

That's My Bailiwick

Carol Ann Hughes and Paul Soderdahl

The University of Iowa Libraries provides a unique new scholarly publishing outlet for its faculty and graduate students. With the prevalence of personal faculty home pages and course web sites in just about every department on campus, it's not very hard for faculty to find a web server somewhere for storing an HTML file. And, with some work, faculty can often find some "techie" to help convert a document to HTML or to save a list of links.

What is rare, however, is a space on the web where faculty from all disciplines can find a home for their scholarly research interests, coupled with a computing environment and a knowledgeable staff to help them "follow their bliss" in digital form. The Information Arcade's new Bailiwick project does just that.

The Need for Something New

For a number of years, academic departments in the humanities and social sciences have been able to mount departmental information on the University of Iowa's central web server maintained by academic computing. More recently, two centrally administered course web servers have been made available to any faculty member or teaching assistant offering a credit course. Based on feedback from faculty and graduate students, however, the University Libraries learned that there was no place for a research idea or other academically oriented "pet

project" to be published on the web. Instead, faculty and students needed to bury these somewhere on a personal home page, often with a commercial Internet Service Provider at their own expense. Rising to address this need, the University Libraries sought to provide a well-respected, institutionally supported web server for just this sort of electronic publishing endeavor. What originally started as simply a "projects" directory on the library's general web server has now grown into the Bailiwick project.

Officially launched in March of 1998, Bailiwick provide a space on the web where academic passions can be realized as highly specialized and creative web sites. It is not simply a place for personal home pages, nor is it intended for course web sites or academic departmental information. It is not meant to serve as the new model for scholarly publishing in peer-reviewed journals. Rather, Bailiwick is designed to provide faculty, staff, and graduate students with web space where they can focus on a particular area of scholarly interest.

Most electronic publishing initiatives arise from an attempt to transfer existing models of print publishing to the digital environment. A small number of electronic scholarly journals are currently published on the University of Iowa campus. The University Libraries already provides a number of ways to support this medium, from archiving to cataloging to hosting journal sites, all as one

Carol Ann Hughes is head, Information, Research, and Instructional Services, and Paul Soderdahl is team leader, Libraries-Wide Info System and Multimedia, University of Iowa.

element of the University Libraries' new Scholarly Digital Resources Center.

Bailiwick, instead, provides a web space that allows authors to harness and exploit this new electronic medium, permitting new models of publishing with multimedia, hypertext, and the ability to incorporate anything in digital form. It is not intended to substitute or even compete with traditional scholarly publishing or electronic journal publishing. Rather, it provides an opportunity to engage in an entirely new medium for scholarly communication.

A History of Innovation

The heart of the Bailiwick Project within the library environment is the Information Arcade, an award-winning facility located in the University of Iowa's Main Library. Opened in 1992, the Information Arcade is a place that provides access to published electronic information resources coupled with state-of-the-art multimedia development workstations that allow faculty and students to digitize and manipulate source materials that are not already in electronic form. The facility also houses a fully networked electronic classroom, with 24 student workstations, where classes from throughout the University are held—some for the whole term and others for one or two class sessions.

In support of its unique service mission "to facilitate the integration of new technologies into teaching, learning, and research," the Information Arcade is well regarded as a place for innovation and risk-taking on the University of Iowa campus. It is a place where ideas can be fleshed out, a place that can respond to the real technology needs that faculty and students present. When the Information Arcade first opened, it was the only fully wired electronic classroom on campus, with a workstation at every student's desk. It was the only publicly accessible facility on campus where any faculty member or student could create digital video on a drop-in basis. It was the only computer facility on campus where anyone could anonymously access the Internet for free. All of these innovations are now mainstays on campus.

In 1998, the Information Arcade expanded its offerings with three new innovative web-based services:

- **The MOO Project.** This text-based virtual reality campus for the University of Iowa community is made possible through the magic of MOO, a piece of software that creates a networked environment on the Internet that is part e-mail, part chat-room, and part pro-

gramming interface. Known collectively as "The Mediatrix," this educational MOO currently houses two distinct academic projects. The Scholar's Web Project, devoted to the possibilities of digital communication in graduate education, makes its MOO home in "The Cave." The MOOniversity Project, which strives to provide a virtual learning environment that encourages collaboration across campuses and disciplines, is located in "The MOOniversity." Co-administered by D. Diane Davis, assistant professor of rhetoric in the Rhetoric Department and Michael Calvin McGee, a professor of rhetoric in the Communications Studies Department, The Mediatrix is available to any faculty member wishing to make use of it for teaching and research.

