

Introduction: Interdisciplinary Approaches to Language Documentation

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This special edition of the Language Documentation & Conservation Journal results from a speakers' series held at the Third International Conference on Language Documentation and Conservation in 2013. The speakers' series was designed to bring attention to the complexities and value of interdisciplinary research in language documentation. Four speakers shared their ongoing research and have since revised their talks into the papers presented herein. Each paper offers a slightly different approach to designing and implementing interdisciplinary research in the context of language documentation and each involves a different combination of disciplines. The authors present some aspect of what constitutes and defines interdisciplinary research, an approach that has been a frequent topic of academic rhetoric but remains on the fringes of mainstream research agendas. Before discussing the papers directly, some discussion of what constitutes 'interdisciplinary research' is in order.

1. What is interdisciplinary research?

One workable definition says,

Interdisciplinary research is any study or group of studies undertaken by scholars from two or more distinct scientific disciplines. The research is based upon a conceptual model that links or integrates theoretical frameworks from those disciplines, uses study design and methodology that is not limited to any one field, and requires the use of perspectives and skills of the involved disciplines throughout multiple phases of the research process. (Aboelela et al. 2006: 341)

This proposed definition was mainly designed to aid decision makers in funding agencies and researchers in identifying an interdisciplinary approach (Aboelela et al. 2006: 341).

Another definition, used by the National Science Foundation, is as follows:

Interdisciplinary research is a mode of research by teams or individuals that integrates information, data, techniques, tools, perspectives, concepts, and/or theories from two or more disciplines or bodies of specialized knowledge to advance fundamental understanding or to solve problems whose solutions are beyond the scope of a single discipline or area of research practice.¹

¹ This definition originated in the 2004 Report of the National Academy of Sciences, National Academy of Engineering, and Institute of Medicine titled Facilitating Interdisciplinary Research. See the NSF page at https://www.nsf.gov/od/oia/additional_resources/interdisciplinary_research/definition.jsp

One problem entailed in defining the term ‘interdisciplinary’ is to distinguish it from similar terms such as ‘multidisciplinary’ or ‘cross-disciplinary’. In the general literature, the terms ‘interdisciplinary,’ ‘multidisciplinary, and ‘cross-disciplinary’ are often used interchangeably, although Amith draws distinctions between them noting that ‘cross-disciplinary’ is the most neutral term.

Amith also suggests that “the key word in the [NSF] definition is ‘integrates’, as it is precisely this integration that is taken to distinguish interdisciplinary from multidisciplinary studies.” This notion of *integration* is, indeed, pervasive throughout the literature on interdisciplinary research. Note that

Interdisciplinary research asks how these disciplinary understandings can be merged, expanded, and transcended. Interdisciplinary research will continue to require concepts and methods developed through disciplinary research, but it will integrate (emphasis added) that knowledge to create new connections between disciplines and new explanations of complex phenomena. At its best, interdisciplinary research creates knowledge that no single discipline can create on its own. (Derrick 2011: 3)

The most defining aspects of true interdisciplinary research are 1) that the varying disciplines are joined early in the planning process and ‘integrated’ in terms of theoretical and practical input to the targeted research and 2) that interdisciplinary projects have the potential to form whole new disciplines. As such, 3) they must, on some level, meet the goals for the research design of each discipline involved.

2. What background in language documentation invites interdisciplinary research?

We can balance these definitions against the frequently quoted ideal scope of language documentation which states that “conventional language documentation strives to create comprehensive records of the linguistic practices of speech communities” (Himmelmann 1998: 166; cf. Gippert et al. 2006). In so doing, we can see clearly that there is a real requirement to investigate more than just linguistic phenomena in language documentation. The emphasis on ‘practices’ begs researchers to consider the broader scope of things, other than the language itself, that might impact or generate those linguistic practices.

When language documentation was first being developed as a unique field of study, most of the attention was given toward the gathering of language-specific data. There was also a good deal of attention paid to the role of technology, the role of linguistic representation, and the linguistic scope and processing of gathered data. As the ‘legs’ of this new discipline were established, researchers began to explore what else could be accomplished in the context of language documentation. There was a realization that language documentation could be layered with other disciplines to produce a richer, broader outcome for both researchers and members of the speaking communities involved. The field’s early recommendations that ‘linguistic practices’ be documented opened the door for many other considerations. And, while there has since been some significant work in language documentation that utilized an interdisciplinary approach (see Holton 2012 and Thieberger 2012), there has been little in-depth discussion about how researchers decide on and develop interdisciplinary research.

