technical data collected through the digitisation process and converted to MODS format for ingestion into the DSpace repository at the University of Sydney. We are now awaiting integration of a new Library Storage Area Network, and upgrading of the DSpace software to allow for MODS ingestion to complete the process.

A number of key issues arose in the course of this trial data ingestion, which are broadly applicable to media files collected during fieldwork in a number of disciplines.

1. *File Formats*
   While there are generally agreed upon standards for archival of images and audio, the same is not true of video. For this project we followed the recommendations of Jim Wheeler's "Videotape preservation handbook" and

the [Moving Images and Sound Archiving Study](#) by the Arts and Humanities Data Service in the United Kingdom;

2. *Gathering Preservation Metadata*
Tools for the automatic extraction of technical and preservation metadata such as [jHove](#) do not yet support any video formats. Therefore we had to keep separate note of preservation and technical metadata;

3. *File sizes*
The large sizes involved for digital video have significant time and resource consequences not only for the digitisation phase, but also in transcoding and ingestion. Linda Barwick presented a paper reporting on PARADISEC's recent video data trial (which produced material for ingestion into PARADISEC's collection) at the Digital Endangered Languages and Musics Archives Network meeting in London in November 2006 (the presentation is available as a powerpoint from http://www.delaman.org/docs/meeting06/barwick-video-trial.ppt.

See further discussion of these issues by Tom Honeyman on the Transient Languages and Cultures Blog http://blogs.usyd.edu.au/elac/2006/08/digital_video.html.

4.   Sustainable Data from Digital Fieldwork Conference, 4-6 December 2006

The conference was convened by Linda Barwick and Nicholas Thieberger (PARADISEC, University of Melbourne) in conjunction with the EthnoER eResearch project and supported by funding from the University of Sydney Library and Grangenet as well as APSR and EthnoER. The primary organiser was Tom Honeyman (PARADISEC) with administrative support from Vi King Lim (PARADISEC, Sydney) and Fiona Nelson-Campbell (APSR).

Held at the University of Sydney from 4-6 December, the conference comprised three parts:

- academic papers on the theme Fieldwork: from creation to archive and back;
- demonstrations of tools and platforms for submitting and disseminating digital ethnographic material, including FieldHelper; and
- a hands-on workshop to introduce researchers to relevant recommended tools.

The conference schedule is attached to this report as Appendix 2, and is available online at http://conferences.arts.usyd.edu.au/schedule.php?cf=11).

The conference was advertised through the website at http://conferences.arts.usyd.edu.au/index.php?cf=11, through an advertising brochure that was distributed at relevant disciplinary conferences nationally and internationally, and through relevant email discussion lists in the disciplines of linguistics, musicology and botany. It attracted 56 participants in all, who came

from the UK, the United States and Asia as well as from various Australian Universities, libraries and cultural instiitutions, and indigenous language centres.

A refereed conference publication, edited by Linda Barwick and Nicholas Thieberger, was produced for the conference. Authors were invited to submit papers for refereeing by 30 September. Published by Sydney University Press, it employed an innovative publication workflow, described by Ross Coleman in his paper in the volume, with all papers also published online through the Sydney E-Scholarship Repository. A full listing of the proceedings contents, with links to the conference collection in the Sydney E-Scholarship Repository, is attached to this report as Appendix 3.

5.   Outcomes against objectives

1. *Development of a data model for description and organisation of field data, leading to a tool "FieldHelper"*
As reported above, the data model and tool were developed in line with the original objectives. Some features of the project were delayed by various factors including the broadening of the disciplinary base to include one scientific fieldwork disciplines (botany) as well as the humanities and social science disciplines of linguistics, ethnomusicology and archaeology. This meant that the model had to become quite abstract and generic in nature. Other features of the FieldHelper tool, including structure of the MODS and METS output from the tool, were delayed by the decision by APSR to develop its own METS package in 2007.
2. *Fieldtesting the model and FieldHelper tool with various ARC-funded data-intensive field research projects.*
Twenty participants from various projects have volunteered for fieldtesting of FieldHelper tool when a beta version becomes available.
3. *Knowledge transfer to the wider research community*
This objective was fully met through presentation and publication of the conference, as discussed above.

A summary of achievements against the work packages forecast in the original application is listed below:

Task	Comment
Data modelling for research community feedback	Completed semester 1, 2006, through interviews and distribution of data model to fieldtesters.
Programming for fieldhelper tool, stage 1	Completed in December 2006.
Fieldtesting of tool	Data model tested in semester 2, 2006. Alpha version of tool fieldtesting in semester 1 2007, with wider distribution awaiting beta version.
Gathering and assessing field testing data	Completed in September 2006. Further testing postponed till 2007.

