AAA Launches Digital Data Management Resources

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As part of its commitment to promoting best practices for data management, in September 2016 the AAA published online a set of modules, Bringing Digital Data Management Training into Methods Courses for Anthropology. Participants in two workshops that the AAA hosted were instrumental in developing the modules and related materials, which will help familiarize the next generation of anthropologists with key principles and practices. These teaching resources, all available at no charge, grew out of the AAA’s year-long digital data management project (DDMP), completed with National Science Foundation support. The perspectives we present here were gained through serving as the Project Manager (Femenías) and Research Assistant (Mistretta).

Today, data often originate in digital form—a development expected to increase exponentially in the coming years. The technical requirements for managing a vast array of anthropological data types in diverse formats pose significant challenges. Yet, at the heart of anthropological research are a set of interconnected, fundamental issues of research design, data collection and data management. The DDMP course materials stress the continued importance of the underlying concepts of responsible and ethical project design—from a project’s inception all the way through depositing data in appropriate repositories.

Early planning called for distinct modules to address data types characteristic of each of anthropology’s traditional four fields. To create this set of modules for online publication using a Creative Commons license, the AAA commissioned four anthropologists from the US and England: for archaeology, Lindsay Lloyd-Smith (U Leicester); biological anthropology, George Perry (Pennsylvania State U); cultural anthropology, Kathryn Othi (U Alabama); and linguistic anthropology, Arienne Dwyer (U Kansas). They drafted the modules for presentation and discussion in two full-day workshops in February and May, 2016, which several NSF program officers also attended. The drafts were circulated before the first workshop to discussants from libraries, archives, data depositories and museums: Andrew Asher (Indiana U), Candace Greene (National Museum of Natural History), Lori Jahnke (Emory U), Jared Lyle (U Michigan) and Stephanie Simms (U California).

During the first workshop, the authors decided to join forces and create a fifth module—one that introduces general principles and practices underlying effective digital data management that are common to many areas of anthropology. These questions form the core of the general module: What are data? What is data management? What are the advantages of making data accessible? What are ethical dimensions of data management? What is a data management plan (DMP)?

The authors circulated their revised individual contributions and the general introduction prior to the second workshop, which focused on disseminating and expanding the modules. Participants included faculty, museum professionals and training professionals: Phillip Cash Cash (U Arizona), Jenny Cashman (Arizona State U), Ricardo B. Contreras (Ethnographica and East Carolina U), Sara Gonzalez (U Washington), Candace Greene (National Museum of Natural History), Christine Mallinson (U Maryland-Baltimore County); Ricky Punzalan (U Maryland-College Park), Thurka Sangaramooorthy (U Maryland-College Park), Darlene Smuckey (George Mason U), Natalie Underberg Goode (U Central Florida), Fatimah Williams Castro (Beyond the Tenure Track) and Amber Watch (Arizona State U). Two graduate student participants, Cash Cash and Cashman, were nearing completion of their doctorates, while Mistretta would soon begin a PhD program.

The second workshop also featured small working groups for in-depth consideration of the modules’ themes. In two sessions, participants considered the collaborative character of anthropological research, which is increasingly based in and responsive to community concerns, and the ethical dimensions underlying anthropological investigation, including issues of privacy and security that may be differently considered in other disciplines such as medicine. In others, participants pondered what constitutes data, looking at objects, artifacts and other evidence that originate in nondigital forms and, conversely, at digital media as subjects of research and

Jenny Cashman, Natalie Underberg-Goode and Ricky Punzalan mid-discussion. Photo courtesy AAA
Participants in the second workshop. Photo courtesy AAA

as data sources. Three more groups focused on incorporating student research early in an academic career: online course formats and providing training about module use, which trainers can in turn apply to teaching. Finally, the nuts and bolts of forging a data management plan (DMP) occupied the eighth group.

For Mistretta, the attention to the DMP and opportunity to hear the observations of NSF observers along with discussants were notable features of the workshop. She noted that despite the NSF requirement to include data management plans in grant applications, applicants’ DMPs often omit important information about data access, stakeholders and collaborative efforts with communities. The question of how to integrate these concerns into research design project marked conversation throughout the workshops.

