MUSIC IN THE ACADEMIC LIBRARY OF TOMORROW

By Diane Parr Walker

The University of Virginia (UVa) libraries have been engaged over the past couple of years in conversations and planning exercises focused around the theme "The Library of Tomorrow." This sounds more than a little futuristic, and indeed, we often feel that we are looking into a very murky crystal ball, trying to determine if we are seeing fingerposts pointing in the direction we should go or merely swirls of mist enticing us down the wrong path. When undertaking a similar exercise in the late 1960s, Robert S. Taylor, who was charged with the task of developing a prototype for what he called "the academic library in transition" at the then newly established Hampshire College in Massachusetts, wrote:

> There are moments . . . when we wish we did not have to use the word 'library.' The word carries too many connotations, which, partially truth and partially myth, may not let the library get to tomorrow, may inhibit its adaptability. The term exaggerates the differences between print and other media. It emphasizes the warehouse rather than the dynamic process. It focuses on the physical objects rather than on people.[1]

Over thirty years later, Taylor's frustrations still echo in the current issues facing music scholars, teachers, and librarians. How will libraries adapt for the future? Specifically, will music libraries need to adapt, and how? Music libraries have long encompassed multiple media, but will the focus in tomorrow's library still be on physical objects (or their digital replacements), or will its appropriate focus be on people? The March 2000 issue of *Notes* offers several excellent essays by visionary and esteemed music librarians on the challenges and concerns facing music librarians at the dawn of the twenty-first century. The musings offered here are an

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1. Robert S. Taylor, *The Making of a Library: The Academic Library in Transition* (New York: Becker and Hayes, 1972), 200.

attempt to examine some of those issues in the broader context of planning for the future of academic libraries.

INTRODUCTION

Because the word "music" carries different meanings for different audiences, before exploring these questions it might be useful to clarify what I mean by "music" and by "music in libraries." Twenty years ago, when a student came to the library asking for "the music for Beethoven's *Razumovsky Quartet,*" the first question the music librarian was likely to need to ask was whether the student wanted the score or the parts. Today, the more pertinent question is whether the student wants a recording or the printed notes. These days, a "music store" sells compact discs. Retail stores that sell music notation on paper for any other than commercially popular music are becoming increasingly scarce except in cities that also happen to house a music performance school. Furthermore, while a student studying performance in a music department or school understands music to imply common-practice or "classical" music, to a political science major music is popular culture.

For the purpose of discussing music in the academic library of tomorrow, this article will refer to two aspects of music as it is reflected in academic libraries. The first is music as an art form, and as represented in both recordings of performances and in printed transcriptions that those who are literate in musical notation and proficient in playing or singing from that notation can use to re-create that art form. The second is music as a discipline in the humanities, for which recordings as well as writings on the subject are important, but for which musical notation usually is not. This latter context includes all types of music from any culture or genre.

THE CHANGING NATURE OF ACADEMIC MUSIC COLLECTIONS AND THEIR AUDIENCE

Deanna Marcum has mused, "whereas information technology and computing professionals tend to think of digital resource development as technological innovation in support of electronic access, the question that arises more naturally from librarians is, access to what?" She points out that, unlike the books, journals, and other physical items that have historically been collected and cared for by libraries, "the Web is not under the care of librarians."[2] How will librarians capture and make

2. Deanna B. Marcum, "E-Content: Technology's Payload," *EDUCAUSE Review* 37 (March/April 2002): 10–11; electronic version at http://www.educause.edu/ir/library/pdf/erm0229.pdf (accessed 20 February 2003).

available to future generations the digital content now on the Web? I suspect probably about as well as libraries captured the massive amounts of sheet music produced during the nineteenth and twentieth centuries. How many of our libraries have piles of sheet music still inaccessible and unsorted in storage attics, basements, and remote facilities? And what percentage of the total amount of music published is represented by the accumulation of those piles? The digital information explosion is not the first technological development that has generated more content than libraries can—or perhaps should—manage. Whether we collect music and information about music or we point to it, collection development principles that music libraries have developed to hone the libraries of today will most likely also serve to customize individual libraries of tomorrow. But combining Marcum's question about what to give access to with Robert Taylor's implied wish to focus on people leads to a more significant question: for whom should the music library of tomorrow be built?

Music is pervasive in contemporary life: joggers run while listening to music playing through portable headphones, Muzak pervades stores and elevators, and it seems that music is always playing in our cars and homes. Nor is this just an American phenomenon. Among the first signs that the Taliban had been driven from power in Afghanistan early in 2002 were the sounds of previously forbidden music playing loudly over sound systems from treasured tapes that had been secretly stored for safekeeping during the repressive regime.