3. What are the parameters of interdisciplinary research?

The above definitions provide some explanation of what interdisciplinary research is. Let's also be clear about what interdisciplinary research is *not*. It is *not* the mere addition of researchers from various disciplines or with different academic and professional credentials to a specific project. The addition of other researchers, perhaps considered as 'token' participants, used to make the project 'look' like it has more range and depth, will not qualify. The parameters of true interdisciplinary work begin with the conception of a project; it is not sufficient to add or include another discipline after the project has been created simply to show an attempt to broaden and be more inclusive in the research. There is one exception to this general rule and that happens when the data from a language documentation project begins to yield results that might require the perspective of another discipline.

The parameters of an interdisciplinary project are set in the analysis of the conceptual framework, the study design and execution, the type and method of data analysis, conclusions, and future applications. As such, the development of the study design and direction helps to define research team competencies and drive team development.

Once the academic world embraced the full scope of projects that were cast as 'interdisciplinary', research of this type began to move from being seen as a random, unsystematic occurrence to an essential, teachable research approach. This is a critical change in our conception of what it means to be interdisciplinary. Unfortunately, actual attention to these parameters is often missing, and the approach is rarely taught.

4. Are there distinct advantages and disadvantages of interdisciplinary research?

Yes, there are both advantages and disadvantages. Among the advantages are:

- a. More sharing of responsibility by members of the research team. To this end, from the beginning, the central research question should drive the creation of an interdisciplinary research team. As Burenhult (this volume) asks, "unless the collaborating disciplines are allowed to define aspects of the documentary agenda, how will linguists be able to make the most of the collaboration?"
- b. The opportunity to bring a different set of research questions to the same project data. In some cases, adopting an interdisciplinary approach can ultimately be seen as leading to a more informed view of the ideal linguistic foci for a documentary project, thereby having a significant long-term impact on documentary activities (Good, this volume).
- c. The ability to potentially attract funding from a broader range of sources within a single agency or even across agencies—such research offers more "bang for the buck." Funding agencies realize more research outcomes for their money in such broader-based research.
- d. The fact that funding agencies specifically encourage interdisciplinary work. Consider the DoBeS project (<http://dobes.mpi.nl/projects/>) and the National Science Foundation

- e. (https://www.nsf.gov/od/oia/additional_resources/interdisciplinary_research/), for example.
- f. The requirement for “out of the box” project designs which create fuzzy boundaries (that’s good); such designs even create new disciplines. Good (this volume) reports that in one case, “an interdisciplinary focus ... identified a significant new domain of documentary investigation that [had] been largely neglected.”

There are also some potential disadvantages or difficult considerations. Among them is that academic institutions often claim to support interdisciplinary work but are, in fact, structured precisely in ways that make it difficult. Our academic culture is largely based on strong disciplinary boundaries, reinforced by professional societies, institutional hierarchies, and publication sources and requirements. Rhoten (2004: 6) writes,

The fact is, universities have tended to approach interdisciplinarity as a trend rather than a real transition and to thus undertake their interdisciplinary efforts in a piecemeal, incoherent, catch-as-catch-can fashion rather than approaching them as comprehensive, root-and-branch reforms. As a result, the ample monies devoted to the cause of interdisciplinarity, and the ample energies of scientists directed toward its goals, have accomplished far less than they could, or should, have.

This extends to how researchers often see themselves in relation to their discipline and how willing they are to push their own limits. Good (this volume) notes that a scholar must develop a “collaborative personality.” Agreements across academic departments or programs can be complicated. There are often tensions around where to publish the work—academic journals are most often focused tightly on a single discipline and may not welcome work that is truly interdisciplinary. For example,

Effective interdisciplinary research often requires collaborators to gain fairly deep knowledge about how practitioners of other disciplines collect and theorize on their data, and may further result in academic outputs that are neither fish nor fowl, as it were, in terms of disciplinary evaluation. Is a culturally informed collection of place names ... an instance of linguistics, anthropology, or geography? Questions like this do not merely provide interesting intellectual puzzles. They can have real-world consequences given the fact that disciplines do not merely exist to provide a convenient way to categorize different methods of inquiry but are also embedded within the institutional structures which support scholarship. (Good, this volume)

