

III. NARRATIVE

A. Significance

Statement of Purpose

In July of 2016, the University of California, Santa Barbara plans to launch an important 6th stage—part of the end-phase—of its digital [English Broadside Ballad Archive \(EBBA\)](#), which will incorporate rare collections of printed ballads at the Beinecke Library, Yale University; the Society of Antiquaries, London (SAL); Manchester Central Library (MCL); and Chetham’s Library, Manchester. These rare holdings are unknown to most scholars, and for the most part not fully catalogued by their holding institutions. For example, MCL’s 139 mostly unique ballads are entirely uncatalogued by the library, and the Beinecke’s online database reveals some 42 results for the 490 broadside ballads the library actually holds. Archiving these items (c. 900 total) will thus considerably expand the libraries’ own access to their important ballad holdings at the same time as it will deepen EBBA’s already significant database of difficult-to-access ballads. These holdings will also extend EBBA’s historical reach by including approximately 90 broadside ballads from the 16th century (mostly from SAL), a period for which a mere 250-280 such items survive, and they will fill in historical gaps among our 17th-century ballads, especially from the 1640s-50s (about half of MCL’s ballads). See **Appendix 1**. EBBA users will thus be better able to track the arc and development of the broadside ballad up to and through the 17th century.

In this 6th stage, EBBA will also return to its first and largest archive of 17th-century ballads—the 1,882 ballads collected by Samuel Pepys and held at Magdalene College, Cambridge—to re-film the artifacts in high-resolution color and replace the current low-quality images (made by digitized microfilm). For the first time, users will be able to view facing album pages, discern differences between the ballad sheet and album paper, and see how Pepys often trimmed and cut in half his ballads. Such high-quality images were undreamed-of when the EBBA project began in 2003. But because of our current prominence, the Pepys Library has expressed renewed interest in collaboration, and pledged extraordinary support.

Furthermore, EBBA will make many exciting updates to the website, revamping the site’s interface both visually and conceptually. With a new HTML5 responsive design, EBBA will be effectively usable by smart devices as well as by computers. Additionally, we will make it possible for users to perform computational analytics and visualizations (such as topic modeling) by means of a simple, point-and-click interface (see “*Data Analysis and Visualization*”).

We will also enhance our music offerings by providing diplomatic transcriptions of all musical scores printed on the broadsides (c. 350) as well as transcriptions dictated from all unique recordings (currently 2,300), to reveal how singing ballad texts to regularized “standard tunes” requires modifications in both media. A visual aid, a song position pointer, guides users through the notated songs (see “*Recordings*”).

All the libraries included in this proposal have granted EBBA unprecedented permission to fully archive their early ballad holdings (see Commitment Letters, **Appendix 20**). With generous funding from the NEH for 2014-16, we are currently archiving the 1,237 ballads at Harvard’s Houghton Library. When we add the above-named rare US and UK collections to Harvard’s, and to the other previously archived large collections from the National Library of Scotland, University of Glasgow, Huntington Library, British Library (Roxburghe), and Pepys Library, EBBA will make publicly accessible on one site approximately 75% of the estimated 11,000 extant ballads printed pre-1701 in Britain.¹ Indeed, counting the records from Oxford’s Bodleian Library, to which EBBA now links as a result of a collaboration proposed by the

¹In our last grant proposal, we estimated roughly 10,000 extant pre-1701 English broadside ballads. With our discovery of the rare collections included in this grant proposal, that total has been revised upward to 11,000.

Bodleian and funded by JISC, access to extant ballads through EBBA expands to 88% (see, e.g., results for [“Pride’s Fall”](#)). Due to continuing expansion of EBBA, users will be able to cross-search many collections and confidently trace changes in editions, aesthetics, and themes over time. Continuing our well-established standards, we will provide reproductions of “album facsimiles” (bound pages or loose sheets onto which trimmed ballads were pasted), “ballad sheet facsimiles” (reconstructions of how the ballads would have approximately looked when they came off the press), and “facsimile transcriptions” (in which the difficult-to-read early type is replaced with modern type while preserving the original ballad ornament and formatting, thus providing easy readability without sacrificing aesthetic appreciation), and plain-text transcriptions. We will also deliver recordings of all extant tunes (a considerable number, since 97% of the Beinecke’s ballads and about 50% of MCL’s and Chetham’s ballads have tune titles on them); deep cataloguing; MARC records; TEI/XML encoding of metadata and plain text; and introductory essays written by members of the EBBA team about the collections and early modern ballad culture. In the process, EBBA will advance its goal of freely offering scholars and the general public understanding of these multifaceted artifacts in ways hitherto unavailable.