Indeed, music is so ingrained in human life that historically it has sometimes been overlooked as an important resource to save. Thomas Jefferson wrote both "I cannot live without books"[3] and "music . . . is the favorite passion of my soul."[4] Jefferson collected published music as avidly as he did books, sending lists of desiderata off to European dealers in an attempt to capture for himself as much writing about music and musical notation as he could. When the original collection of the nascent Library of Congress burned during the War of 1812, Jefferson, feeling both the responsibility to provide intellectual resources for the nation and a nagging need for cash, sold his library of some ten thousand books to the country. None of his music was included in the sale, however. It seems that he considered music an integral part of his life and household, but not a resource important for a library to save—certainly not necessary for the creation and operation of a government. Nor did his music collection go to the University of Virginia later when Jefferson established that institution's library.

3. Thomas Jefferson to Giovanni Fabbroni, Williamsburg, Virginia, 8 June 1778.
4. Jefferson to John Adams, Monticello, 1815.

Jefferson's oversight has been remedied by the development of music libraries as separate entities and distinct collections within libraries. Much of this development within academic institutions has been related to the academic study of music. Therefore, most intentional music collecting in the libraries of academic institutions has been based on "professional" and curricular needs, that is, focused on the classical tradition of trained musicians. Those piles of sheet music for popular songs that music libraries have stashed away were more often donations than intentional acquisitions. In academic music libraries, collecting has traditionally included primarily materials needed for teaching music, consisting of published scores for study and performance, sound recordings of performances of Western art music and jazz, and books and journals about those same musical traditions, with some representative musics of other cultures added in the past few decades. Primarily, it is the cognoscenti who can read the notation of music that have used these collections; that is, music in contemporary academic libraries has been collected principally for the musician and music scholar.

In many cases, though, today's libraries are not attending to a large potential clientele for music collections in their institutions. Although courses in history, American studies, and popular culture have long incorporated popular music, relatively few music libraries have collected to support these courses; most often, faculty outside of music departments have not relied on the libraries in their institutions to supply music for their classes, even if they have sought out music books and journals in the library. In fact, music has been relatively inaccessible or inconvenient for those outside the music department or school who might have been inclined to use it. Sound recordings need to be on hand for the music faculty, so history faculty have been discouraged from or perhaps not even allowed to borrow them to take to their classes. Printed music might as well be hieroglyphics to those who cannot read music notation, making the printed scores that are the meat of a musician's library unusable for other disciplines. The digital library of tomorrow, and the Internet of today, could offer opportunities to make music, both as sound and as a topic, much more accessible to other disciplines in the academy.

Exploring the interdisciplinary use of other resources might offer some useful models for music. For example, like sound recording collections for music, slide collections for art and architecture have been built principally as content for the classrooms of professors in those disciplines. Under the premise that "pictures . . . will be an important part of the digital library and learning environment" in the future, Pennsylvania

State University's Visual Image User Study (VIUS)[5] is examining the use of visual images in a wide variety of disciplines in the arts, humanities, and environmental studies. Although the VIUS project is ongoing and has reported only preliminary results,[6] the majority of the faculty and students who responded to the initial surveys indicate that they use digital or analog pictures for educational purposes. An underlying assumption behind the study is that if the right content can be made easily accessible, digital images will be even more widely useful for teaching and research in many disciplines.

I am not aware of any project to study systematically the use of music by other disciplines similar to the Penn State project on the use of visual images. A recent survey of students across all disciplines at the University of Virginia, however, reveals that although listening to music may be an integral aspect of their daily lives, the majority of students at the university are unaware of the musical sound recordings and printed music available in the university's music library, or do not find these resources of interest. On the other hand, an interactive online guitar chord dictionary developed by a member of the library's technology staff for the UVa library Web site regularly ranks as the most frequently used URL on the library Web server.[7] In other words, while the collection in the music library gets relatively little use by the student population at large, students at the institution as well as many, many people who are not affiliated with UVa are finding and using a particular Web-based music reference tool that is of interest to them. Interest in music may well be as high as the interest in pictures that the Penn State study is discovering, but libraries' interest in music would seem to be much narrower than that of their potential users.

Boundaries between academic disciplines are becoming increasingly fuzzy, even as deep expertise becomes increasingly focused. In order to serve faculty and students, academic libraries will be pressed to provide more effectively for both the specialist in a particular discipline and the experts from other disciplines who want to draw on resources that have not traditionally belonged to their fields of study. Music in the library of tomorrow will need to be pertinent to a much wider audience than the

5. Pennsylvania State University Visual Image User Study (VIUS), http://www.libraries.psu.edu/crsweb/vius/index.html (accessed 20 February 2003).

