The Seven Pillars of Open Language Archiving: Introducing the OLAC Vision

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LSA Symposium: The Open Language Archives Community 4 January 2002

Unprecedented opportunity

Digital archiving of language documentation and description on the World-Wide Web offers:

- Minimal cost multimedia publishing
- Maximal access to the citizens of the world

Two aspects are particularly strategic:

- Tool for language preservation and maintenance
- Heightened ethical, legal, and policy concerns

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Two possible futures

Digital archiving could hold:

 the promise of unparalleled access to information,

or,

 the specter of unparalleled frustration and confusion The outcome will depend on whether we:

 act in community to define and follow best practice,

or,

 act in isolation to proliferate idiosyncratic practices

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A community to bridge the gap

- What users want—the ideal
- What users actually get —the gap
- What it would take to bridge the gap a community that provides the infrastructure for acting in concert

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A building metaphor

The infrastructure is erected on seven pillars:

- Data
- Tools
- Advice
- Gateway
- Metadata
- ReviewStandards

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What users want

The individuals who use and create language documentation and description are looking for three things:

- Data
- Tools
- Advice

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1. Data

- Information that documents or describes a language of interest
- A wide variety of formats: print publications, computer data files, sound recordings, hand-written index cards, and so on
- A wide variety of content: word lists, paradigms, texts, annotations, lexicons, grammar descriptions, and so on

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2. Tools

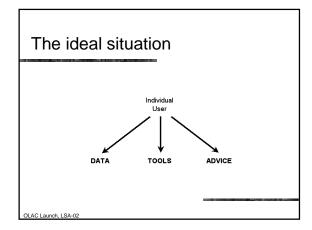
- Computational resources that facilitate creating, viewing, querying, or otherwise using language data
- These include: application programs, components, fonts, style sheets, document type definitions, and so on

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3. Advice

- Information that users would typically solicit when they need help
- For instance,
 - What data sources should I rely on?
 - What software tools should I use?
 - What practices should I follow when creating data? When using data?

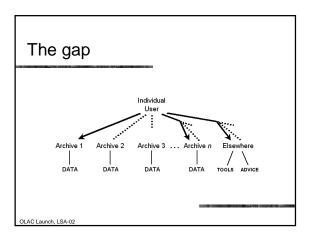
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What users actually get

- The data are archived at hundreds of sites
 - Some are on Web and user finds them
 - Some are on Web but user can't find them
 - Some are not even on Web
- The tools and advice are at hundreds of other sites

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It's even worse

- The user may not find all existing data about the language of interest because different sites have called it by different names.
- The user may not be able to use an accessible data file for lack of being able to match it with the right tools.
- The user may locate advice that seems relevant but then has no way to judge how good it is.

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What a community could provide

In order to bridge the gap, the individuals who use and create language documentation and description need a community that provides four things:

- A single gateway
- Uniform metadata
- A review process
- Standards

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4. Gateway

- A single portal through which users gain access to all available data, tools, and advice
- The actual data, tools, and advice are located on hundreds of sites all over the Internet—the gateway stores links to them.
- By accessing the single gateway site, the user gains access to all available data, tools, and advice.

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5. Metadata

- Uniform descriptions of all available data, tools, and advice
- Not the data itself, but data about the data; thus it works for digital and non-digital holdings.
- Uses specialized metadata elements to meet requirements specific to language archives:
 - uniformly identifying languages
 - matching data formats to the appropriate tools

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6. Review

- Peer review is an important function of any academic community
- Peer evaluation of available data, tools, and advice
- Review by individuals (with responses)
- Review by community to establish some advice as recommended best practice

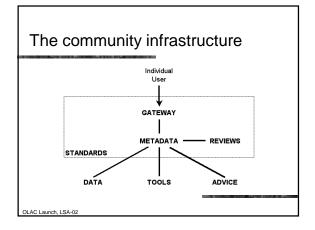
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7. Standards

Provide the framework that allows the core infrastructure to function:

- Gateway—governed by a protocol for harvesting metadata from participating archives
- Metadata—governed by an XML schema that ensures uniformity across all archives
- Review—governed by a process that allows community to establish best practice

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Open Language Archives Community

An international partnership of institutions and individuals who are creating a worldwide virtual library of language resources by:

- developing consensus on best current practice for the digital archiving of language resources
- developing a network of interoperating repositories and services for housing and accessing such resources

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Participating archives (13)

- Alaska Native Language Center
- American Indian Studies Research
- American Philosophical Society American Indian Manuscript Collections
- Comparative Bantu Online Dictionary
- Deutsche Forschungszentrum für Künstliche Intelligenz
- European Language Resources Association

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- Linguistic Data Consortium
- Oxford Text Archive
- Perseus Project
- SIL International
- TELRI Research Archive of Computational Tools and Resources
- Typological Research Center

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How does it work?

- Participants follow three standards:
 - OLAC Metadata Set
 - OLAC Protocol for Metadata Harvesting
 - OLAC Process
- These extend proven standards from the digital library community:
 - Dublin Core Metadata Set
 - Open Archives Initiative Protocol for Metadata Harvesting