EBBA’s goal is to recreate not only the physical features but also the experience of broadside ballads in their own time. Called “broadsides” because they were printed on one side of a single large sheet of paper, they were a major new cultural phenomenon distinct from the oral ballad of tradition. They were multi-media artifacts: simultaneously text, art, and song. In their heyday of the 17th century, they sported black letter (or gothic) type, with multiple woodcuts and accompanying tunes; see, e.g., [Euing 383](#). As cheap print—costing on average just a penny—they were peddled in shops and on the streets, likely by the millions (Watt, *Cheap Print*, 11) and bought by all levels of society. They were the equivalent of today’s newspapers, magazines, or pop songs, and like those popular media, they were a valued vehicle for mass communication. They were also highly ephemeral, as is particularly evident in the fraying and fragmentation of many of the MCL ballads, likely the result of much folding and carrying around.

Indeed, if millions of ballads were disseminated, almost as many were lost to posterity when they literally fell apart after much handling or were pasted up on walls or recycled as pie lining, pipe kindling, or toilet paper. Ballad collectors thus engaged in an extremely important feat of preservation. Yet, ironically, considering their original profusion, access to the rare survivors is now extremely limited. Libraries restrict viewing of the fragile originals, and even when allowed, travel to the holding sites is expensive and time-consuming. As director of EBBA, Patricia Fumerton was privileged to be awarded a UCSB grant to ferret out these rare pre-1701 ballads. She spent a week at Yale’s Beinecke Library, and, along with her Assistant Director, Dr. Megan Palmer-Browne, another two weeks at the three UK libraries, looking through thousands of bound and loose broadsides to identify pre-1701 ballads. The latter trip occurred after a preliminary review the year before of SAL’s holdings by Palmer-Browne, in addition to much advance work at UCSB: reviewing 5 reels of one-of-a-kind microfilm of the 3,100 Halliwell-Phillipps broadsides at Chetham’s Library, provided to EBBA by the Director of the English Short Title Catalogue (ESTC), Dr. Brian Geiger. Such resources are unavailable to the average scholar.

But what about [Early English Books Online \(EEBO\)](#)? Is that not a reliable resource for locating all printed broadside ballads, replete with images? Even disregarding EEBO’s prohibitive subscription rates and poor-quality images scanned quick-and-dirty from microfilm, the fact is that *EEBO holds only a very small fraction of our rare ballads*: just 23% of SAL’s 140 ballads, 18% of MCL’s 135 ballads, 6% of Chetham’s 120 ballads, and 3% of Beinecke’s 490 ballads. EBBA is in dialogue with EEBO—Jo-Anne Hagan, Publisher at ProQuest (owner of EEBO) and Rebecca Welzenbach of EEBO-TCP (which transcribes EEBO texts) are on our [Advisory Board](#). EEBO-TCP has recently asked to create links to EBBA’s transcriptions, which we have granted. But the need for full and accurate access to *all* ballads within an independent, comprehensive, user-friendly website is high.

Most surprisingly, many of the rare ballads identified in this current grant proposal have not even been

catalogued yet by the ESTC, traditionally the gold-standard catalogue of extant pre-1800 works printed in Britain. Dr. Geiger has agreed to serve again as consultant to EBBA in this grant phase, in order to ensure that the ESTC is updated by our findings (**Appendix 20**). Just recently, in a fruitful circle of collaboration, the ESTC [linked](#) each of its broadside ballad entries to the corresponding facsimile image in EBBA (EBBA [citations](#) in turn include ESTC numbers that link back to the ESTC catalogue entry). Until all extant printed ballads are similarly matched, scholarly awareness of and access to especially the rarer ballad collections named above is patchy; citations to them are partially but not altogether accessible via the ESTC and the libraries that hold them, and citations matched to images of them in EBBA are depressingly few. Given these ballads' rarity, there is an urgent need for EBBA to include them in its comprehensive database, making them accessible to everyone.