- **The Streaming Video Project.** With text-based virtual reality at one end of the spectrum, the Information Arcade simultaneously launched a new streaming video server, to meet the high-end multimedia needs for delivering real-time motion video and audio over the Internet. With a 50-user license to Real Networks' Real Server, the Information Arcade now provides students and faculty with the ability to serve digital movie files to several locations simultaneously. Because of the streaming quality of the video files, users do not need to wait for an entire file to download before playing it. Already used by Bob Boynton, Professor of Political Science, for his Multimedia Politics class, the streaming video server provides a delivery mechanism for the digital videos created by students and faculty at the Information Arcade's multimedia development stations.

- **The Bailiwick Project.** Linking these two new modes of communication, and providing an outlet for any number of other scholarly publishing projects, the Bailiwick server becomes a publishing medium for research projects that complements the University Libraries' TWIST (Teaching With Innovative Style and Technology) course web server. Space is available on this research web server to any University of Iowa faculty, staff, or graduate student publishing a scholarly academic web site that might be experimental in nature, or consist of a comprehensive examination of scholarly resources in some subject area, or perhaps explore a narrow, highly specialized topic.

Open by simple proposal, Bailiwick runs on a dedicated web server within the library and is supported by the University Libraries' web server infrastructure. Content providers retain editorial control and freedom, and have the ability to define their topic of interest, identify

the target audience, and design a customized web site. Each bailiwick is initially limited to 5MB of space, with the ability to petition for more based on specific needs for a given project. In addition to disk space, authors can turn to library staff at the Information Arcade for consultation on site design, graphics and layout, technical support, and training.

An individual bailiwick might:

- serve as a home page for artistic expression and collaboration between artists working in Iowa and other countries;
- be a showcase for digitally produced art that incorporates interactivity meant to be viewed on a computer screen;
- provide a natural home for hypertext experiments that explore new forms of multilineal argument or open-system documents that welcome, even depend on, links to other web sites to expand or counter those arguments;
- host a site not full of bells and whistles but simply a collection of narrowly focused pages of links to resources on a given topic;
- offer an electronic publishing medium for delivery of specialized bibliographies or digital reproductions of rare documents

There are currently 11 bailiwicks in production, with another eight more being developed. The authors of bailiwicks represent 13 different academic departments, including Communication Studies, Political Science, Athletics Administration, and Theatre Arts, and they range from teaching and research assistants to full professors.

Sample Bailiwicks

In general, the bailiwicks developed to date fall into one of four categories: (1) a collection of Internet links on a specialized topic of study, which could range from a small set of links on a particular page to an annotated Internet bibliography of thousands of links; (2) a hypertextual or multimedia essay or thesis that necessitates publishing in this medium; (3) a scholarly research project that is dynamic or updated with such frequency that print publishing would be ineffective, including, for example, ongoing findings from a research study; or (4) a collaborative project that makes use of a shared electronically accessible work space.

The Internet Bibliography

Karla Tonella, a graduate student in Mass Communica-

tion, has authored three different bailiwick sites that loosely fall into the category of Internet bibliography. As a former graduate assistant on the Information Arcade staff, Tonella was the one who first identified the need for this sort of publishing medium on campus and articulated the concept of the Bailiwick project. She was very much instrumental in bringing the server to fruition and quickly adopted it as a home for two comprehensive and award-winning sites of Internet resources in her areas of expertise: Women's Studies Online and Journalism and Mass Media. Both of these sites have been given widespread praise in those subject areas and have helped bring attention to the Bailiwick project, both on campus and around the country.

Her Border Crossings site also relies on Internet links as its core content, but it is experimental in its design and published in a way that is intended to "encourage the browsing reader to consider the areas of their postmodern world where traditional boundaries are being renegotiated and blurred." The site explores the notion of "border crossings" from a number of different perspectives and has received numerous citations in the mainstream press, including a sidebar in the *Chronicle of Higher Education*, inclusion in *Britannica Online's* catalog of recommended sites, and a feature article in *Search*, a monthly newsletter for advanced graduate students published out of Northeastern University in Boston.

