

III. NARRATIVE

A. Significance

Statement of Purpose

In July of 2012, the University of California-Santa Barbara plans to launch an important fourth stage of its electronic English Broadside Ballad Archive (EBBA), <http://ebba.english.ucsb.edu>, and begin mounting online the 1,754 early printed ballads held at the National Library of Scotland (NLS), primarily consisting of the Crawford collection of 17th century mostly black-letter broadside ballads—many never previously catalogued. The NLS ballads will considerably expand and deepen EBBA's already significant database of difficult-to-access ballads printed in the 17th century—the heyday of the English broadside ballad.

The National Library of Scotland has granted UCSB unprecedented permission to add its early ballad holdings to EBBA. With generous funding from the NEH for 2010-12, we are currently archiving the Euing ballads at the University of Glasgow Library and the early printed ballads at the Huntington Library, Pasadena (together about 1,000 works). This project will be completed on schedule in the summer of 2012. The Euing and Huntington ballads, when added to EBBA's already digitized Roxburghe collection at the British Library (approximately 1,500 ballads) and Pepys collection at Magdalene College, Cambridge (over 1,800 ballads), allows EBBA to make publicly accessible in one site roughly 50% of the estimated 8,000 extant ballads printed in 17th century England. With the inclusion of the NLS ballads—primarily the Crawford collection of 1,466 ballads which rivals the Roxburghe in size—EBBA's holdings will increase to an impressive 75% of all extant 17th century English broadside ballads. As a result, users will not only be able to cross-search many collections but will have access to a significant majority of extant ballads, allowing them to confidently trace developments in formal features, variant editions, and clusterings of ballads over time. Following well-established EBBA standards, we will provide facsimile reproductions in varying sizes of collection album pages (in the case of the Crawford, such pages consist of large, loose sheets onto which the ballads have been pasted) as well as of the ballads themselves (offering a close approximation of how they looked before being trimmed and pasted onto the album pages); transcriptions of the difficult-to-read early modern print that preserve the original ballad ornament and formatting (providing easy readability without sacrificing aesthetic appreciation); recorded songs of all available tunes (allowing users a fuller sensory experience of the ballads); extensive cataloguing; TEI/XML encoding; MARC records; and introductory essays about early modern ballad culture and individual collections. We will also make a major upgrade to EBBA's search engine. Collaborating with WordHoard (<http://wordhoard.northwestern.edu/userman/whatiswordhoard.html>), we will create an index that accounts for word variants and semantics, and we will enhance the user interface to allow for more intuitive and refined searches. In the process, EBBA will freely provide scholars, students, and the general public with the opportunity of enjoying and understanding these multifaceted cultural artifacts in ways unavailable through traditional print media or other extant websites.

EBBA's goal of recreating not only the physical features but also the cultural experience of broadside ballads is crucial to a full appreciation of why they were so important in their time. Called "broadsides" because they were printed on one side of a single large sheet of paper (hence broad-side), these ballads represented a major new cultural phenomenon distinct from the oral ballad of tradition. They were multi-media artifacts. Printed in their heyday of the 17th century in black letter or gothic type, with multiple woodcuts and accompanying tunes, they were simultaneously text, art, and song. As cheap print—costing on average just a penny—broadside ballads were peddled in shops or on the streets likely by the millions and bought by all levels of society. They were the equivalent of today's newspapers or magazines, and like those popular media, they were a highly valued medium of mass communication.

But if millions of ballads were mass disseminated, almost as many were lost to posterity when they were pasted on walls or recycled as pie lining, pipe kindling, toilet paper, and the like. Ballad collectors thus engaged in an extremely important feat of preservation. The Earl of Crawford assembled his immense collection of 17th century ballads in the 19th century. Although arranged alphabetically by first line, the Crawford ballads, like many of EBBA's other collections, would readily fit into the eleven thematic categories by which Samuel Pepys grouped his own impressive collection. Such Pepysian categories reflect the ballad's expansive range of topics, extending from the serious, political, and religious, to the trifling, domestic, and profane. The Crawford collection thus importantly confirms the representativeness of these other collections—even those Roxburghe ballads printed in the early 18th century. In accordance with EBBA's mission to track the printed ballad through its rise and decline, we will also archive two small NLS volumes of late 17th and early 18th century ballads: the Rosebery volume (just 124 ballads) and another unnamed volume (of 164 ballads). The Rosebery consists of many unique ballads that often adopt Scottish perspectives. Still, both collections address the same wide variety of topics as the Crawford. Significantly absent from all three NLS collections, as from EBBA's Euing, Roxburghe, and Pepys collections, is the predominance of political ballads printed in white letter or roman type without illustrations or tune titles, which dominate the Huntington's later 17th century ballads. Though the NLS ballads are also mostly from the late 17th century (from 1660-89), they in large part continue the older "heyday" tradition of black letter print with woodcuts and tunes that voice multifarious topics. At the same time, the few NLS white-letter ballads experiment with a new white-letter ballad genre we also see in the late 17th century Huntington ballads—the elegy—which was a prominent form much earlier, in 16th century black-letter ballads, as evident in the Huntington's Britwell collection. As interestingly, the NLS ballads affirm the wide popularity of yet another late 17th century white-letter ballad format, which so far in EBBA has seemed mostly peculiar to Pepys: broadsides with musical scores printed on them. Finally, since the NLS will greatly expand the content of the EBBA archive to include 75% of extant 17th century ballads, they will expose the popularity of ballads around particular dates, events, and themes as well as more ballad variants. Adding the Crawford and other NLS ballads to EBBA, in sum, will open up a wide and illuminating window onto an otherwise limited view of 16th through 18th century culture.

Yet full access to these NLS collections is shockingly limited. Due to the fragility of the originals, the NLS naturally restricts access to the ballads and, even when access is allowed, travel to Edinburgh can be a challenge. But there are no alternatives. There is no printed facsimile or modern edition of the ballads. There is no extant microfilm of the originals in the standard pre-1800 microfilm series, Early English Books. Nor are there any digital reproductions in the major (if costly) online scholarly resource, Early English Books Online (EEBO). An image of a ballad from another institution which has the same title and printer information as an NLS ballad might sometimes be posted in EEBO, but none from the NLS. This is problematic on three fronts. Firstly, the EEBO user has no idea that the NLS also holds an edition of that ballad. Secondly, an NLS ballad with the same title and imprint would necessarily look different from the ballad shown because of variations in inking and the condition of the page. Thirdly, and most importantly, the NLS ballad might not even be what we would today call a "duplicate." Early modern printers not only regularly corrected and thus changed text during the same print-run, but they also commonly reissued a ballad with the same title and imprint but with significantly different text and even woodcuts. For instance, Pepys 5.312 is titled "The Languishing Young Man" and has the imprint "Printed for J. Deacon, at the Angel in Gilt-spur-street, without Newgate." Crawford 942 has the exact same title and imprint, but it is a significantly different version of the ballad. Indeed, it is arguably a different ballad: it is printed in black letter, whereas the Pepys is in white letter; it has two illustrations, whereas the Pepys has none; and it has a four-stanza answer to the young man from his lover "Maria," which is entirely missing from the Pepys ballad. Clearly one ballad image does not fit all. Ballads with identical titles and imprints can vary widely. EBBA is in open dialogue with EEBO—hoping in the future to create links to our open-access archive so as to freely provide images of all extant 17th century ballads—and Jo-Anne Hogan, Publisher at Proquest (owner of EEBO) as well as Aaron McCollough of EEBO-TCP (a project that transcribes EEBO texts), are both members of our Advisory Board. But the need for access to the

NLS ballads and to multiple versions of all ballads within an independent ballad website is high.

Most surprisingly, the NLS ballads have not even been fully catalogued by the online English Short Title Catalogue (ESTC), traditionally the gold-standard catalogue that scholars rely on to find extant works printed in England pre-1800. The ESTC shows no listings by NLS shelfmarks for the library's ballad collections. Indeed, many of the NLS ballads have not even been catalogued by their individual titles: for instance, only 607 titles of the 1,466 Crawford ballads can be located in the ESTC. Together with their absence from EEBO, this has led to the near disappearance of the NLS ballads from ballad scholarship. Dr. Brian Geiger of the ESTC, North America, has eagerly agreed to serve as consultant to our proposed fourth phase of EBBA, in order to ensure that the NLS and other EBBA ballads are fully catalogued in the ESTC and also linked to EBBA (see **Appendix 16**). But for the moment there exists only a bare-bones two-volume printed catalogue of the Crawford ballads made by the 26th Earl of Crawford in 1890, which is itself so rare that we had to obtain it by Interlibrary Loan. Of all the collections we have archived in EBBA, the Crawford and other NLS ballads may be in the most desperate need of archiving.