Trial repository ingestion	Data from fieldwork projects deposited in University of Sydney eScholarship Repository in January 2007 (using Fieldhelper descriptive model). METS ingestion awaiting APSR METS package in 2007.
Programming for fieldhelper tool, stage 2	Postponed to 2007 (dependent on APSR METS package).
Organising and delivering workshop	Completed December 2006.
Preparation of guidelines	Postponed to 2007 (dependent on APSR METS package integration).
Publish METS profile for importing field data into D-space	Superseded by APSR METS profile development in 2007.

6. Outstanding issues

The main outstanding issues to fulfil the promise of this project are:
- Integration of Fieldhelper with other APSR projects in the research workflow structures to be developed as part of the Repository Integration Framework project in 2007.
- Integration of the APSR METS profile (under development in 2007) into Fieldhelper output formats.
- Trialling of ingestion of fieldwork data into Dspace repositories via METS packages.

Appendix 1: Sustainable Data from Digital Fieldwork: Conference Schedule

University of Sydney, December 4 - 6, 2006

Day 1: Main Quad Refectory, University of Sydney

Monday, December 4, 2006
9:00 AM - 9:20 AM   **Opening Speeches**
John Shipp (University of Sydney Librarian) and Linda Barwick (Conference Convenor)

9:20 AM - 9:50 AM   **Conference Session**
Chair: Jane Simpson, University of Sydney

Nick Thieberger, Linguistics, University of Melbourne
        "An ethnography of the EthnoER project"

9:50 AM - 10:30 AM
 Trevor Johnston, Department of Linguistics, Macquarie University
*Adam Schembri, Deafness, Cognition and Language (DCAL) Research Centre, University College London
        "Issues in the creation of a digital archive of a signed language"

10:30 AM - 10:45 AM   **Morning tea** Provided by APSR

10:45 AM - 11:25 AM   **Conference Session**
Chair: Ross Coleman, University of Sydney Library

Barry Conn, National Herbarium of New South Wales
*Kipiro Damas, Papua New Guinea National Herbarium
        "From trees to descriptions and identification tools"

11:25 AM - 12:05 PM
 Murray Henwood, University of Sydney
Susan Hanfling, University of Sydney
*Rowan Brownlee, University of Sydney
Belinda Pellow, University of Sydney
*Tristan Gutsche, University of Sydney
        "Sowing seeds in the digital garden"

12:05 PM - 12:45 PM
 John Bowden, Research School of Pacific and Asian Studies, Australian Nat
*John Hajek, Department of French, Italian and Spanish Studies, University of Melbourne
        "When best practice isn't necessarily the best thing to do: dealing with
        capacity limits in a developing country"

12:45 PM - 1:30 PM	**Lunch** Provided by APSR

1:30 PM - 2:05 PM — **Conference Session**
Chair: Rachel Nordlinger, University of Melbourne

Tom Honeyman, PARADISEC, University of Sydney
    "Powerless in the field: a cautionary tale of digital dependencies"

2:05 PM - 2:40 PM
 Laura Robinson, University of Hawai'i, Manoa
    "Archiving directly from the field"

2:40 PM - 3:00 PM	**Afternoon tea** Provided by APSR

3:00 PM - 3:40 PM — **Conference Session**
Chair: Linda Barwick, University of Sydney

Andrea Berez, Linguistics, University of California, Santa Barbara
Gary Holton, Alaska Native Language Center, University of Alaska Fairbanks
    "Finding the locus of best practice: technology training in an Alaskan language community"

3:40 PM - 4:20 PM
David Nathan, Linguistics, School of Oriental and African Studies, London
    "Proficient, permanent, and pertinent: aiming for sustainability"

4:20 PM - 5:00 PM
Jessica Boynton, English Department, Eastern Michigan University
Steven Moran, University of Washington
Anthony Aristar, English Department, Eastern Michigan University
Helen Aristar-Dry, English Department, Eastern Michigan University
    "E-MELD and the School of Best Practices: an ongoing community effort"

5:00 PM - 6:00 PM in Main Quad Nicholson Museum — **RIHSS event: Book launches**
Free public event hosted by the Research Institute for Humanities and Social Sciences.
Three launches:
Conference proceedings, published by Sydney University Press.
    Launched by Professor Stephen Garton, Dean, Faculty of Arts
The Online Wurm Fieldnotes (PARADISEC).
    Launched by Dr Ashild Naess, University of Oslo.
A Grammar of South Efate (UH Press) by Nick Thieberger.
    Launched by Professor William Foley, University of Sydney.

