Panel: New Mapping Resources for Instructors and Students

Panel description

 This pedagogic panel is planned as a follow-up to the 2005 CAMWS panel “Ancient Geography in the Twenty-First Century Classroom,” which was published as *Occasional Papers of the American Philological Association’s Committee on Ancient History* vol. 3 (2006) <<http://www.thesagesshoppe.com/academia/CoAH/CoAH-OP/index.html>>. The panel discusses and illustrates a range of the remarkable advances which have been made during the past seven years to enlarge and diversify the opportunities for the exploitation of maps as teaching and learning materials. Between them, the papers consider the productive use of maps both in survey courses and in more focused upper-level ones, especially those incorporating a research component for students.

 As all three papers attest, developments in digital technology underpin the progress that has been made. For all its merits, the pilot draft of a wall map for the ancient world (see paper #1) presented and discussed at the CAMWS 2005 panel lacks several of the invaluable features to be found in the set of seven such maps eventually completed and published in 2011; the reason is much more a matter of technology than lack of imagination or ambition. Equally, the Peutinger Map site (paper #1), the Mapping the Mysteries site (paper #2), and the À La Carte initiative (paper #3) could not have been launched in their present form without recently improved technology. Indeed, what is now being developed as the À La Carte initiative was specifically identified by a speaker at the CAMWS 2005 panel as an ideal, but as yet unattainable, goal; this same speaker returns in 2012 in the role of discussant. The À La Carte initiative is poised to liberate instructors and students from the frustrations of reliance upon fixed, printed maps which do not adequately fulfill their particular needs, and to offer instead a practical tool for creating maps that convey exactly what is wanted by their makers. Naturally, a strong demand for printed maps and atlases will persist, and the revised set of these for *The Romans from Village to Empire* (paper #1) demonstrates the quality that can be achieved today for an introductory textbook – including city-plans (a notorious cartographic challenge), and even when the need to keep the book affordable precludes the use of colored inks.

 Together with the discussant, all three speakers are actively engaged both in mapmaking and in college teaching at various levels, and they offer this panel in eager anticipation of gaining reactions from fellow instructors (and students) to their ongoing endeavors.

#1 Recent Classroom Map Projects at the Ancient World Mapping Center

 To provide effective instructional support has always been among the Ancient World Mapping Center’s primary concerns. The paper illustrates three recently completed major initiatives by the Center, and discusses their character and aims. All three have been planned to offer – in their different ways, at different levels – remarkable opportunities for the enrichment of classroom teaching.

 Most basic, and also most arresting visually, is the set of seven *Wall Maps for the Ancient World* published (2011) by Routledge in both print and digital formats. In print, the largest of these is immense – 5 ft tall by 6.5 wide – but this size makes it possible both to inform and inspire students who are being introduced to the ancient world for the first time. To many of us today, classroom wall maps may be too readily dismissed as unwelcome reminders of a past generation’s myopic, rigid educational practices. This new set of seven – spanning between them a vast arc of space and time, from the Near East and Egypt to the Roman Empire, 3000 BCE to 200 CE – can act on the contrary as an eye- and mind-opener. The well-judged choice of color palette renders the all-important physical landscape of unfamiliar parts of the world meaningful to newcomers. At the same time, cultural data is marked selectively and very legibly, with ‘big picture’ survey courses in mind.

 For coursework that is still introductory but more focused in scope, the Center has produced over forty maps for the second edition of Mary Boatwright et al., *The Romans from Village to Empire* (Oxford UP, 2012). The paper illustrates how all the maps for the first edition (2004) have been revised and improved, with particular attention to enhancing the presentation of physical landscape, which now appears in color on both endpaper maps. The range of maps has been extended to match the longer chronological span (to 500 CE) that the new edition encompasses. In addition, a co-ordinated suite of plans of Rome at successive stages in the city’s development has been introduced, as well as a plan of Constantinople. As before for the first edition, the Center’s website offers all these maps free of charge for non-commercial use, so that they provide an outstanding resource for teachers and pupils studying Roman history and culture.

 For an upper-level course on such themes as cartography, geography, travel or worldview, not to mention the Late Roman empire, the Center has recently been able to offer (also free) an online presentation of the Peutinger Map (*Tabula Peutingeriana*) that displays the map as a seamless whole (22 ft long) <http://www.cambridge.org/9780521764803>. On the map – as the paper shows – can be overlaid an extensive range of layers in any combination: for example, they highlight individual elements of the physical and cultural landscapes, assign numbers to unnamed features for identification, and mark gaps in the data. Multiple components in the layers relate to entries in a comprehensive database that forms another part of the same site. Moreover, a mosaic of *Barrington Atlas* maps is provided, on which the routes of the Peutinger Map are plotted out alongside those of the Antonine and Bordeaux itineraries. As I elaborate with reference to my own teaching experience, in these materials there is as yet untapped potential to stimulate students’ imaginative exploration and use, most rewardingly in courses requiring the development of a research project. In addition, for students with an interest in ancient mapmaking, the Peutinger Map as seen here invites comparison with the Marble Plan of Rome at <http://formaurbis.stanford.edu>.