Eager to make its collections publicly accessible, the National Library of Scotland is keen to work with EBBA. Letters of commitment are attached from the National Librarian & Chief Executive of the NLS, Martyn Wade, as well as from the Chairman of the Balcarres Heritage Trust, Lord Balniel (a direct descendent of Lord Crawford), which owns the Crawford collection deposited with the NLS (**Appendix 16**). Both writers have seen a copy of the license we worked out with the Huntington library and are happy with it, so we do not face the potential for the lengthy contract negotiations we encountered with the British Library. As both letters indicate, the NLS and Balcarres Trust are together committed to free public access to the ballads. As the letter from Dr. Wade further states, the Library has pledged to deliver high-resolution color images on a cost-only-recovery basis and furthermore pledged cost share of curatorial time to the amount of £8,122. Dr. Brian Hillyard, the NLS Rare Book Collections Manager, has already spent many hours in helpful conversation with us, both via emails and a Skype conference call, and has provided the snapshot samples of the Crawford images offered as appendices in this proposal. We cannot imagine a more supportive collaborator for this important project, which will on so many fronts open up the appreciation of early modern ballads by scholars and the general public.

EBBA's archiving of the NLS ballads answers a pressing need for scholars of popular culture, literature, art, and music. As with its previous collections, EBBA will provide high-quality digital facsimiles of ballads in varying sizes and formats. As with the Roxburghe, Euing, and Huntington ballads, we will photograph all the NLS album pages as high-resolution digital color photographs rather than working from black-and-white microfilm, as we necessarily did with the Pepys ballads. We will thus provide users with excellent surrogates for the originals. The color images will allow users clearly to see where the yellowed ballad page ends and the differently shaded album page begins, and thus make out exactly how the broadsides have frayed and been trimmed over time. As with the Euing and Huntington ballads, we will also offer two manipulated viewings of the originals: "ballad facsimiles"—wherein we remove most of the backing paper to approximate the look of the ballads when they came off the press—and "facsimile transcriptions"—wherein we grayscale the ballad facsimiles and replace the early modern with modern text. Transcriptions are made according to EBBA rules that render the early modern font into easily readable modern type, but without sacrificing all the features, and thus the character, of the original language (see also "*Mounting the Ballad Images*"). Furthermore, even as they render the text more accessible for the modern reader, the facsimile transcriptions will preserve the ballads' formal features, especially the illustrations, so that viewers will not lose sight of the fact that ballads are multiply viewable as both texts and art. Advancing access to the ballads' multi-disciplinarity, EBBA will additionally provide recordings of sung versions of the ballads wherever a tune is found to be extant and not yet recorded (estimated at about 600 songs). The tunes will be researched and recorded under the direction of our experienced music specialist (see also "*Recordings*"). Through graduate coursework, essays will be offered on the NLS collections. Finally, the ballads will be extensively catalogued and digitally

represented in TEI/XML and MARC to ensure maximum searchability as well as the archive's longevity.

Since EBBA will reach significant mass with the addition of the NLS ballads, optimum searchability will be key. We thus plan a major upgrade of our full-text indexing and search architecture. Collaborating with WordHoard at Northwestern, <http://wordhoard.northwestern.edu/userman/whatiswordhoard.html>, we will create an index that accounts for all known variants of all words in all ballads. We will also implement the semantic enabled search engine Lucene. These two technologies will be integrated both with each other and with EBBA's current MySQL-based catalogue search. In addition, we will significantly enhance the user search and return interface. Our aim is to provide a more intuitive interface that allows users to perform more refined, boolean, and combined searches as well as to determine return order and weighting. These new technologies will together provide a truly state of the art search gateway to the archive (see "*Digital Technology*"). Already usage of EBBA is high and growing, from an average of 1,598 unique visitors per month in 2010 to 2,053 so far in 2011—an average increase of 455 visitors/month (see **Appendix 1**). Our logs show the growth of EBBA not only in numbers but also geography, with IP addresses from Romania, Italy, France, Indonesia, and China, among other countries. Moreover, the popularity of EBBA has spread amongst scholars to the general public. Academics regularly contact EBBA to thank us for making ballads accessible to them for research and teaching, and in recent months, EBBA has sparked animated exchanges in the popular news and entertainment websites *The Hairpin* and *The Awl*, www.thehairpin.com and www.theawl.com, respectively (see **Appendix 2**).

The Significance of an Expanded EBBA for the Study of Popular Culture

It is most fitting that the broadside ballads in EBBA have become the topic of internet blogs, as ballads were intended for a mass audience. The single most printed medium in the literary marketplace of London, they were hawked on the city's streets and sent into the provinces in the packs of peddlers by the hundreds of thousands, if not the millions (Tessa Watt, *Cheap Print*, 11). Indeed, one could not travel from point A to point B in London without hearing ballads sung on street corners or seeing them pasted up on posts and walls. Ballads thus touched all levels of society. Shakespeare, for one, cites ballads in every play he wrote. Still, ballads were decidedly aimed at and embraced by the "low." They were printed on the cheapest paper using recycled, worn woodcuts so as to be affordable to all but the very poorest of society. Indeed, they cost on average a mere penny. To increase their audience to include the semi-literate, well into the 17th century (when other texts were being issued in white letter or roman type), ballads were still being printed in black letter or gothic type, which was the print by which children learned to read. To increase their allure, ballads towards the end of the 16th and beginning of the 17th century became increasingly ornamental, with decorative lines and illustrations. People of the lower to middling sort would buy ballads to paste them up on their walls as ornaments. Finally, ballads of this period were sung to simple, well-known tunes (so well-known that just the tune title was printed), which made them even more accessible to the less educated. Examples of the "high" broadside ballad form are Pepys's "Anne Wallens Lamentation" (1616), shown as a ballad facsimile image (digitized from black-and-white microfilm) at <http://ebba.english.ucsb.edu/ballad/20053/image>, Roxburghe's "The little Barly-Corne" (c. 1618-58), shown as album facsimile image (made from a color digital photograph) at <http://ebba.english.ucsb.edu/ballad/30154/album>, and, in its later, half-folio size, Crawford's "Mars and Venus" (**Appendix 7a**; curator color snapshot of the album page lying in one of the collector's 9 boxes).

To add icing to the visual and aural cake of the ballad, the subject of ballads expanded at the beginning of the 17th century to include all kinds of topics of interest to all kinds of people. But the singular importance of such printed ballads began to wane toward the end of the 17th century, as reflected in their format. Printed ballads became smaller—often just slips of paper—the decorative black letter was increasingly displaced by simple white letter or roman print, and much of the ornament as well as tune titles disappeared. Furthermore, some ballad sheets began to print the first few bars of music, suggesting a lost common knowledge of old tunes and also increasing competition from newly fashionable songbooks.

Thus, after 1700 the ballad ceases to be as readily popular a form and its functions are overtaken by other media, such as songbooks, cheap engravings, newspapers, chapbooks (cheap-books of only a few pages), and finally romance novels. The subject of ballads also shifts, becoming less topical and more narrative, often in a sentimental or romantic mode—the type of ballad we know today in Country and Western songs or strange tales, such as the Headless Horseman.

Most of the NLS ballads, and the bulk of the Crawford, derive from the ballad’s “heyday” tradition: though half folio sheets, they are black-letter ballads with woodcut illustrations and tune titles. Like other ballads in this tradition, they address a smorgasbord of popular and often topical issues. “Turner’s Dish of Lentten Stuffe” (Crawford 841) celebrates the different “cries” by which sellers sold their wares on the streets—“Ripe cherry ripe . . . Pippins fine, or pears,” we hear—at the same time as the ballad critiques those sellers who cheat customers; The “Lamentable Ballad on the Earl of Essex’s Death” (Crawford 48) subtly criticizes Elizabeth I for the execution of the popular Earl (though safely does so in 1685, well after the Queen’s death); “The Good-Fellows Frolick” (Crawford 495) celebrates the homosocial world of the alehouse (and expresses anxiety over the female domestic space of the home); and “The Lady and the Blackamoor” (in no less than four editions, Crawford 668-671) narrates the gruesome rape of a Lord’s wife and the murder of both her and her children by the Lord’s black servant, thus voicing contemporary anxieties over both racialized Others and servants (the servant class was expanding in the period), and perhaps even the wish-fulfillment of oppressed servants for revenge against their often cruel masters. The NLS ballads add significantly to the treasure horde of EBBA’s black-letter ballads that voice and illustrate the full multiplicity of the popular culture of their time. They will thus increase EBBA’s ability to offer scholars and students of many disciplines the opportunity to gain fresh perspectives on the culture of all people and especially of the “masses” in early modern England. Furthermore, in providing accurate tunes and easy to read “facsimile transcriptions,” they will bring alive popular culture not only to scholars and students but to the general public, for whom ballads were originally marketed (and still entice, as seen in **Appendix 2**). The ballad speaks not just to the academic but to the man and woman on the street.