There may also be theoretical or methodological challenges leading to problems in both the conception of and implementation of the research in question. Language documentation fieldwork carries with it an established methodology for data collection and ethical rules of engagement with community partners. The definition of ‘fieldwork’ itself might differ from that in other disciplines and certainly fieldwork methodologies can differ and become a source of conflict. Issues also tend to arise around data management and ownership. For these reasons specifically, a designated interdisciplinary research team needs to address and anticipate as many of these things in advance when possible.

A starting point for anyone considering an interdisciplinary approach to research

is to ask: What are the boundaries of my discipline? Think about research in related disciplines or sub-disciplines and ask: is their research designed and/or evaluated by the same criteria? The advantages to interdisciplinary research are many, but must always be balanced carefully against any real or perceived disadvantages.

5. What are the goals for this issue?

The Speaker's Series was conceived of to bring attention to the increased value of interdisciplinary approaches to language documentation and to create some discussion about how this fairly new development was defined or created. By 2013, language documentation was well-established as a field of study, those who were beginning to bridge it with other disciplines were varying their approaches. At the time of the Speaker's Series, there was a growing body of research which was, in one way or another, fitting the description of 'interdisciplinary' research. (e.g., Holton 2012; Thieberger 2012). Researchers were beginning to realize that strict language documentation projects, while always valuable for their linguistic content alone, proved good opportunities to gather other types of data. There was a recognition that, if one was going to record language anyway, why not also make the content of language genres and linguistic practices relevant in some other way?

The researchers who contributed to this issue were asked to write about their experiences with interdisciplinary research. Basically, they were asked to *reflect* on that experience and share with the language documentation audience how they thought about and approached a project set to be interdisciplinary. They were asked to consider how they approached, conceived of, implemented, negotiated, full scale research while engaging disciplines other than linguistics in the context of language documentation projects. They were, therefore, asked to write about the experience, about how the interaction with another discipline came about and how it moved forward. They were also asked to discuss what the strengths and the weaknesses of engaging in interdisciplinary research were. In order to allow them plenty of room for reflection on what they thought was most important, they were not otherwise restricted by either content or the length of their contribution.

6. Overview of the included articles

Concepts of landscape and language blend together as NICLAS BURENHULT explores in his paper, "Domain-driven documentation: The case of landscape." In this article, the author relates experiences from his fieldwork among the Jahai, an Austroasiatic-speaking group of rainforest foragers in the Malay Peninsula. He argues that "landscape forms a constant scene for our actions, thoughts, and beliefs." Burenhult also notes that landscape provides a natural conversational space between researcher and community members.

Burenhult defines a 'domain' as "an experiential sphere of universal relevance which is highly likely to be a target of human representational strategies," and writes that domains "can be categorically identified in every language and be straightforwardly compared across them." Domains therefore represent arenas which facilitate interdisciplinary communication and collaboration. Accordingly, they may also be our best chance of exploiting external expertise to enrich documentation programs and regenerate and

expand documentation as a field (Burenhult, this volume). Burenhult suggests that, by using a domain-driven approach, the documentary record goes beyond a comprehensive record of linguistic practices and assures more reusability of the documentary resources by other disciplines. He does, however, raise a key question, repeated by many who work in the interdisciplinary arena, and that is how do researchers reconcile the goals of their documentation projects with the both the theoretical and practical goals of the other disciplines involved?

BIRGIT HELLWIG presents interesting perspectives on integrating child language acquisition research with language documentation. Her paper, “Child language documentation: A pilot project in Papua New Guinea” begins by recognizing the lack of this type of research within the realm of language documentation research. Hellwig establishes some of the overlapping areas of interest which contribute to child language documentation, explaining that it is anchored both in anthropology (i.e., language socialization research) and psycholinguistics (i.e., language acquisition research), and that it draws on three distinct data types: anthropological, experimental, and longitudinal. Hellwig notes that of the three types, documenters are most familiar with anthropological data, and that “there is a long-standing tradition of including anthropological components within language documentation projects... .” However, Hellwig contrasts this with the lack of expertise in the field with “the two data types most relevant for language acquisition research: experimental and longitudinal data.”