6. "The Pennsylvania State University Visual Image User Study Interim Report to the Andrew W. Mellon Foundation" (28 June 2002; corrections 2 December 2002), http://www.libraries.psu.edu/crsweb/vius/VIUSInterimReport.PDF (accessed 20 February 2003).

7. Perry Roland, *Online Guitar Chord Dictionary,* http://hatbox.lib.virginia.edu/text/gtrchord/index.html (accessed 20 February 2003).

community of musicians for which many music libraries have been built in the past. Courses in American studies, history, popular culture, and other areas should expect to be served as well as musicians are by the music collected by their libraries, and music libraries would do well to broaden their collecting scope to include the music needed by professors across their academic institutions. Digital technology can be exploited to make it easier for this wider clientele to access, explore, and use musical sound in ways similar to those envisioned for visual resources by the VIUS project.

DIGITIZATION

Nicholas Basbanes quotes Peter Lyman as saying, "digital libraries really serve the sciences, technology, medicine, business—those are the areas of knowledge that map to this form of communication pretty well. . . . When you choose digital libraries as a replacement for books and print, what you are doing is choosing the sciences over the humanities."[8] Is Lyman right? Is music as a discipline in the humanities disadvantaged when libraries spend money on digitization? Not necessarily.

Periodicals

Kerala Snyder has made an eloquent case for digital publication of music journals: "If every music journal were starting fresh today, without any past history, why would anyone want to publish a music journal on paper, which can offer musical sounds only to those readers who can conjure them up in their imaginations from printed music examples? . . . Paper cannot sing!"[9] Snyder describes the development of the *Journal of Seventeenth-Century Music* (JSCM), which was launched in 1995 as a digital publication and as the official journal of the Society for Seventeenth-Century Music.[10] The JSCM is available free and is produced at little expense. The society ensures preservation and protection of copyright by depositing a paper copy with the Library of Congress. But, best of all to Snyder's thinking, the journal takes advantage of digital sound and video technology to illustrate the musical examples in a form that can be understood by all, not simply those who are literate in musical notation. This example offers a strong case for the use of technology to help make music and its study accessible to a wide audience in a cost-effective way.

8. Nicholas A. Basbanes, *Patience & Fortitude: A Roving Chronicle of Book People, Book Places, and Book Culture* (New York: HarperCollins, 2001), 437.

9. Kerala J. Snyder, "Electronic Journals and the Future of Scholarly Communication: A Case Study," *Notes* 58, no. 1 (September 2001): 34.

10. *Journal of Seventeenth-Century Music,* http://merlyn.press.uiuc.edu/ (accessed 20 February 2003).

Electronic journals are still in a developmental stage that poses an array of problems for both libraries and their users. In most cases, "e-journals" are in reality electronic versions of publications originally conceived for print delivery, often packaged by vendors with other similarly duplicated journals. Although this process improves access, the electronic version is often only a minimally accurate representation of the physical article, and libraries have no assurance that the vendor will continue to provide a particular journal indefinitely. Snyder's model points to a more promising future. Music in the era of print journals has been disadvantaged by a mode of publication that cannot allow the reader to *hear* musical examples. Music could well be added to Lyman's areas of knowledge that map well to digital communication. Digital technology offers the community of music scholars, publishers, and librarians the opportunity to create articles, books, theses, and dissertations specifically for digital delivery rather than relying on third-party vendors to convert printed music publications into a deficient electronic form. The JSCM demonstrates how the community can take charge of its own destiny.

Audio

Leslie Gerber, owner of Parnassus Records, has commented, "Compact disc sellers and buyers alike face the problem of accessibility. Stores cannot display everything available and buyers cannot find what they want. Classical sales may amount to only 3 percent of the market, but consider Amazon.com, with an excellent search engine and very broad availability. Amazon has reported that classical music makes up 18 percent of music sales."[11] Gerber's remarks were prompted by Anthony Tommasini's analysis of the factors behind the apparent collapse of the classical recording industry. Tommasini notes that classical music recordings have always been a specialized market, and that matching products with interested buyers has always been a challenge. "Those troublemakers at Napster," Tommasini suggests, "may actually have been pointing the entire industry to the inevitable solution: the Internet."[12]

Indeed, music consumers have been demonstrating their preferences for the kind of convenience and flexibility the Internet enables as they flock to file-swapping and peer-to-peer services like Napster and its successors for unauthorized downloads of recorded music. In confirmation of these preferences, *Consumer Reports* listed Internet song sites as their

11. Leslie Gerber, letter to the editor, *New York Times,* 3 November 2001, Final, Arts and Leisure section, late edition.