#2 Mapping the Mysteries: GIS as Pedagogical Aid in the History of Religions

 The paper presents a case study in the pedagogical potential for GIS in the teaching of ancient religions. The study is based on the mystery cult of the Great Gods of Samothrace, which is unique among the ancient mysteries in its promise of safety at sea. The pedagogical opportunity builds on a scholarly project which uses GIS to organize, query, and visualize the ancient evidence for the human social network created by the cult. Historical evidence suggests the capacity for such networks to counteract maritime dangers: the physical, through improved channels of communication; the criminal, in the form of ancient piracy. My approach positions the cult in the category of ancient mechanisms for interstate connectivity – including fictive kinships, heroic legends, treaties, and leagues. Viewed in this light, it appears that the island of Samothrace in the North Aegean functioned as a super-node in the network of linked states. The GIS database offers students and instructors four clear pedagogical benefits:

1. Visualization of the spatial aspect of the cult’s human social network; this is particularly valuable for the understanding of a cult which promised safe movement through space;
2. Critical investigation of a model of social dynamics which resonates with students’ perception of contemporary social reality, and offers opportunities for deductive analysis;
3. Engagement with the primary evidence – archaeological, epigraphic, literary – at locations both with direct Samothracian connections and without them, in order to gauge the degrees of separation between the sites. Students use their inductive skills to evaluate the primary evidence, and they form synthetic hypotheses based on their observations. This opportunity is a marked advance upon the unquestioning acceptance of arguments presented by an instructor or through secondary materials alone;
4. A capstone – introduced at the end of the semester – for the application of concepts previously introduced to the class, including heroic legends and colonization; voluntary organizations functioning under the aegis of divine patrons; civic priesthoods and festivals; *theoria* and *proxenia*; the definitions of sacred space; and the processes and social ramifications of initiation. There is ample scope for investigation in space and time, because the cult flourished in both the Hellenistic and Roman periods.

 The database has been created by identification of some 100 sites with demonstrable Samothracian affiliations, based on: inscriptions at the site on Samothrace advertising initiation, *proxenia*, and *theoria*; inscriptions in the *poleis* attesting local Samothracian priesthoods, *koina*, and shrines; historical texts; and archaeological evidence of local shrines for the Samothracian gods. Each of these sites has been made a ‘cell’ for two types of primary historical data: those indexing the site’s connection to Samothrace, including images, texts and translation, along with relevant bibliography; and those which represent the further mythic, social, and historical mechanisms for effecting communication and cooperation among scattered *poleis*.

 Students are introduced to the site on Samothrace and the cult, and are assigned the investigation of between four to six cells. Their goal is to gauge the extent to which conceptual networks – myth, social status, festival participation, among others – offered mediation among those specific *poleis*, and thereby a response to the realities of geographical separation in the international marketplace of the Hellenistic world. This exercise offers a conclusion to the semester with an emphatically embedded model of mystery cults – in strong contrast to the scholarly tradition, which presents the mysteries as voluntary and a world apart from civic, even proto-Christian, religious practice. Students thus acquire the means to make meaningful arguments about the cult’s social function; they engage in a contemporary chapter of the cult’s investigation, and they experience the realities of research in ancient religious studies.

#3 Mapping Antiquity ‘À La Carte’

 The paper discusses and demonstrates an initiative by the Ancient World Mapping Center – one which applies GIS and web based technology to present an interactive, manipulable map of the ancient Mediterranean world intended primarily for students and their instructors. This tool outdistances traditional ‘static’ cartography insofar as it offers the capacity for anyone to generate maps that reflect highly specific criteria, thus providing a visually instructive presentation of geographical and cultural data, and the potential for stimulating discussion.

 Unlike in the case of printed maps, where by definition users cannot modify the scope and content determined by the mapmaker, the À La Carte tool offers each user unprecedented flexibility. Names can be marked in several different languages and transliterations, allowing a map to be tailored for a particular level and audience. Equally, coastlines, rivers, lakes, and elevations can all be individually selected and manipulated, as can the choice of settlements and other manmade features to be marked; for classroom testing purposes, an instructor can even create a physical-landscape-only map. There is the ability to crop out a frame, too, and to vary scale by zooming in or out; hence maps can be made both for geographically focused courses and for ‘bigger picture’ global studies.

 In the development of the À La Carte tool, use by students and instructors has been kept firmly in mind. Unlike many modern GIS systems, this is not a tool liable to overwhelm users with bewildering choices and configurations, nor does it require esoteric computer knowledge or exceptionally advanced equipment. Rather, it is a simple web application with a clean interface that can be accessed and used by any reasonably equipped computer device with an internet connection. The option to save a map as an image, or to export it as a .pdf file, allows each user to interact with their creation in whatever format they find the most serviceable; they can also readily incorporate it into a presentation, document, or even web page. Such convenience greatly facilitates the integration of cartography into students’ papers and theses, not to mention their instructors’ lectures.

 Moreover, as the paper illustrates, the À La Carte tool offers its physical and cultural data for download. The names of features and their co-ordinates are derived in part from cooperation with the Pleiades project <http://pleiades.stoa.org>, although the complexities frequently encountered in Pleiades (as appropriate in what is a developing research tool, not an instructional one) are eliminated. All this data, along with any map created with the tool, is free for non-commercial, personal, or academic use, consistent with the spirit of the open-source tools with which it has been built (mapserver, openlayers, postgis, and others).

 The À La Carte tool as discussed and demonstrated in the paper represents Phase One of an ongoing initiative. As will be explained in conclusion to the paper, the aim of Phase Two is to achieve a vast expansion of the fully searchable database of features based on the *Barrington Atlas*. In addition, Phase Two means to enable users to plot new locations or features, and to modify names or other data, directly in the application. Last but not least, creation of a user community following the wiki model is planned for Phase Two: this important enhancement will invite individuals at any level to propose changes, create fresh content, and share findings.