Her paper explores and explains the interaction of various disciplines in relation to her field site in Papua New Guinea as she elaborates on the different methodologies at play when two fields (documentation and psycholinguistics) intersect. She points out the need for collaboration between researchers in language documentation, language acquisition, and language socialization. She elaborates on the problems with methods developed to fit Western contexts and notes that Western-based research approaches may not apply in language documentation for endangered languages. One problem she encountered was that child language studies require experimentation and longitudinal data which are not part of classic language documentation. This question persists through much interdisciplinary research: what do we do about competing methods? For example, Hellwig considers whether we should consider child language documentation as part of psycholinguistics or is it more reasonable, effective and workable in the field to integrate a more anthropological approach? Language documenters often find themselves wedded to the latter because following a set Western agenda for research fails to account for community practices and participation. Again, true interdisciplinary work would require an ‘out of the box’ research design which would result in collaborative or complimentary agenda, and a very flexible approach to fieldwork methods.

In his paper, “Interdisciplinarity in areal documentation: Experiences from Lower Fungom, Cameroon,” **JEFF GOOD** discusses his work with anthropologist Pierpaolo Di Carlo, and with several other linguists, during a study of linguistic diversity involving seven languages spoken in thirteen villages where linguistic diversity has been maintained over time. This research spans linguistics, ethnography, geography, and archaeology; its central research question explored the factors that have allowed Lower Fungom to develop and maintain its extreme linguistic diversity. Good explains how “the standard documentary linguistic toolkit has been augmented by an interdisciplinary approach to studying the region.” Good describes the way his approach involved “prioritizing the

documentation of multilingual practices in Lower Fungom” which “emerged directly from an insight of [his research team’s] interdisciplinary research regarding local language ideologies.” Reflecting on the complexities of interdisciplinary research, Good notes that in the “academic world that is built upon disciplinary foundations, working across disciplines requires a high level of expense with comparatively little ‘overt’ payoff.

Good underscores the purpose, intent, and value of all the papers collected here noting that “the rise of the documentary paradigm as an approach to the study of endangered languages has been, at least rhetorically, associated with an emphasis on the value of interdisciplinary collaboration as a means to come to a fuller understanding of the diverse linguistic practices of communities throughout the world.”

JONATHAN AMITH’S paper, “Endangered language documentation: The challenges of interdisciplinary research in ethnobiology,” discusses a project that blended ethnobiology with language documentation in the development of a floristic and faunal inventory of the natural environment in the Nahuatl-speaking region of the Balsas River Valley in Mexico. This project has investigated through digitally recorded and transcribed texts, the cognitive aspects of nomenclature and categorization and an exploration of utilitarian and cultural aspects of the local flora and fauna. In this paper, the interaction of disciplines (biology, linguistics, and anthropology) is examined at the level of data-gathering and interpretation, providing a detailed examination of disciplinary integration. Amith approaches the interaction of disciplines from two perspectives: 1) understanding the extent of the integration among disciplines needed to solve a problem and 2) considering the degree to which participants from different disciplines are acting *in service* to other disciplines or pursuing their own research agenda. Amith expands on the notion of working ‘in service’ to other colleagues saying, “through community-based collaboration, ethnobiological projects are able to extensively collect flora and fauna, often in areas that are poorly explored. Herbaria and museum collections may thus be built up at a relatively low cost and new geographical references and species are often discovered.” (See Amith fn. 5 for detailed results of Amith’s collaborative work with biologists and the resulting collections.) His paper provides a thorough discussion of elicitation practices and approaches used by other disciplines, suggesting that such documentation provides for both qualitative and quantitative analysis of how community members identify the flora and fauna of their natural environment..

Summary Comments:

Interdisciplinary research is promoted by funding agencies, some institutions, and many researchers but, as the papers here demonstrate, not always easily understood or implemented. High quality interdisciplinary research begins in the planning stage, proceeds with lots of collaboration and cooperation, engages a range of methods and practices, and results in outcomes that benefit all involved. Its not an easy task, but the engagement of different disciplines in language documentation pushes the boundaries of research and provides a stronger documentary record not limited to language-specific data.

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