12. Anthony Tommasini, "Classical Recording: Spinning into Oblivion?" *New York Times,* 21 October 2001.

first choice for "where to go for digital audio," even while cautioning that several such services are currently the subject of lawsuits for copyright infringement.[13] The *Consumer Reports* article does not even mention compact disc retailers among the recommended sources for music in digital formats. Further anecdotal confirmation of this trend was recently offered in a conversation with a colleague who happens to be the mother of a teenager. While describing his fickle music preferences, she commented that at least she no longer has to give her son money to buy CDs; he just logs onto his peer-to-peer network of choice, then burns the music he wants onto his own CDs. Leaving aside for the moment the questions of copyright and of how soon technology will make it feasible for an audio file larger than a two-minute song to travel through digital networks, libraries find the specter of such a potentially limitless wealth of content both exhilarating and daunting. Music librarians may well be going from herding the cats that were sheet music to trying to catch the wind that is online digital audio.

Dealing with ephemera is of course nothing new for music libraries. Digital audio content may be the ultimate ephemera, although music is not the only digital content that is vulnerable to the vicissitudes inherent to ephemera. The effects of the events of 11 September 2001 on online government information are illustrative. Significant amounts of information on nuclear power plants, water systems, and gas and oil pipelines have long been freely available through government Internet sites and regional government documents depository libraries in the United States. Nevertheless, some of this information suddenly disappeared in the weeks following September 11th as public policy changed literally overnight from the public's right to know to concern for national security.

Music is less likely than nuclear power plant information to be deemed a sudden threat to national security, but as the music industry begins to develop viable and authorized alternatives to peer-to-peer piracy, music librarians may be faced with a model familiar to the sciences. Access to recorded music may well be available only through subscriptions to vendor services rather than ownership of collections. In that event, as with online indexes and full-text services, libraries and their users will be at the mercy of vendors for what content is available and when. A particular batch of recordings online this week may be pulled by the distributor or moved to another service next week. If subscriptions to recorded music are the wave of the future, it is unrealistic to expect an industry motivated by financial profit and driven by consumer market

13. "Ripping & Burning: Where to Go for Digital Audio," *Consumer Reports,* February 2002, 60.

forces to guarantee perpetual access for the benefit of libraries and scholarship. Librarians and scholars will either have to accept such vagaries of content, or work to develop new methods for collecting and preserving. Stephen Wright addressed this dilemma in the March 2000 *Notes* issue: "In music libraries, we are in serious peril of replicating the embarrassment of full-text databases with the current tropism toward electronic distribution of digital audio. Faced with bewildering problems of storage space and licensing, music libraries will inevitably succumb to the temptation to lease collections of digitized audio from commercial enterprises. Undoubtedly this will reduce the stress of absorbing the new audio technology into our collections, but we may also relinquish control over the selection and cataloging of particular works and performances."[14] The model of full-text databases offers a valuable negative example for music libraries; the challenge will be to use what we know of its deficiencies to influence the development of better models.

Scores

The development of electronic production and delivery of notated music, while of tremendous potential for libraries, continues to lag behind text and audio. As the specialized province of musicians, this format is likely to be most in the control of musicians and librarians to explore and develop. Ever attempting to find solutions for preservation and access to those problematic piles of popular sheet music, many of the experiments by libraries have focused on this material, which has the added advantage of avoiding copyright complications because it is largely in the public domain. This is one area in which music libraries are actively serving primarily the interests of the wider audience beyond the music department. Victor Cardell notes in a recent review of Web sites for American sheet music that "Sheet music has a popular appeal to researchers in art, dance, theater, music, history, sociology, fashion, and other disciplines. . . . Savvy librarians across the country have taken advantage of emerging technologies by mounting Web versions of sheet music databases in recent years."[15] Yet, as Martin Jenkins's recent review of several sites offering notated music on the Internet illustrates, the principal technological challenge for the near term is the development of common and open standards for Web delivery of notated music.[16] The Open Archives Initiative (OAI) Protocol for Metadata Harvesting promises one way in which information about and links to online scores

14. H. Stephen Wright, "Technology," *Notes* 56, no. 3 (March 2000): 593.
15. Victor Cardell, "Digital Media Reviews," *Notes* 58, no. 4 (June 2002): 890.
16. Martin Jenkins, "Free (Mostly) Scores on the Web," *Notes* 59, no. 2 (December 2002): 403–7.