The Multimedia Essay

The most popular use for Bailiwick thus far has been for publishing multimedia essays. The Information Arcade itself has been a proponent of the multimedia essay since it first opened in 1992, and most semester-long courses now held in the Information Arcade's electronic classroom incorporate some sort of multimedia term paper as part of the course requirements. The Information Arcade is one of the leaders on campus in the adoption of electronic theses and dissertations, working closely with the Graduate College and academic computing on a pilot project this semester. It is not surprising, then, that faculty and graduate students are turning to Bailiwick as a medium for publishing these sorts of materials.

Michael Calvin McGee, Professor of Communication Studies, has published his essay, "Suffix it to Say that Reality is at Issue," as a bailiwick. Jennifer Lawrence-Gentry, a Ph.D. candidate also in Communication Studies, created a comprehensive site on the work of Mikhail

Bakhtin which is now seen as one of the most complete online resources on Bakhtin. Patrick Muller, a teaching assistant in Preventive and Community Dentistry, developed a bailiwick essay entitled, "Complexity Studies: The Fluid Multifaceted Nature of Knowledge." The sites are all very different in design, target audience, and perhaps even scholarly value. Nonetheless, Bailiwick provides an ideal way for the University of Iowa to support this sort of experimental multimedia publishing outside the rubric of a class assignment for a multimedia term paper or a more traditional electronic scholarly publishing environment.

The Scholarly Research Project

Aside from the hypertextual and multimedia aspects of publishing on the web, the most unique advantage to the web for publishing scholarly research is the ability to maintain currency on a published project. The most well developed example of this is a bailiwick on Gender Equity in Sports, sponsored by the Women's Intercollegiate Athletics department. The site monitors the current state of affairs of gender equity in intercollegiate and interscholastic sport, and tracks Title IX compliance and pending Title IX litigation at colleges and universities. This resource has received significant national attention and acts as a research tool in and of itself that is published out of the University of Iowa Libraries and now available for students and scholars across the country.

Another example is the Dogon bailiwick, published by Chris Culy, Associate Professor of Linguistics. This dictionary of the Dogon language was compiled by Marcel Kervran, a member of the Pères Blancs, who lived in the town of Bandiagara, Mali for about 30 years. The dictionary has over 7,000 head words. A second expanded edition was published in 1993. Partially representing the varieties of Donno SO spoken in and around Bandiagara, the dictionary is being expanded from its earlier HyperCard format, and it may soon be ported into an SGML environment. It is an excellent example of an academic tool that would be difficult to create and deliver in paper form.

The Collaborative Work Space

Finally, the Bailiwick server provides a way for researchers at the University of Iowa to work collaboratively and in a public forum with colleagues at other institutions. This collaborative space can be used as a way to gather research data, or to allow others to comment on or con-

tribute to the development of a site. Barbara Bianchi, a graduate student in Counselor Education and an art therapist, has established a bailiwick for Global Connections, a set of online art and notes from travel journals. One component of the Global Connections site, called "Russia Revisited," includes materials from a number of contributing artists and students in Russia, who are jointly working together to create a collaborative artistic travel journal.

Policies Regarding Bailiwick Sites

Bailiwick sites run the gamut in subject area, nature, and scope. No attempt is made to centrally control the content of someone's site. After all, it is their bailiwick and they have complete editorial freedom. On the other hand, there are certain guidelines in place for establishing a bailiwick in order to maintain the focus as an innovative research web server.

First, the site is not intended to be a space for student class assignments. Short-term projects intended to meet course requirements can already be accommodated on one of the University's centrally administered course web servers. In addition, the site is not meant to be a place for a personal home page, or even a student's portfolio. This type of activity can be better accommodated on a student's personal account through academic computing or through a commercial Internet Service Provider. Sites that are commercial in nature are refused, as are sites that are completely divorced from the University's mission.

Content providers need to abide by the University's Acceptable Use Policy which identifies inappropriate uses of information technology resources on campus, such as hacking, forgery, inserting viruses, violating intellectual property rights and software licenses, interfering with others' access to information technology resources, or personal campaigning, lobbying, or commercial activities.

These modest restrictions notwithstanding, most proposals for bailiwicks have been approved. Inappropriate use of existing bailiwick web space has not yet been an issue.

Library Resources to Support the Project

The hallmark of the Information Arcade is its dual strength of providing a facility with state-of-the-art high-end computing equipment for electronic publishing and multimedia development combined with a large and di-

verse public services staff that can work closely with faculty and students, often one-on-one, to help them harness the technology and integrate it effectively into their teaching, learning, and research. The facility is staffed with six half-time graduate assistants selected from a variety of academic programs in an attempt to achieve a balance of technologists, information specialists, graphics artists, and instructional designers. The primary benefit of this unique staffing arrangement is that the Information Arcade is much more than just another computer or library lab. It is a place where faculty and students can find qualified consultants trained in a subject specialty with expertise in almost any area related to technology.