Perhaps most importantly for the study of popular culture, in adding many “duplicates” to EBBA, the NLS ballads will greatly aid in exposing trends of the times. At the most basic level, for instance, in raising EBBA’s number of “Lady and the Blackamoor” ballads to eleven, the four Crawford versions of the ballad suggest that its topic (or maybe just its compelling illustration or catchy tune) was particularly well liked in the period. Recognizing EBBA’s unique position to expose just such popularity, Dr. Christopher Marsh of Queen’s University, Belfast (author of *Music and Society in Early Modern England* [Cambridge, 2010]), approached us for help in creating an EBBA page or linked website dedicated to the “top ten” most popular ballads in the 17th century. With the addition of duplicate NLS ballads in EBBA, we look forward to being better able to situate such popularity in cross-period themes as well as more specific, temporal or spatial “hot spots.” For ballads, one might say, are the social twitter of their time or, as Pepys writes (quoting John Selden), they are lightweight social “straws” that, when cast up, show “which way the wind is.”

The Significance of an Expanded EBBA for the Study of English Literature

The addition of the Crawford and other NLS ballads to EBBA will make a major contribution to various approaches to literary studies. Foremost, they will further advance the current interest in the study of literary texts as cultural phenomena. Literary cultural criticism arose in the 1980s and, though initially focused on upper class or high culture, has more recently turned to cheap street literature, such as pamphlets about rogues or crafty vagrants. On ballads, there has been less activity, due to the difficulty of accessing materials. But important books have appeared by Tessa Watt, Joy Wiltenburg, Dianne Dugaw, and more recently—in large part aided by EBBA—by Steve Newman, Angela McShane, and Patricia Fumerton (with Anita Guerrini). We have also seen an EBBA-inspired surge of dissertations and articles on ballads by junior scholars, such as Eric Nebeker (UCSB), Kelly Feinstein-Johnson (UC-Santa Cruz),

and Theodore Barrow (CUNY). The expansion of EBBA will be an increasingly valuable research tool for these ballad-focused cultural critics but also for those more generally interested in popular culture, since ballads address just about every social topic. The huge number of ballads about love and marriage will prove especially important to feminist literary critics. The addition of multiple editions of ballads will also greatly benefit literary scholars working in the rapidly growing area of print history. Consider Pepys's "Mars and Venus," EBBA's only copy, <http://ebba.english.ucsb.edu/ballad/21248/image>, a ballad badly torn along its right side so that we have lost not only much of its fourth image and column of text but also much of its imprint. But the Crawford edition of the same ballad is nearly identical and intact (**Appendix 7a**). We can thus confidently replace the missing Pepys text (inserting it within square brackets) and recover one missing printer's name, "W. Thackera[y]." In other cases, we will see places where printers have changed text during the same print-run (proving that printing was a fluid not a "set" process, as Adrian Johns has argued) and also, more dramatically, how they often used the same titles and imprints for ballads with significantly different text and/or illustrations, as noted above. Since we are refining our search engine, users will be able more readily to find and compare such ballad variants.

Also now available will be a more complete study of the broadside ballad in relation to other literary genres that evolved alongside broadside ballads. For instance, many elegies appear in the Huntington's 16th century Britwell ballad collection. But the elegy is not prominent at all in the Pepys and Roxburghe collections. We at EBBA thus thought it had died out as a ballad genre—until it resurfaced with a vengeance in the late 17th century Huntington ballads we are currently archiving. The resurgence suggests a deliberate attempt to revive the earlier genre by some 17th century ballad printers, perhaps hoping to attract a more refined audience. An example is a ballad dated 1681, "**A Hew and Cry after Blood & Murther: Or An Elegie on the most barbarous Murther of Thomas Thinn, Esq.**" The body of this "Elegie" is printed in white letter with no ornament or named tune—typical of many late 17th century ballads—but the first part of its title is in black letter and clearly aims at mass appeal with its "Hew and Cry after Blood & Murther." The title thus hovers between high and low, refined elegy and gory tabloid. So is this "Elegie" turning away from or towards the traditional broadside ballad? It appears to be doing both. The Huntington's many elegies make us rethink the ballad genre as it continues to reinvent itself in the course of the 17th century, and the Crawford ballads aid that cause. Indeed, Crawford separately gathered 33 of his ballads under the category "Elegies and Epitaphs." All are in the later white-letter format, but many have funereal (black) borders (as in **Appendix 3**) that we see in early 16th century elegies (e.g. <http://ebba.english.ucsb.edu/ballad/32409/image>). Most interesting is Crawford 460, dated 1685-92, in the "heyday" black-letter tradition, with four illustrations and a named tune. The ballad's title almost calls out to the 1681 "Elegie" cited above to join its ballad ranks. The ballad is titled "**The London lasses hwe-and-Cry After Her Dearly Beloved Robin, Whom she unluckily lost last Saturday Night**" (**Appendix 4**). We expect other NLS ballads will make even more exciting contributions to the study of literary genres.

The Significance of an Expanded EBBA for the Study of Art History

Art historians have yet to explore fully the importance of early modern ballads to England's visual culture. To date, the popular art of the ballad has been overshadowed in academic inquiries by prints sold on the upper end of the market. And yet, the visual content of ballads, like their texts—which ranges from the pious to the obscene and the traditional to the topical—appealed to members of all classes and was very much a part of their lived appreciation of art. Ballads were not only read or sung but were passed from hand to hand as keepsakes and posted proudly on walls as decoration. Such circulation contributes to recent art historical inquiries into the social uses of printed matter in England. But few art historians have talked in any sustained way about ballad woodcuts or "impressions" (EBBA's term for the printed images, since we don't have the actual woodcuts; we have only the images or *impressions* made by them on a ballad sheet). A rare exception is Alexandra Franklin (at the Bodleian Library) who has an important article on the subject. There is a whole new area of art historical research waiting to be explored on ballad impressions, and even on black-letter print as an aesthetic artifact, which EBBA is encouraging by

making high quality digital images of the ballads available for examination. All but the microfilm-based Pepys ballads are photographed in color. Users can thus detect subtle nuances in ink colors and in the strokes made in the woodcut impressions. An expanded database of images also allows EBBA to build its corpus of “impression groups”—images linked by close similarity if not necessarily produced by the same block (Kelly Feinstein-Johnson’s dissertation, cited above, addresses this very topic).

It is important to be able to make impression associations, since similar impressions often reappear dozens of times on broadside ballads. For example, the tavern scene in “The little Barly-Corne” cited above, <http://ebba.english.ucsb.edu/ballad/30154/album>, is a favorite in ballads about drink. When multiple impressions are made from a tailor-made woodcut (or a retracing of the cut), meanings especially grow. Consider, for instance, three sets of associated impressions for “The Lady and the Blackamoor” which will be made available with the addition to EBBA of the Crawford ballads (**Appendix 5**). The first impression group (1a and 1b)—made by the same printers and likely from the same block—are very degraded, with many worm holes and breaks in the surrounding border. Note especially the break in each impression at the mid-left of the border as well as a very small, odd patch of inking just to the right of that break (and to the upper-right of the horse’s ears). This ink patch—which looks almost like a smudge in 1a—is more prominent in 1b, the Crawford impression, perhaps because the area of wood was less worn when 1b was made, or, more likely, because more detail shows in the color photograph. Whereas we might be inclined to ignore the “smudge” in 1a, 1b suggests that something might actually have been represented at that spot. The second impression group (2a and 2b) was probably made from a retracing of the woodcut that made the first impression group, before the cut deteriorated (the second group is later in date and, shows numerous very slight differences from the first, as in the drawing of the tree in the back left). Made likely from a copy of group 1’s cut, group 2 tells us what was probably worn or broken off the odd spot in the first cut: an image of the dead lord (who at the demand of the Moor in the poem cuts off his nose in a failed attempt to save his wife and remaining child). The third impression group is much later and clearly made from a new cut; yet it seems more inspired by the degraded group 1 versions than group 2 because the dead Lord remains missing (as does his horse—a tree grows in its place).

Impression 2b (Crawford 669)—made by related but not the exact same printers who made 2a—is thus especially important in that it “backs up” 2a as a prominent version of the woodcut that included an image of the dead Lord. At the same time, it also underscores three represented timelines (past—in the background, the Lord out hunting; present—in the foreground, the Lord begging for his family’s life; and future—in the middle ground, the de-nosed Lord lying dead), proving that ballad woodcuts, though crude, could be representationally very inventive. Perhaps as interesting—for its very uniqueness—is impression #4, Crawford 670. Though not dated, the ballad it illustrates is in white letter and likely from the 18th century, when blacks were becoming more prevalent in London society. As if declaring as much, the blackamoor dominates the impression, appearing as an inhuman giant holding the lady in one hand and likely her child in the other. The addition of all four Crawford impressions to EBBA’s impression groups for “The Lady and the Blackamoor,” in sum, opens up whole new possibilities for imagining this ballad.

The Crawford and other NLS ballads are full of such wonderfully “telling” impressions that talk to each other at the same time as they talk to us, and, with sophisticated means of associations, can be read together by art historians and even by more lowly appreciators of art (for whom they were intended).