Frenzen, an educator who first taught ethnographic methods more than twenty years ago, was impressed by the consistent focus on ethics throughout both workshops, including the participants’ stress on incorporating the subject early in the modules. Mistretta similarly pointed to the repeated emphasis on the idea that ethics and collaboration should be considered in tandem throughout a project and even after its completion, from the development stages through the continued preservation of data. Who owns data? is a fundamental question: matters of intellectual property rights connect with decisions about how—or indeed if—to preserve data obtained with, rather than from, communities. Regarding the difficulties in deciding on the best direction a research project should take to meet both the requirements of data preservation and the beliefs of a community, Mistretta highlighted a point that the archives stressed, not all repositories are the same, so it is important to consult archives at the outset to ensure that the repository selected will benefit the project and appropriately handle the data.

The modules authors, during both workshops, presented their individual perspectives and emphasized important features for their own subdiscipline as well as the anthropology as a whole. Lindsey Lloyd-Smith stated succinctly about data management. “It’s not a plan, it’s a practice.” Data management should be carried through the duration of a project. George Perry showed how contemporary analytical and management technology can enhance traditional evidence, such as through 3D scanning of material remains. Adrienne Dyer argued passionately for the power of anthropology to decolonize linguistic ideologies. And Kathrin Öhns, reminding us of the intrinsic interconnectedness of qualitative and quantitative data, shared processes for converting ethnoarchaeological data to digital records.

For Frenzen participating in the project overall provided an unmatched opportunity to learn from the different perspectives and approaches of different anthropologists and professionals in related fields. The intense brainstorming within breakout groups during the second workshop was an especially notable feature. These small groups generated numerous ideas useful for research that goes across field boundaries and for further developing the modules.

One such proposal was to incorporate the modules into an online course using an open access learning management system, thereby making the material more widely available for independent study. The group results also emphasized the growing tendency in the US to incorporate original research into undergraduate curricula, with the related need to establish appropriate research design and data management practices in the early stages of post-secondary education rather than in graduate school.

Another project component is Mistretta’s survey identifying research methods courses in US graduate anthropology programs. The survey found that a course titled “Research Methods” or something similar is offered in about half the anthropology departments surveyed—“53% of 314 departments.” Discussion of the information in the second workshop generated diverse conclusions, while participants often lamented the lack of such classes. Many pointed out that this trend seems consistent with an overall reduction in the numbers of anthropology courses that each department offers. It may also indicate, however, that the teaching of research methods, often tightly tied to the technical expertise expected in one of the four fields, is dispersed among multiple courses or even multiple departments. In addition, if affirmation that field research is a cornerstone of one discipline, anthropology, often takes on the responsibility of providing qualitative methods training for numerous other disciplines at a university. In such a scenario providing widely available educational materials is more important than ever.

The project has generated a set of data management plans from awards recently made to anthropological research projects. Primarily from the National Science Foundation and National Endowment for the Humanities, as well as information about where to locate DMPs and information about writing them. These resources are posted along with the modules.

The web publications of the DMP modules marks the first occasion that the Association has commissioned and published gradate methods training materials. They join the web-based resources that the AAA has long maintained in the websites’ ‘Learn and Teach’ section, which is curated by a postdoctoral Professional Fellow. Available Methods and Ethics materials include the Association’s Handbook on Ethical Issues in training materials in a wide variety of methods.

The Association has convening power to bring anthropologists together to engage in productive conversations about enhancing curriculum development, as AAA Executive Director Ed Liebow discussed in Anthropology News (57:5 [6-21]). The 2016 DMP workshops and published materials constitute important components of these conversations. Thanks to the NSF’s support and the project participants’ generous contributions, the AAA is well poised to develop additional educational materials that will complement the modules and to revisit the workshops’ themes.

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Brittany Mistretta (MA, Catholic University of America) is the project’s Research Assistant. In Fall 2016 she entered the University of Florida to pursue a doctoral degree in anthropology and a certificate in museum studies. Her research interests are in Caribbean archaeology, zooarchaeology, ritual practices and the reuse of archaeological excavations and archival data.