7:00 PM - 10:00 PM   Conference Dinner
Darbar Fine Indian Cuisine, 134 Glebe Point Road, Glebe (own expense)

 Day 2: Tuesday 5 December, 2006 in Main Quad Refectory

 9:00 AM – 9:40 AM
Chair: Murray Henwood, University of Sydney

Simon Musgrave, Linguistics Program, LCL, Monash University
        "Archiving and sharing language data using XML"

9:40 AM - 10:20 AM
Tom Honeyman, PARADISEC, University of Sydney
Steven Hayes, ACL, University of Sydney
        "Fieldwork Data Sustainability (FIDAS): the FieldHelper project"

10:20 AM - 11:00 AM
Leo Monus, APSR, Australian National University
Kim McKenzie, ANU
Murray Garde, University of Melbourne
        "The Bidwern project"

11:00 AM - 11:20 AM   **Morning tea** Provided by APSR

11:20 AM - 12:00 PM   **Conference Session**
Chair: Ian Johnson, University of Sydney

 Shane Stephens, CSIRO
        "The Annodex platform"

12:00 PM - 12:40 PM
Nick Thieberger, Linguistics, University of Melbourne
Ronald Schroeter, ITEE, University of Queensland
        "EOPAS, the EthnoER online representation of interlinear text"

12:40 PM - 1:00 PM
Adrian Burton, Australian Partnership for Sustainable Repositories (APSR)
        "The Dawning of the Age of Online Collections"

1:00 PM - 2:00 PM   **Lunch** Provided by APSR

2:00 PM - 2:30 PM   **Conference Session**
Chair: Nick Thieberger, University of Melbourne

Linda Barwick, Sydney Conservatorium of Music, University of Sydney
    "Using fieldwork data in publications: musicology"

2:30 PM - 3:10 PM
Åshild Næss, Linguistics and Scandinavian Studies, University of Oslo
    "Past, present and future in Reefs-Santa Cruz research"

| **3:10 PM - 3:30 PM** | **Afternoon tea** Provided by APSR |

3:30 PM - 4:00 PM   **Conference Session**
Chair: Linda Barwick, University of Sydney

Ross Coleman, University Library, University of Sydney
    "Field, file, data, conference - towards new modes of scholarly
    publication"

4:00 PM - 4:30 PM
David Pearson, National Library of Australia
    "Sustainability models for digital preservation"

4:30 PM - 5:00 PM   **Panel discussion**

 Day 3: Wednesday 6 December 2006, Madsen GIS lab, room 426

9:00 AM - 10:00 AM   **Digital media: Showing of** *Journey to the Owls Nest* **(2006)**
Presented by film-maker, Kim McKenzie, ANU

10:00 AM - 11:00 AM   **Digital media: Organising files with FieldHelper**
Presented by Steven Hayes, ACL, University of Sydney, and Tom Honeyman, PARADISEC, University of Sydney

11:00 AM - 11:30 AM, Madsen Tea room   **Morning tea (Provided by PARADISEC)**

11:30 AM - 1:00 PM   **Annotating media: Elan, time-aligned transcripts**
Presented by Bruce Birch, University of Melbourne

1:00 PM - 1:45 PM   **Lunch (own arrangements)**

1:45 PM - 2:45 PM   **Annotating media: Toolbox clinic**

Presented by Nick Thieberger, PARADISEC, University of Melbourne

2:45 PM - 3:30 PM   **Presentation of data: Audiamus and the Ethnographic Online Presentation and Annotation System (EOPAS)**

Presented by Nick Thieberger, PARADISEC, University of Melbourne

3:30 PM - 4:30 PM in Madsen GIS lab, Room 426   **Closing Discussion**

Appendix 2: Sustainable Data from Digital Fieldwork: Papers and presentations available online

Conference collection in the Sydney eScholarship repository
http://hdl.handle.net/2123/1160

PART 1: Papers from the refereed conference volume

Barwick, Linda, and Nicholas Thieberger, eds. *Sustainable Data from Digital Fieldwork. Proceedings of the Conference Held at the University of Sydney, 4-6 December 2006*. Sydney: Sydney University Press, 2006.