The Significance of an Expanded EBBA for the Study of Music

The addition of Crawford and other NLS ballads to EBBA will further enhance EBBA’s function as an invaluable research tool for anyone studying the music of late 16th through 18th century England. Currently, one who wants to hear ballad texts and tunes together has to look up the ballad and its tune in separate sources, and then has to put the two together themselves. For most music scholars this is not a particularly difficult process, but it is laborious and time-consuming. Our music specialist estimates that it

takes about 2 1/2 hours to find the correct tune for a ballad, learn it, and record it. By providing on a single site both text and tune whenever it is extant (adding an estimated 600 NLS tunes to our current holdings of some 2,000 recordings), an expanded EBBA will save thousands of hours of research time for others and provide instant accessibility for use in research and the classroom.

Perhaps the greatest benefit for musicologists and ethnomusicologists is EBBA's usefulness as a teaching tool. Many students (not just those who study music) are far more comfortable conducting research on the internet than they are in working with actual book sources. But most websites that deal with English balladry are unreliable, often designed by hobbyists with the folk singer in mind rather than by experts for the researcher of broadside music. EBBA provides teachers with a site of accurate tunes that is dependable and consistent in quality to which they can send their students. And it allows those listening to the song to quickly change over to the "facsimile transcription" if any words or phrases are unclear.

By connecting the ballads with their tunes, EBBA will also encourage more students and scholars to use this extremely important collection as a resource for the greater understanding of the music and culture of the time. Listening to "The Lady's Fall" (or "In Peascod Time"), to which the gruesome story of "The Lady and the Blackamoor" was sung, <http://ebba.english.ucsb.edu/ballad/20261/recording>, we hear how tunes could function in counterpoint and relief to otherwise overwhelmingly brutal tales. This is especially important as the real-time tunes lengthen the experience of the ballad—an average ballad song lasts 8 to 12 minutes, unlike today's typical song of 3-4 minutes. The song slows down time and invites the audience to inhabit the experience of the ballad in a way neither the text nor the art alone can. Without the ballad tune, the ballad experience is literally diminished. Finally, as we find ballad songs increasingly towards the end of the 17th century rehearsing tunes from the theaters (and vice versa), we recognize the natural flow of music through every facet of contemporary culture. In some cases, we can see up front the theatrical style of broadside music—a fact of interest to both ethnomusicologists and drama specialists. The connection of late 17th century broadside ballads not only to the theater but also to songbooks is especially evident in those many Crawford ballads—no less than 68—with musical notation printed on them. One such ballad, "The Indifferent Lover" (Crawford 395), is extremely valuable even though badly torn because it comes from a John Dryden play with music composed by Henry Purcell: the ballad, we are told, is "To a Pleasant new Tune, Sung in the last new Comedy, called *Amphytri[on]*" (**Appendix 6**). As EBBA expands its holdings, students will be able to find thousands of such new and recurrent tunes (even if the title for the same tune changes, as it often did) within and between individual collections of ballads.

The Significance of an Expanded EBBA for the Study of Ballad Collectors/Owners

The addition of the NLS collections to EBBA will also offer a much broader perspective on ballad collecting in the 16th through the 19th centuries. Joining such 17th century collectors as Samuel Pepys, Robert Harley (who began the Roxburghe collection), Narcissus Luttrell (who favored white-letter political ballads), and William Fitch (the Ipswich postmaster who first assembled the Britwell collection), as well as the 18th century collectors who expanded upon Harley's collection (Major Thomas Pearson and, of course, the Duke of Roxburghe) as well as the 19th century collector who completed the Roxburghe collection but fell into relative obscurity, Benjamin Heywood Bright, we can now add two more named collectors: James Ludovic Lindsay, the 26th Earl of Crawford, and Archibald Philip Primrose, the 5th Earl of Rosebery. So many collectors raise many questions. Given the political bent of Narcissus Luttrell, do we see a difference in the kind of elegies he collects as compared with the relatively lowly Fitch or the very highly placed Crawford? Does Crawford's Scottish heritage, like that of Roxburghe, influence the kind of ballads he collected? Certainly, though Rosebery was born in London and traveled the world, his Scottish title and estates influenced not only his campaigning in Parliament as Foreign Secretary on behalf of Scottish affairs in the 1880s (before his brief stint as Prime Minister, 1894-95) but also his collecting ballads with a Scots tenor. All these collectors aimed at preserving specifically early broadside ballads, but one wonders to what extent, as with Rosebery, their contributions are as much

a reflection of their personal interests as of the period in which the ballads they collected were printed? Answering such questions will advance the study of ballad collecting and antiquarianism generally.

Particularly important is how the collecting practices of Crawford and Rosebery decenter the mammoth influence of Francis James Child on histories about ballad collecting and even definitions of what a ballad is. Child disparaged printed ballads, calling the Pepys and Roxburghe collections “veritable dunghills.” He had his own idea of what a “true” ballad was: it was a purely oral form that existed before the advent of print and reflected a communal society which passed on its traditions solely by word of mouth. Child combed the backways and highways of England and Scotland in search of this oral tradition and became a major influence in shaping today’s popular understanding of ballads as “folk songs.” But Child’s notion of the ballad was ironically a scholarly construction, and as Mary Ellen Brown has shown in Fumerton and Guerrini’s collection, *Ballads and Broadides in Britain, 1500-1800*, Child constructed his five-volume edition of “oral” ballads largely by relying on printed broadsides, and most recent ones at that. The fact is that orality and print have been intricately intertwined since the advent of print, and any idea of recovering a “pure” oral form can only be fantasy. Fascinatingly, Crawford and Rosebery, though actively collecting when Child was making such a strong stand in favor of “oral” ballads, looked instead precisely to the heyday of the printed ballad, recovering black-letter ornamental broadside ballads of the 17th century and earlier, if possible. They likely valued the fact that tune titles were printed on these ballads and that the ballads could thus be readily sung, but they as clearly valued the ballads’ decorative, curling black-letter print and many illustrations. Without collectors in the 19th century like Crawford and Rosebery, who rejected Child’s idea that printed ballads were “veritable dunghills,” an enormous record of early modern popular history would have been lost, indeed, to history’s dunghills.

Just as an expanded EBBA encourages us to think more about developments of the broadside ballad as a cultural, literary, artistic, and musical phenomenon as well as about ballad collecting and antiquarianism, so it prompts more work on other valuable collections of the time. EBBA’s long-term goal is to archive all 17th century broadside ballads (see “*Duration of the Project*” and “*Work Plan*”), thus making the printed ballad “heyday” fully and freely accessible to scholars, teachers, students, and the general public.

B. History, Scope, and Duration

The Early Modern Center, UCSB

An expanded EBBA will be amply supported intellectually, technically, and institutionally by the Early Modern Center (EMC), <http://emc.english.ucsb.edu>, of the English Department at the University of California–Santa Barbara. Founded in 2000 with funding from the College of Humanities and Social Sciences and the English Department at UCSB—and receiving in 2007 a \$600,000 endowment to ensure its longevity—the EMC sponsors colloquia, conferences, and courses around annual themes as well as collaborative research between faculty and students in English Literature and Culture, 1500-1800, and in related disciplines of early modern studies. In addition to a reference library, the Center houses ten computers, a data projector, a flatbed scanner, standard and over-sized printers (for printing large broadsides), and provides full access to EEBO, EEBO-TCP, and ECCO. Eight English Department faculty and fifteen in-residence English Department graduate students, as well as about a dozen undergraduates specializing in early modern English studies, make up its intellectual core. Emeritus and affiliated faculty as well as affiliated graduate students are also active in the Center’s programs, especially from Art History, History, and Music. Many are part of the large EBBA team that is over 175 people strong: see <http://ebba.english.ucsb.edu/page/team>. The EMC also draws on the rich resource of Transcriptions, a studio in the English Department devoted to the intersection between literature and technology founded by Alan Liu. In addition, the English Department has a full-time staff person (Brian Reynolds) who manages all our computer-related equipment. Thus supported, the EMC maintains a strong cyber presence. EBBA is its latest and largest project.

Initial Support and Development

With a modest UCSB Instructional Improvement Grant of \$5,000 for 2003-04, a seedling EMC ballad team began research into gaining permissions for EBBA and how best to structure the database for mounting ballad images and other relevant information. We consulted extensively with the staff at EEBO and EEBO-TCP as well as inquired into the procedures of the Blake Archive, a comparable enterprise which also involves both texts and images. In addition, we formed an Advisory Board, with which we further consulted, and sought out specialists within the UC system on digital archives, TEI/XML, and music historiography. After this intensive initial period of inquiry and consultation, we decided it was best not to work jointly with EEBO, mainly because of the protracted problems EEBO was experiencing in mounting ballads, and began negotiations directly with the Pepys Library for digitizing its holdings. In early June of 2003, we successfully obtained unprecedented permission rights from the Pepys Library to mount online their more than 1,800 ballads.

The EMC then worked hard to procure \$133,000 in UCSB and UC funding for 2004-06 to advance this first phase of EBBA, including a UC-Humanities Research Institute Grant which, together with cost-share from UCSB, provided us with \$20,000 for a two-day “Straws in the Wind” conference in 2006 featuring distinguished and new-to-the-field scholars working on broadside ballads. An edition (Ashgate 2010) including seventeen critical essays emerged from that conference, co-edited by Fumerton and Anita Guerrini (History, Oregon State University). In the face of depleted funds, we were awarded an NEH Reference Materials Grant for 2006-08 to complete our archiving of the Pepys ballads. The grant consisted of \$325,000 from the NEH and co-support of \$192,899 from UCSB.