can be provided. In the OAI model, metadata is automatically "harvested" on a regular basis from participating repositories of digital objects and stored centrally, creating in effect a union catalog of online resources. This can then be used to build a service provider which offers searching capabilities across the entire database and linking back to the digital object at its home site.[17]

Copyright

Stephen Wright has aptly noted that "the specter of copyright hovers over every scenario of the electronic library of the future."[18] Digital technology offers the promise of better search engines to find what is available and easier distribution once we find it, but also the threat that as intellectual property and copyright laws attempt to protect commercial interests in the face of advancing technologies, libraries may be prohibited from collecting or even accessing digitized resources legally. National and international policies on intellectual property will have a profound effect on whether libraries *can* legally collect and preserve music in the future. If commercial interests are successful in locking down digital content, libraries will be prohibited from fulfilling their traditional mission to preserve and make these cultural artifacts available for the future. It is difficult to see the benefit to the interests of the public in the recent drives to extend copyright terms and to prohibit all copying for any purpose.

There are innumerable aspects to the ongoing public, legislative, and legal debates surrounding copyright and technology. This is not the place to go into them all,[19] but one intriguing question for librarians to contemplate as they work with publishers and library users in sorting through the issues is this: should something be legal, or is it ethical, simply because it is technologically possible? That question applies as much to file-swapping and copying technology as to human cloning. Is a file-sharing service like Napster ethical—and should it be legal—simply because it is technologically possible? Or should technological development be prohibited when it can enable illegal or unethical acts as well as legitimate use? One test of ethical action is whether it avoids doing

17. E-mail correspondence to Linda Solow Blotner from Stephen Davison dated 7 March 2003. Additional information about the OAI is available at http://www.openarchives.org (accessed 7 March 2003).

18. Wright, 595.

19. Among the Web sites tracking such debates are: Association of Research Libraries' copyright and intellectual property page, http://www.arl.org/info/frn/copy/copytoc.html; American Library Association Washington Office, http://www.ala.org/washoff/copyright.html; Center for Intellectual Property and Copyright in the Digital Environment of the University of Maryland University College, http://www.umuc.edu/odell/cip/cip.html; Electronic Frontier Foundation, http://www.eff.org/; and Digital Future Coalition, http://www2.ari.net/home/dfc/index.html (all accessed 20 February 2003).

harm. Can file swapping be proven to be harmful to commercial interests? Some have suggested that just the opposite may be the case. At least one analyst has cited data showing that in the months preceding the federal injunction on Napster, compact disc sales were higher than during the same period a year earlier, and that sales immediately began falling on the day of the federal order.[20] Was Napster hurting, or was it in reality perhaps helping, record industry sales?

Lawrence Lessig describes Napster as an "ah-ha" technology. Using it, he writes, "you [could] easily find what is almost impossible to locate . . . [and] . . . then hear what you want almost immediately."[21] He suggests "the extraordinary feature of Napster was not so much the ability to steal content as it was the range of content that Napster [made] available. The important fact is not that a user can get Madonna's latest songs for free; it is that one can *find* a recording of New Orleans jazz drummer Jason Marsalis's band playing 'There's a Thing Called Rhythm.' . . . A significant portion of the content served by Napster is music that is no longer sold by the labels. This mode of distribution—whatever copyright problems it has—gives the world access to a range of music that has not existed in the history of music production."[22]

SUMMARY

Lessig's view of the ideal world would allow for a Napster-type Internet service that would be the equivalent of a library for an avid reader, a world in which "the content of music becomes available for individuals to choose rather than available as disc jockeys choose."[23] In other words, Lessig's ideal future is a music library that has solved the collecting, access, and intellectual property issues posed by the Internet and digital technology to provide a wealth of musical content through his computer when and where he chooses. Ideally, this wealth of music will be equally rich for the musician/music scholar and for academic endeavor in any discipline as for the casual consumer. Lessig's vision is our challenge for the future. Developing that vision will require conversation and collaboration among librarians, scholars, teachers, publishers, and recording companies to recognize and exploit the opportunities digital technology offers.

20. Jeff Leeds, "Album Sales Test the Napster Effect: Music Retailers' Weak Numbers Contrast with Claims that Downloads Cut into CD Sales," *Los Angeles Times,* 20 June 2001.

21. Lawrence Lessig, *The Future of Ideas: The Fate of the Commons in a Connected World* (New York: Random House, 2001), 130.

22. Ibid., 131.

23. Ibid., 132.