Author	Title	Pages	Format	Handle
	Table of contents	[2]	PDF	http://hdl.handle.net/2123/1618
Linda Barwick, University of Sydney	Sustainable data from digital fieldwork: the state of the art (Sydney, 2006)	1-5	PDF	http://hdl.handle.net/2123/1288
Trevor Johnston, Department of Linguistics, Macquarie University; Adam Schembri, Deafness, Cognition and Language (DCAL) Research Centre, University College London	Issues in the creation of a digital archive of a signed language	7-16	PDF, mp3	http://hdl.handle.net/2123/1289
Tom Honeyman, PARADISEC, University of Sydney	Powerless in the field: a cautionary tale of digital dependencies	17-22	PDF, mp3	http://hdl.handle.net/2123/1290
Laura Robinson, University of Hawai'i, Manoa	Archiving directly from the field	23-32	PDF, mp3	http://hdl.handle.net/2123/1291
Barry Conn, National Herbarium of New South Wales; Kipiro Damas, Papua New Guinea National Herbarium	From trees to descriptions and identification tools	33-44	PDF, mp3	http://hdl.handle.net/2123/1292

John Bowden, ANU & John Hajek, Univ. Melbourne	When best practice isn't necessarily the best thing to do: dealing with capacity limits in a developing country	45-55	PDF, mp3	http://hdl.handle.net/2123/1293
David Nathan, Linguistics, SOAS, University of London	Proficient, permanent, and pertinent: aiming for sustainability	57-68	PDF, mp3	http://hdl.handle.net/2123/1294
Andrea Berez, University of California Santa Barbara, & Gary Holton, University of Alaska at Fairbanks	Finding the locus of best practice: yechnology training in an Alaskan language community	69-86	PDF, mp3	http://hdl.handle.net/2123/1295
Jessica Boynton, Steve Moran, Anthony Aristar & Helen Aristar-Dry, Eastern Michigan University	E-MELD and the School of Best Practices: an ongoing community effort	87-97	PDF, mp3	http://hdl.handle.net/2123/1296
Ronald Schroeter, Univ. Queensland; Nick Thieberger, Department of Linguistics & Applied Linguistics, Uni. Melbourne	EOPAS, the EthnoER online representation of interlinear text	99-124	PDF, mp3	http://hdl.handle.net/2123/1297
Shane Stephens, CSIRO	The Annodex platform	125-134	PDF, mp3	http://hdl.handle.net/2123/1302
Simon Musgrave, Linguistics Program, LCL, Monash University	Archiving and sharing language data using XML	135-145	PDF, mp3	http://hdl.handle.net/2123/1301
Murray Henwood; Susan Hanfling; Rowan Brownlee; Belinda Pellow; Tristan Gutsche, University of Sydney	Sowing seeds in the digital garden	147-156	PDF, mp3	http://hdl.handle.net/2123/1298
Åshild Næss, Dept. of Linguistics and Scandinavian Studies, University of Oslo	Past, present and future in Reefs-Santa Cruz research	157-162	PDF, mp3	http://hdl.handle.net/2123/1299
Ross Coleman, University of Sydney Library	Field, file, data, conference: towards new modes of scholarly publication	163-176	PDF, mp3	http://hdl.handle.net/2123/1300

Part 2: Non-refereed conference presentations

Author	Title	Format	Handle
Linda Barwick, University of Sydney	Using fieldwork data in publications: musicology	Mp3 slides (PDF)	http://hdl.handle.net/2123/1288 http://hdl.handle.net/2123/1667
Adrian Burton, APSR	The dawning of the age of online collections	Mp3	http://hdl.handle.net/2123/1530
Steven Hayes & Tom Honeyman, University of Sydney	Fieldwork Data Sustainability (FIDAS): the FieldHelper project	Mp3 Slides (PPT)	http://hdl.handle.net/2123/1528 http://acl.arts.usyd.edu.au/FIDAS /presentations/Fieldwork%20Data %20Sustainability%20(FIDAS).ppt
Leo Monus, Kim McKenzie & Murray Garde, ANU & Uni. Melbourne	The Bidwern project	Mp3	http://hdl.handle.net/2123/1529
David Pearson, National Library of Australia	Sustainability models for digital preservation	Mp3	http://hdl.handle.net/2123/1531
Nicholas Thieberger, University of Melbourne	An ethnography of the EthnoER project	Mp3	http://hdl.handle.net/2123/1532