In advance of starting this first NEH grant, we had already mounted online images of the Pepys ballads in two formats: the “uncropped Pepys page” (which included much of the wide, white border of the album page onto which the trimmed and often cut ballad was pasted, sometimes with Pepys’s hand-written page number visible in the upper corner) and the “ballad facsimile” (in which the album border is removed and the cut ballads are put back together to represent the way in which ballads were originally printed). Subsequently, we removed the “uncropped Pepys page” from the archive, as not scholarly useful, since fuller investigation into the microfilming done by the Pepys photographer revealed that the album sheets were unbound at the time of filming and also that the photographer did not always pull back far enough to capture the full album page. We hope in the future to be able to fund color photographing of the now-bound album books. For the present, EBBA offers two valuable black-and-white Pepys image views: “ballad facsimiles,” as described above, and “facsimile transcriptions” (wherein the original text of the facsimile is replaced with modern roman type for easy reading, but the original illustrations and aesthetic layout of the ballads are preserved). The archiving of the Pepys ballads, now complete, consists of over 1,800 ballads each archived with these two views—in adjustable sizes—together with an additional view purely of the “text transcription,” from which page the user can also click on a link to “View Raw XML,” and see the TEI/XML markup. Also completed are detailed citation entries for each ballad, both in regular and in MARC format (created in consultation with Henry Snyder, then Director of ESTC, North America); standardized keywording of the ballads; standardized cataloguing of all Pepys ballad impressions (“woodcuts”); recordings of all 1,200 extant tunes of the 1,800 ballads; simple and advanced search mechanisms; and background essays on ballad culture and on Pepys’s organizational categories.

When we heard the wonderful news that EBBA had been awarded a second NEH grant for 2008-10 to archive the British Library’s Roxburghe ballads, we delayed start on that grant by a summer so that we could tie off loose Pepys ends (for instance, identifying interleaved pages in his albums) and also ready our projected new EBBA website for inclusion of multiple archives. We were excited that the BL was receptive to color photography of the originals as color images allow one to see variations in the ballad ink and papers used, especially the difference in the color of the ballad sheet and album paper (so that the

line where the cropped ballad ends and the album page begins is clearly visible). But work on the new EBBA website was delayed due to the subsequent long and time-consuming negotiations with the BL over a mutually acceptable license to publish their color images online. Fortunately, we found additional funding from UCSB to cover the costs of the extensive hours spent in legal wrangling so as not to drain NEH funding away from the real work on the Roxburghe project, and—in a truly landmark achievement between a North American institution and the British Library—as of April 2009 we had a co-signed license between UC and the BL and thus a legal template for future archiving of BL collections. This co-signed license both satisfied the BL and fulfilled EBBA’s proposed work plan: the BL agreed to provide EBBA with color digital images at 600 ppi of the album pages of the Roxburghe collection, with the condition that EBBA would work from digitized microfilm for the manipulated views of the ballad images: the “ballad facsimiles” and “facsimile transcriptions.” The BL was concerned about significant “manipulation” of the color photos of its originals, so this was the best compromise we could achieve. EBBA secured additional funding for digitizing the microfilm and, working with Jo-Anne Hogan at Proquest, located the National Archive Publishing Company, which originally microfilmed the Roxburghe ballads for UMI (now Proquest). NAPC made 600 ppi digital images from its negatives. They arrived June 12, 2009.

Work on the Roxburghe ballads nevertheless took longer than expected due not only to the legal negotiations but to having to work with two rather than one set of images (the digital color images and the black-and-white microfilm). Also the British Library missed images in photographing its volumes (understandable given the over 1,500 ballads in the Roxburghe collection) and mis-shot others, which needed to be re-filmed. We are still waiting on 60 color images. Still, we have managed to complete all projected archiving of the Roxburghe ballads, except for cataloguing the woodcut impressions, and that will be completed by the end of the summer of 2011 with additional UCSB Academic Senate funding.

Also, with a Herculean push on all fronts, the new EBBA website is now complete (launched May-June 2010, which explains the slightly lower visitor stats for those months), <http://ebba.english.ucsb.edu>. The site contains much more data than the original EBBA website, including a history of the project, a full explanation of the different image views and cataloguing system, a bibliography, and background essays on EBBA’s various collections. Stahmer continues to update and fine-tune EBBA’s new website and search mechanisms, which is an ongoing process, and we hope to launch a major overhaul of the search engine and interface with new grant funding.

With our third NEH grant in hand for 2010-12, we had planned to continue archiving British Library ballads. But since submitting our proposal, the BL faced drastic budgetary cuts (the photography department alone lost four of its photographers as well as its Quality Assurance staff position) and expressed concern about whether it had the resources to proceed. Fearing lengthy delays of the kind we faced in phase two of our project, we submitted to the NEH that we archive instead the Euing ballads at the University of Glasgow and the early ballads at the Huntington Library, Pasadena, since many of those ballads were similar and some even collected by the same hand as those at the BL. Also both Glasgow and the Huntington were enthusiastic to collaborate with us. With NEH approval, we thus moved forward expeditiously, quickly agreeing on a simple contract and delivery specs for the images with both institutions. We have the added advantage that Glasgow and the Huntington agreed that EBBA could create facsimile transcriptions of the ballads by simply grayscaling the color digital images, instead of working from microfilm, which increases image quality as well as saves cost and time. We have to date already completed first-pass cataloguing, album facsimiles, and also ballad facsimiles for all the Euing and most of the Huntington ballads (a search in EBBA by “Euing” and “HEH” calls up all but a few of the images). We have also transcribed half of the Euing ballads and have completely recorded all the Euing ballad tunes (approximately 400). Indeed, we are well on track to the full archiving of the Glasgow and Huntington ballads, as proposed, by the summer of 2012, as well as to instantiating our proposed advanced visualizing techniques, such as the ability for users to map the use of black letter in ballads.

The EMC is a large ballad studio. Over 175 people have worked on EBBA since its inception in 2003, with new graduate and undergraduate students being trained quarterly, keeping the core number working at any time on the project at 20-25. We boast wide and deep experience in early broadside ballads unrivaled anywhere, and a proven track record. It is for this reason that the National Library of Scotland is eager to collaborate with us. The NLS has seen and accepted the Huntington contract as a template, so no legal problems threaten, and it has already slotted photography of its images into its 2012 work plan. It is also providing the images “at cost” and has further committed curatorial time as cost share to the project.

This next phase of EBBA, however, cannot go forward without NEH funding. The University of California is in financial crisis, as is the entire state. After three successive years of crippling budgetary cuts, the UC must in 2011-12 cut another 500 million from its budget (UCSB’s share is estimated at over 39 million). However—and this is an extraordinary show of support for EBBA—UCSB has pledged cost share toward the new grant in the sum of \$195,527. Also impressive, the University of Texas-Dallas, though itself hit hard financially this year, has re-pledged \$10,000 in faculty and graduate student support (in 2009 UTD hired as tenure-track faculty a key EBBA team member, Jessica Murphy, who now serves as UTD EBBA Project Manager), and the NLS has pledged cost share in curatorial work of £8,122. In sum, significant co-support for this new grant is there; but it will disappear without NEH funding.

Duration of the Project

Completion of adding the Crawford and other National Library of Scotland ballads to EBBA will take twenty-four months of work by a ballad team consisting of 11 graduate students working half-time during the summer months, together with 10 graduate students working part-time during the academic years. These graduate students will be led by myself and Eric Nebeker, Assistant Director of EBBA, as well as by Caroline Bennet, EBBA’s Music Specialist. Brian Geiger, Library Catalogue and ESTC expert and Revell Carr, ethnomusicology expert, will serve as consultants. In addition, Carl Stahmer, EBBA Associate Director and XML and imaging specialist, will continue to manage the image processing and XML-encoding of the ballads as well as upgrading EBBA’s full-text indexing and search architecture (collaborating with WordHoard to create an index that accounts for all known variants of all words in all ballads, implementing a semantic-enabled search engine, and enhancing the user interface to allow for more refined, boolean, and combined searches as well as for determining return order and weighting). The number of ballads we propose to catalogue—over 1,700—may seem ambitious, but we are confident that by the time of the grant, we will have not only the expertise but also a sophisticated infrastructure in place to expedite the process as well as a collaborating institution intent on facilitating our efforts. Similarly, the work by Stahmer on enhancing our search architecture will be greatly expedited by collaboration with the WordHoard project. For a fuller schedule of work, please see Section D, Work Plan.

Upon the complete archiving of the NLS ballads specified for this grant, we will have reached the 75% mark in EBBA’s archival goal. We wish then to move to include in EBBA the remaining, in many cases small but still important, collections of difficult-to-access black-letter broadside ballads. These include the Halliwell-Phillips collection at Chetham Library, Manchester; ballads held by the Society of Antiquarians, London; another set of Britwell ballads at the Chapin Library, Williams College; and the many small collections (such as the Bute ballads) at the Houghton Library, Harvard.