With this high-tech high-touch model, the Information Arcade is uniquely suited to host a project like Bailiwick. Within the walls of this one facility, the library provides support for every piece of a bailiwick development from inception to creation to delivery. With expert consultation, access to equipment, technical support, and web server space, the library becomes a one-stop place for this model of publishing scholarly research.

With respect to staffing, support includes consultation in any aspect of the Bailiwick project, including design issues, interface development, and training in software. Staff do not provide programming nor do they do any of the work in researching or assembling sites. At the point where a faculty member submits an application for a bailiwick, that faculty member is assigned an Information Arcade Consultant as a primary contact person for technical support, troubleshooting, basic interface design guidance, and referrals to other staff both within and without the Information Arcade. At present, the current level of staffing has been sufficient to accommodate this sort of assistance, which is not unlike the assistance provided to any patron who walks in the door.

As a computing facility, the Information Arcade provides public access to a host of multimedia development workstations for scanning images, slides, and text, and for digitizing video and audio. At these multimedia stations, a large suite of multimedia integration software and web publishing software is made available for public use. Staff at the public services desk have a strong background in multimedia development and web design and can provide some one-on-one training on a walk-in basis beyond technical support and troubleshooting. All of these hardware and software resources are available

to Bailiwick content providers, who can choose to do their development work in the Information Arcade or at their home or office.

Finally, since there is a close relationship between the Information Arcade and the University Libraries web, system administration and web server support is all handled in house as well. Thus, there are few artificial barriers imposed by the technology permitting content providers to focus on their creative expression and scholarly communication.

Therefore, with only minimal reallocation of existing resources, the University of Iowa Libraries has been able to launch the Bailiwick project and continue to grow it at a modest pace. One of the components most essential for its continued success, however, is the ability to scale up to meet the expected demand over the next several years. Technical infrastructure challenges are not overwhelming as yet. An analysis still needs to be made to determine how quickly creators are developing their sites, what are the implications for network delivery of these resources, what are reasonable projections for disk space, and who is using the resources.

Perhaps more importantly, though, adequate staffing will always remain a concern. Some faculty are desirous of working more closely with library staff consultants than they can now manage, and the consultants would certainly find it enriching to be more intimately involved with the development of each bailiwick site than time now permits. Marketing of the Bailiwick project has been discrete to say the least because of the limited staffing available. However, embedded in the collaboration inherent in bailiwicks is the potential for stronger involvement with faculty on obtaining grant funding to support the development of specific bailiwick sites.

This path is being tested in a project with two scholars – one from the University of Iowa and one from a university in Germany. With grant funding, these scholars would work with the library to create a new academic resource consisting of a searchable critical edition of an author's corpus coupled with thematic web sites containing bibliographies, a hypertext archive, and searchable commentaries. This bailiwick would then result in an unprecedented resource for scholars from many disciplines and present a model for the development of academic web sites that not only reflect serious study but actually nurture the creation of new, international scholarship. Other site proposals are also candidates for outside funding and can follow this lead.

A Model for Research Libraries

Bailiwick has been a way for the University of Iowa Libraries, and specifically the Information Arcade, to focus on the integration of technology, multimedia, and hypertext, in the context of scholarship and research publishing. To date, most of the bailiwick sites represent disciplines in the arts, humanities, and social sciences, which not only matches the overall clientele of the Information Arcade (given its location in the University of Iowa's Main Library), but also reflects the fact that these disciplines have been traditionally underfunded with respect to technology. Nevertheless, faculty in these disciplines have integrated some of the most creative applications of the technology in their everyday teaching and research, in part because of the existence of the

Information Arcade and the groundwork laid by the Libraries for the past several years.

With the Information Arcade's visibility on campus, and with similar resources and support in the Information Commons—a sister facility in the health sciences library—the University of Iowa Libraries is well regarded on campus as a leader in information technology, electronic publishing, and new media. Thus, faculty and students alike are accustomed to turning to the library for innovation in technology, and the Bailiwick project is a natural fit. As part of a palette of new technology services and resources provided by the library, Bailiwick is now integrated as one of the scholarly digital resources included in the Libraries' support of the teaching, learning, and research mission of the University of Iowa.