C. Methodology and Standards

Mounting the Ballad Images

From the NLS’s 600 ppi color digital TIFF images, EBBA will create JPEGs of “album facsimiles,” “ballad facsimiles,” and “facsimile transcriptions.” The album facsimiles will reflect the ballad as it

appears assembled in the collection, showing the loose backing paper onto which each ballad is pasted in the case of the Crawford collection and any album border and binding in the other two small NLS volumes (including the Rosebery). The ballad facsimile will crop out most of the backing paper so that it can be seen as it might have appeared when originally printed. Finally, the facsimile transcriptions transform the color images to grayscale and remove the original print, replacing it with modern type so that users can easily read the ballads without sacrificing understanding of the relationships between the illustrations and the texts (the three views can be seen for Crawford's "Mars and Venus" in **Appendix 7a-7c2**). By toggling between all three image views, a user gains appreciation of the way the ballads were collected over time (via the album facsimile), of how they emerged from the printing press in their own time (via the ballad facsimile), and of how a literate contemporary might have read the ballad—that is, with the same ease we read modern print—while also admiring its ornament (via the facsimile transcription). Finally the ballad transcription is viewable as "text transcription" (from which one can link to the "raw xml") and integrated into the database to enable full text searching of the ballads.

Cataloguing the Ballads

As with the Pepys, Roxburghe, Euing, and Huntington Library ballads, the new additions to EBBA will be catalogued using the ESTC as our starting point, whenever an entry is available. In addition we will consult Crawford's two volume *Catalogue of a Collection of English Ballads of the XVIIth and XVIIIth Centuries*. However, in keeping with careful decisions made in developing EBBA, we will add important information that supplements current MARC records. The following aspects of each ballad will thus also be catalogued: "refrain"; "imprint"; "license"; "page"; "condition"; "ornament"; "number of woodcuts"; "location"; "black letter"; and "keywords" (via a check-box list to ensure consistency and transparency of the keywording system, though additional keywords can also be added by the cataloguer should the need arise). Our cataloguing retains original spellings for titles, first lines, and refrains. We modify the "long s" or "l" but maintain vv for w, and i for j. However, we also catalog titles with modern spelling so that a user may search for "frollic" or "frollic" and find the ballads they are interested in, no matter which spelling is used. (Once we have implemented variant-spelling searches through WordHoard, this step will no longer be necessary.) This cataloguing system ensures granularity for the XML metadata that will accompany each ballad. For a sample citation result, see **Appendix 8**. Tunes are additionally catalogued and separately searchable by imprint, tune title (in original and modern spellings), and standard tune title (the title assigned to variant names of the same tune); for a sample tune result, see **Appendix 9**. Woodcut impressions are separately catalogued and searchable by keywords (via a checkbox list) and are treated like independent objects that can be associated with each other and with multiple ballads. We are in the process of building the woodcut impressions user interface under our current grant workplan.

Essays on Ballad Culture & Printing and on Specific Collections

The essays on ballad "Culture & Printing" (on the new EBBA website under "Resources") are the product of graduate courses taught by Fumerton. They were written and revised by graduate students under Fumerton's direction and cover such topics as ballad circulation, papermaking, sheet sizes, black-letter print, woodcuts, music, and ballad measure as well as the broadside ballad heyday and social function. Each essay is meant to familiarize the reader with issues surrounding the cultural production and appreciation of ballads in early modern England (see <http://ebba.english.ucsb.edu/page/ballad-culture>). Also already online in EBBA are extensive essays on the Pepys collection, <http://ebba.english.ucsb.edu/page/pepys>, as well as introductions to the Roxburghe collection, <http://ebba.english.ucsb.edu/page/roxburghe>, and to the Euing and Huntington ballads, <http://ebba.english.ucsb.edu/page/euing> and <http://ebba.english.ucsb.edu/page/huntington>. Once the Crawford ballads are archived, more informative essays will be created in graduate courses taught both at UCSB (by Fumerton and Nebeker) and at UTD (by Murphy).

Ballad Transcriptions

The objective of EBBA is to provide four-pronged textual access to the Crawford ballads: via album facsimiles, ballad facsimile reconstructions, facsimile transcriptions, and text transcriptions/XML encodings. By “facsimile transcriptions,” we mean facsimile reproductions of all the ornament of the ballads (pictures and border decoration) as arranged on the original broadsheet, but with a conversion of the older (usually black-letter) font into modern roman type (see **Appendix 7c1-7c2**). Thus, in viewing a facsimile transcription, users will get a very good sense of what the ballad originally looked like while at the same time being able to read the text with ease. A readable print-out of the ballads will also be producible for inclusion in class Readers. Since most early ballads are in thick black letter or gothic font, and since browning of the cheap paper and blotched or faded print is common, the texts are very difficult, at times, impossible, to read. This is especially the case for modern readers unfamiliar with the peculiarities of early modern type. For instance, in black letter and even in most early modern white letter (or “roman” font) an “s” is often printed as “f,” which can easily be confused with an “F” or a “t”; “sitting” or “selling” might thus be mistaken for “fitting” or “telling,” leading to mis-readings of the ballad’s meaning. Making the decision of just how much to “modernize” the original text was difficult and time-consuming. We consulted other modern editions of early broadside ballads, such as Rollins’s *Pepysian Garland* and Ebsworth’s *Bagford Ballads*, and concluded that they were often too free in altering the punctuation and spelling of the originals, or in not indicating when words were being guessed at or reconstructed from another edition of the ballad. In the end, we decided that it was important to preserve most of the original spelling of the ballad, so as to capture a “feel” of the original text, while at the same time converting to modern print the features of the original type that impede readability for the non expert. After extensive discussion by members of the ballad team, we adopted a set of rules for transcribing the original text to modern font (see <http://ebba.english.ucsb.edu/page/transcriptions>).

Accuracy and the Search for Errors

Transcription is simultaneously a simple and difficult process. Even when an area of print is not smeared or faded, the transcriber has a tendency to “self-correct” the original spelling by fully modernizing it: e.g., by typing out “foole” as “fool,” thus psychologically blocking out the final “e” in the original. In addition, hard-to-read areas of text often cannot be deciphered without retracing one’s reading and contextualizing the passage. Some words or phrases cannot be reconstructed without checking the passage against other online editions and cataloguing of the ballad, if they exist, via EEBO and the ESTC. Sometimes modern printed transcriptions, if available, can also be helpful, though they must be consulted with suspicion. No matter how well the challenges are tackled by a transcriber, mistakes are often made because the act of transcribing is detail work. To ensure the highest level of accuracy, we use the transcription industry practice of “double keying.” Each ballad will be independently transcribed by two people, and the transcriptions will then be compared using Microsoft Word’s Merge Documents feature. This technique has proven to reduce checking time while at the same time increasing accuracy.

Recordings

In performing the ballads, we will employ the same standards established for the Pepys, Roxburghe, Euing, and Huntington collections. We have carefully considered a number of factors that impact the interpretation of the ballad as song. It is impossible for us to know exactly how ballads were sung during the 16th through the 18th centuries. What we do know about the vocal timbre and inflection of British ballad singing, as it has survived in contemporary tradition, comes from field recordings made in the mid 20th century. While these recordings inform our vocal production, we want to avoid imitation, especially in regards to accent, making pronunciation choices sometimes difficult. While we do not attempt to imitate English accents, we find that certain rhyme schemes and scansion work better when we adopt archaic speech patterns. We have chosen to use a comfortable, “natural” speaking tone, tending towards

clear articulation, with minimal ornamentation and vibrato, so as to not obscure the basic melody or text. In some cases we use conventional ornaments when we feel they would enhance the effect of the lyrics. We have also decided to record most of the ballads *a cappella*, for several reasons. Our primary purpose is to help people connect the ballad with the tune. A solo voice gives the most unadorned version of the melody, so as to clearly illustrate the connection between words and music. The ballad tradition is a singer's tradition, and we want to highlight the art of unaccompanied balladry. As part of that oral performance, you will sometimes notice slight variations in what the singer sings and the words on the page; this is a natural part of oral performance that we embrace rather than try to correct.

There are only a handful of works on the tunes of broadsides, starting with William Chappell's *Popular Music of the Olden Times*, which laid the foundation upon which subsequent collections were built. Today, however, the most comprehensive and well-researched work is still Claude Simpson's *The British Broadside Ballad and its Music* (1966), which provides transcriptions of unadorned melodies, painstakingly researched and reconstructed, combined with detailed references to the historical sources of the tunes. The goal of EBBA is to provide sound recordings of every NLS ballad for which there is a known tune—in the neighborhood of 900 ballads.

Of these estimated 900 ballads, we will likely only record about 600, since our policy is in most cases not to re-record a ballad if a recording of a duplicate of the ballad already exists in the EBBA archive. We use the rough rule of thumb that a ballad text which is 80% similar to another ballad text is, for the purposes of the tune, a duplicate. In these cases, we link to the already recorded ballad. But if no recording exists, or if there are significant variations in the way the tune could be sung beyond what have already been recorded (Packington's Pound, for instance, has several known versions), the ballad tune is recorded. Tunes are sung by graduate and undergraduate students who have been trained in singing as well as in ethnomusicology. UCSB provides EBBA with a state-of-the-art recording studio and staff support; the songs are thus recorded to the highest recording standards.

Digital Technology

The technical component of EBBA is currently being managed by Eric Nebeker, a recent Ph.D. of UCSB, lecturer in the English Department, and Assistant Director of EBBA. Nebeker has expertise both in database design and maintenance and in early modern literature and culture. The information architecture is designed by Carl Stahmer, Associate Director of EBBA and Web/database/XML program specialist. Nebeker and Stahmer work in consultation with Alan Liu, Director of the UCSB Transliterations Project, Webmaster of Voice of the Shuttle, and professor of literature and technology, as well as with other members of the EBBA Advisory Board, such as Elaine McCracken, Serials & Electronic Resources Librarian, Davidson Library, UCSB.

Information Architecture

The information architecture for this project builds upon that developed for the NEH funded Euing and Huntington initiatives. It utilizes a four-pronged Image/Recording/Database (SQL)/XML backbone to ensure the scholarly value of the collection, a web-based user interface, and a webservice that allows interchangeability of resources across users and platforms. The archive proper is comprised of a collection of high-resolution images of each ballad, sound recordings of associated tunes, a database catalogue, and corresponding XML files of holdings that include both formal markup of texts and human and machine-readable metadata. Access to the archive is provided in both human and machine readable formats. An advanced web gateway allows users to search, browse, and view archive holdings. Ballad facsimiles are delivered via I-Size, a custom JSP application developed by Stahmer specifically for EBBA. I-Size eliminates the need to produce multiple versions of a single image in order to deliver the image to users in the various sizes typically required by a web application—thumbnail, screen-shot, print-

resolution, etc.—by creating digital images of various sizes on-the-fly based on user request parameters. I-Size also automatically inserts relevant metadata, including licensing and terms of use data as well as cataloguing information directly into delivered JPEG files in the form of XMP data. Additionally, raw TEI/XML and RDF/XML as well as MARC records for all entries provide web-service/object exchange capabilities. TEI/XML files are generated using the X-Ballad application, created by Stahmer specifically for EBBA as part of EBBA’s earlier rounds of NEH funding. Now in its 3.0 version, X-Ballad allows editors to generate TEI/XML for ballads by identifying textual units using a simple point-and-click interface. The application then generates TEI/XML for the ballad. With X-Ballad, textual editors thus need not have direct knowledge of TEI or XML. New funding will allow us to enhance existing functionalities and add new capabilities at both the human and machine readable levels as well as to augment EBBA’s production infrastructure, specifically regarding searches.

Search and Index: “Miner”

Because EBBA's holdings already include over 50% of all extant broadside ballads from the period, and with the addition of the NLS ballads will include 75% of them, the ability for users to perform simple, semantic, and robust searches on the archive is essential. The thrust of EBBA's technology development efforts for this phase of work will be a major upgrade of EBBA's full-text indexing and search architecture. EBBA currently utilizes MySQL's native text indexing and query engine to conduct all text-based searches performed on the archive. The engine is well suited for handling EBBA's extensive collection of cataloguing metadata; however, it is limited in its ability to deliver the most relevant and accurate ballad search returns possible for two primary reasons. First, MySQL's native text indexing and querying is not semantic by nature, considering neither context nor partial or near matches, and it provides no mechanism for assigning relevance to returned results. Second, the engine has no capacity for dealing with variant spellings, which is of particular importance to an archive such as EBBA, which collects objects from an historical period when orthography in general and spelling specifically was far from regularized. Using MySQL's indexing, for example, a user searching for “love” would find ballads containing the words “love,” “loves,” and “loveth,” but not “loving,” an obviously relevant omission. Nor would they find the orthographical variant “loue,” which was common in the day. In order to overcome these difficulties, EBBA will develop and implement a completely new indexing and searching architecture that involves integrating parallel employments of an enhanced MySQL indexing structure and a full-text indexing and search engine. These twin technologies will be capable of providing advanced semantic searching of full-text content. MySQL's native search and indexing will still be used to provide access to EBBA's extensive metadata cataloguing; however, as part of this restructuring, we will collaborate with the WordHoard project at Northwestern University (<http://wordhoard.northwestern.edu/userman/whatiswordhoard.html>) in order to create an additional, full-text index that accounts for all known variants of all words in all ballads (see **Appendix 10**). We will then use this index to create variant masters of each ballad that will be indexed for searching using Lucene (<http://lucene.apache.org/java/docs/index.html>), a highly robust, open-source, semantic search index and querying engine. When a user conducts a search from the EBBA website, the query will be executed in MySQL against all cataloguing metadata and then the query string will be normalized on-the-fly using the WordHoard index and the normalized query will be executed against the Lucene index. The returned results will then be ranked for relevance by checking both exact matches to the original query string and Lucene's native relevance engine (**Appendix 11**). The end result of this architecture will be a system that allows users to perform highly refined searches of the catalogue that work across variant spellings, and to receive the results of these searches in a relevance-ordered list.

Human Web Gateway: “Screenside”

EBBA’s web interface currently provides advanced search, browse, and display capabilities, allowing users to restrict searching and browsing on any combination of EBBA’s metadata categories and to view

results in a variety of forms, including the various images that EBBA houses for each ballad, raw TEI/XML, text transcriptions, etc. Under this grant, we will modify the search gateway to provide the user with more flexibility both in constructing search queries and viewing results. We will introduce a new “Query Builder” interface as a means of allowing users to easily build complex, boolean queries of the archive. Using this system, a user would, for example, be able to search for all ballads with a title containing the word “king” but not the word “queen” and a publication date after 1650 but before 1700. This functionality will be provided via a simple point-and-click interface that will allow users to add and remove conditions and sub-conditions to their query (as in **Appendix 12**). Users will also be able to define the order of returned results both at the time of query submission and directly from the search return page (**Appendix 13**).

Preparation and Digitizing of Ballad Images

The ballads will be made available by the NLS photography department (in consultation with NLS curators) in 600 ppi color TIFF format. Although these ballads are simple works artistically, there are gradations in the tone of the ink and paper and even subtle shadings of gray that can be enhanced via color photography. In addition, the act of trimming and sometimes dividing ballads to insert them into albums becomes much more apparent when looking at a color photograph.

The raw TIFF files produced by the NLS will be processed by EBBA’s technical team and turned into JPEGs for final web deliverability. These will be saved as album facsimiles and ballad facsimiles. These TIFF files will also be converted to grayscale and turned into JPEGs saved as facsimile transcriptions. The JPEG album pages will look very much like the TIFF files delivered by the NLS photographer. For the ballad facsimiles, however, we will use Adobe Photoshop to trim away any excess border beyond the ballad sheets themselves in order to recreate the ballad as it looked when it came off the press. Finally, to create the facsimile transcriptions, or modern type images, an image team has been trained to use Adobe Photoshop to cut out the early modern text of each facsimile and replace it with the appropriate transcribed text. The team follows line breaks and text size convention in the original as closely as possible so that the resulting facsimile transcription resembles the layout of the original ballad. All illustrations adorning the ballad are left untouched, thereby creating a version of the ballad that is easily read, even by those untutored in earlier printing styles, without losing the ballad’s aesthetic impact.

Storage, Maintenance, and Protection of Data

Previous grant funding has allowed the EBBA project to upgrade its server infrastructure. EBBA is now housed on an 8-core high performance server that serves not only the website in a linux-apache-MySQL-php (LAMP) virtualized environment but also all file server and development server needs (via virtualization) for the project. All project data is backed up nightly to disk and weekly to tape that is then stored offsite. The physical server, all virtualized operating system environments, local network, and backups are all managed by the UCSB English Department Systems and Network Administrator, Brian Reynolds. In addition, UCSB’s Davidson Library, a member of the Association of Research Libraries, has committed to using its digital infrastructure and expertise to sustain the ballad archive over the long term (see UCSB Library letter of commitment in **Appendix 16**). The Davidson Library is the site of one of the original NSF-funded digital library projects, the Alexandria Digital Library, and as an outgrowth of that work, the library now supports through its regular budget over 40 servers and 5 terabytes of digital text and images. Library technical staff have extensive experience with metadata ingest, persistent archivability, multiple digital object formats, and the application of relevant national standards. The library has three levels of frequently scheduled on- and off-site digital back-up, and is also an active partner in the networking and content management of UC’s collaborative California Digital Library.

D. Work Plan

The plan of work schedule listed below is based on EBBA's extensive experience to date with cataloguing ballads; transcribing them; creating facsimile transcriptions; finding authentic tunes, learning those tunes, and recording them. We have determined that it will take on average 30 minutes per ballad to fill out the citation information (which will be facilitated by previous research on the dates and names of authors, printers, and publishers of the 17th century and access to both available ESTC catalogue information and the printed catalogue for the Crawford ballads, as well as consultation with Brian Geiger, Director of the ESTC, North America); 2 hours to double-key transcribe a ballad and compare transcriptions; 30 minutes per ballad to review bibliographic information and produce the TEI/XML in X-Ballad; between 40 minutes to create a facsimile transcription of a ballad; 2 1/2 hours to research and record a ballad song; and a year, for Stahmer working half-time, to develop and implement a new indexing and searching back-end architecture for EBBA, with another year, working at quarter-time, to implement a new front-end search interface.

The image and text work will be lead by Eric Nebeker (EBBA Assistant Director) and Jessica Murphy (EBBA Project Manager at UTD) directing a team of many graduate students and some undergrads who are specialists in early modern studies. These students also have the advantage of being familiar with the EBBA project as well as with early modern ballad culture generally. They are perfectly positioned to continue work on the project and to train new students. Graduate students are also especially well-suited to the kind of detail work involved in transcribing ballads and in creating facsimile transcriptions because such labor is tedious, requiring high levels of concentration, and cannot be maintained full-time. Working part-time during the academic year fits the needs of EBBA as well as of the graduate students' own schedules. We have also found that advanced undergrads can be excellent at image manipulation and enjoy learning about printing practices in the course of making facsimile transcriptions; we thus often offer work on EBBA in the form of Independent Study courses for such students, which are very popular. In the case of singing and recording songs, undergraduates from the Music Department will continue to be encouraged to participate in EBBA under the direction of Caroline Bennet (EBBA Music Specialist), who will herself also record songs; we expect to use 3 grads and 4-6 undergrad singers each quarter (undergrads eagerly volunteer to learn ballad tunes and record them as part of their performance qualifications for a music degree). Revell Carr (EBBA Music Specialist, 2005-07), will continue to advise us from the University of North Carolina-Greensboro.

Note: we hope to hire as many work-study students as possible so as to maximize by 2 times the number of hours in fact worked on the project (many of our students qualify and have applied through FAFSA).

Schedule of Work on the Crawford and other NLS Ballads: In Advance of Grant

- on notification of NEH award a contract is signed with the NLS to digitize the Crawford and two other small collections (template license already in place)
- NLS creates high-resolution digital color photographs of the album pages of each collection, in preparation for beginning work on July 1, 2012 (this photography is already on the NLS schedule)

Summer 2012:

- Nebeker works 76% time leading a team of 9 graduate student RAs working 53% time, and Murphy works 10% time leading a team of 2 UTD RAs at 39% time. 4 grads will work on the digital images of color album pages and ballad facsimiles; 5 will work on cataloguing the ballads, in consultation with library catalogue and ESTC specialist, Brian Geiger; the UTD team will begin transcribing ballads.
- Bennet works 38% time researching available tunes for the ballads and inputting in database for each ballad its tune, its standard tune title, and whether it is singable.
- Stahmer begins work 45% time creating application interface for integrating ballads into WordHoard as part of development of "Miner" indexing system.

September 2012 - March 2013:

- Citation information for new collections is completed and mounted online together with color album facsimiles and ballad facsimiles.
- Nebeker works 76% time leading a team of 1 graduate student GSR working 50% time and 7 graduate student RAs each working 10% time on transcribing and checking ballads; Nebeker and Fumerton also lead undergraduate Independent Study courses on turning transcribed ballads into facsimile transcriptions.
- Bennet works 38% time leading a team of 2 graduate student RAs each working 10% time as well as 6-9 undergraduate volunteers from the Music Department to record ballad tunes.
- Stahmer continues development of “Miner,” implementing Ballad-WordHoard API and overseeing import of current catalogue; he also modifies admin interface so that new items added to the archive and edited items will be automatically indexed.

April 2013 - June 2013

- Transcribing ballads completed; making facsimile transcriptions and recording ballad tunes continued at the same relative pace; music editor works 15% time editing recording files.
- Nebeker and Fumerton teach a graduate course in spring '13 on ballad culture and on the Crawford and other NLS collections; essays generated will be mounted in EBBA.
- Stahmer completes development of “Miner,” implementing Lucene full-text indexing of WordHoard-regularized ballad transcriptions and creating an API for conducting simultaneous, integrated searches of MySQL metadata and Lucene full-text index.

Summer 2013:

- Team of 9 graduate student RAs from UCSB (6 from English and 3 from Music) work 53% time on making facsimile transcriptions and recording ballad tunes; also begin X-Ballading and cataloguing woodcut impressions. 2 UTD graduate student RAs each work 39% time making facsimile transcriptions.
- Stahmer debugs “Miner.”

September 2013 - June 2014:

- Fall 2013 Conference to celebrate EBBA’s decade-long ballad project and accomplishments.
- Completion of all facsimile transcriptions, recordings, music file editing, X-Ballading, and cataloguing of impressions.
- Stahmer works 28% time on EBBA’s user interface, “Screenside” to make it work with new search API; he also enhances display features, builds query interface, and adds ability of users to custom sort returns.
- The NLS is delivered facsimile album pages and basic citation information to mount on its own website.
- The ESTC is delivered MARC records of all NLS ballads.
- Announcement on UCSB and international websites of newly expanded EBBA.

*Subsequent to the NEH Grant*July 2014 - June 2016:

Full archiving of 17th century broadside ballads held at London (Antiquarian Society), Manchester, Williams College, and Harvard.

July 2016 - June 2018:

Full archiving of the 17th century broadside ballads held at the Beinecke Library, Yale University. If the British Library’s financial situation improves, we would also add the Bagford and other smaller 17th century BL collections. By the end of the project, EBBA expects to have assembled on a single searchable website all printed ballads of the 17th century (as well as many of the late 16th and even early 18th century), estimated at 8,000 total.

E. Staff (for full resumes, see **Appendix 14**)

Director of Project: Patricia Fumerton

Fumerton is Professor of Renaissance Literature and Culture, founder of the UCSB English Department's Early Modern Center, and much-published expert on 17th century broadside ballads. Fumerton will be

responsible for final editorial control of EBBA. She will work 40% of her time on the project during the two-year funding period.

Associate Director and XML and Imaging Specialist: Carl Stahmer

Stahmer holds a Ph.D. in English from UCSB in digital humanities and was Research Scientist at the Maryland Institute for Technology and the Humanities (MITH). He also serves on the Steering Committee for the Networked Infrastructure for Nineteenth-Century Electronic Scholarship (NINES). Stahmer will work 45% time on EBBA in the first year of the grant and 28% time in the second year.

Assistant Director: Eric Nebeker

Formerly Project Manager of EBBA and working on the project since 2006, Nebeker holds a Ph.D. in Early Modern Studies from UCSB, specializing in ballad and print history. He is furthermore a Lecturer in the UCSB English Department. He will assume general responsibility for the technical development of the project (in consultation with Stahmer) as well as manage the Music Specialist and student workers. He will work 76% time on EBBA during the grant.

University of Texas-Dallas Project Manager: Jessica Murphy

Murphy is assistant professor of English at the University of Texas-Dallas and EBBA's UTD Project Manager since 2010. Murphy has been actively involved with EBBA since 2005, assisting with backend technology, cataloguing, MARC records, developing standards, transcribing broadside ballads and converting transcriptions into XML. She will teach a course at UTD in 2013 on EBBA and will devote 10% of her time each summer of the grant supervising a team of 2 UTD graduate students.

Music Specialist: Caroline Bennet

Caroline Bennet has an M.A. in Ethnomusicology from UCSB and has been researching and recoding EBBA tunes since 2010. She will work 38% time during the grant period.

Music Consultant: Revell Carr

Revell Carr was Music Specialist for EBBA 2005-07 and is currently Assistant Professor of Ethnomusicology, University of North Carolina-Greensboro.

Library Catalogue Consultant: Brian Geiger

Brian Geiger is Professor of History and Director of the Center for Bibliographical Studies and Research at UC-Riverside; he is also Director of the ESTC, North America.

F. Dissemination

The goal of an expanded EBBA is to provide easy and democratic access to the images, texts, songs, citation information, and subject matter of broadside ballads leading up to, including, and immediately following the printed ballad heyday of the 17th century. Since the NLS has granted EBBA permission to create a database of its ballad holdings, no password or other restrictions need impede access to the site.

Graduate students and faculty actively promote EBBA at conferences and in publications. Since January 1, 2010, fourteen project members have given twenty-four talks based on EBBA. We have also published a collection of essays, and an edition of Pepys ballads is in press (see **Appendix 15**). In the fall of 2013, we plan a large, international conference to celebrate EBBA's decade-long achievements (NEH support will allow us to raise more funding for this event; we also expect it will be as big a hit as the conference we mounted in 2006). We further promote EBBA from major Early Modern and UCSB websites, including the UCSB library database. Already a Google search of "EBBA" brings up our website first (before a commercial site for LA body-care products); and a general search of "broadside ballads" returns EBBA second. We expect our recognition will continue to grow as the database expands. Finally, we will announce the NEH grant and EBBA's expansion, when completed, via media outlets across the world.