Eager to aid this cause, the Beinecke Library has at no cost provided EBBA with high-resolution color images of its 490 early broadside ballads that Fumerton identified during her on-site visit, and Edwin Schroeder, Director of the Beinecke, further signed an agreement granting us digital permission to mount the ballads online. Furthermore, Heather Rowland, Head of SAL; Kevin Bolton, Archives Manager of MCL; Dr. Michael Powell, Librarian of Chetham; and Dr. M. E. J. Hughes, Head of the Pepys Library have also sent enthusiastic letters of commitment. They will provide images on a cost-recovery-only basis and most have pledged third-party contributions in the form of curatorial time (**Appendix 20**).

EBBA's archiving of these ballads answers a pressing need for scholars of popular culture, literature, art, and music. Already usage of EBBA is high and growing every year, more than doubling from an average 2,756 unique visitors per month in 2012 to 6,500 unique visitors in each of the last 9 months (see **Appendix 2**). Moreover, EBBA's popularity has spread from scholars to the general public. We are both the subject and agent of popular media even as we engage in traditional outreach via presentations, publications, and coursework; we receive emails of thanks on a regular basis (see **Appendix 3a-3h**).

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

It is most fitting that EBBA has become a focus in popular media today, as ballads were intended for a mass audience. The single most printed artifact in the literary marketplace of London by the end of the 16th century, they were hawked on the city's streets and sent into the provinces in the packs of peddlers by the millions. Indeed, one could not travel from point A to point B in London without hearing ballads sung on street corners or seeing them posted on walls. Ballads thus touched all levels of society. Shakespeare, for one, cited ballads in every play he wrote. Still, they 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. They cost on average a mere penny (the same as a pint of ale). To increase their audience to include the semi-literate, when other texts were being issued in white-letter or roman type, ballads were still being printed in black-letter or gothic type till the end of the 17th century, which was the print by which children learned to read and which was also associated with homey "Old England." To increase their allure, ballads towards the end of the 16th and beginning of the 17th century became increasingly ornamental, with decorative lines and woodcut illustrations. People of the lower to middling sort would buy ballads to put up on their walls as art. They were also sung to simple, well-known tunes (so well-known that usually just the tune title was printed), which made them even more accessible to the less educated. As multimedia artifacts, they reached their heyday in the 17th century. One can track the emergence of and developments in the heyday ballad by looking from SAL's relatively plain 16th-century "A new balade made by Nicolas Balthorp" (1583) to MCL's large two-part ornamental ballad, with woodcuts and a tune title, "Alas poore Trades-men what shall we do?" (c. 1646), to MCL's and Beinecke's later, smaller sheets, still decorated with woodcuts and with named tunes, "The Royall Health to the Rising Sun" (1649) and the "Bonny Scot: Or, the Yielding Lass" (c. 1690); **Appendix 4a-d**.

Accompanying these changing aesthetics were changes in broadside ballad topics. As SAL's collections

well show, 16th-century broadside ballads were often political “flytings” (personal arguments), elegies commissioned by friends, or religious meditations upon strange wonders or sin. Thus Nicolas Balthorp above (4a) turns his own dying in battle at Calais in 1550 into a meditation upon Christ’s suffering for man’s original fall. But 17th-century broadside ballads sport a more expansive range of topics designed to capture a larger market—extending from the serious, religious, and political to the topical, trifling, domestic, and profane. The “low” or marginal often get a voice. MCL’s ballads, filling out EBBA’s few holdings from the 1640s-50s, for example, offer rare critiques of the English Civil War as seen from the perspective of the streets. In “Alas poor Trades-Men what shall we do?” (4b), a storekeeper wanders London’s empty shops, lamenting the damaged economy caused, he says, by the elite rich going off into the countryside to fight in civil war. Towards the song’s end, the speaker turns movingly from his fellow poor tradesmen’s lost business to recall their lost “gracious King,” wishing that “The Lord preserue and belesse him / with safe return / To them that long do miss him, / And send him to remain / With them that well to wish him”—placing new meaning on the restated final refrain, “Alas poor trades-men / What shalle we do?” In another particularly poignant ballad, “The Royall Health to the Rising Sun” (4c), a commoner laments the execution of Charles I in 1649 and the rise to rule of Cromwell with the daring refrain: “Gallant English Spirits / doe not thus complaine, / The sun that sets / may after rise againe.” The metaphor of the setting sun is as transparently a reference to the executed king as is the crown pictured in the cloud hovering above the personified setting sun in the first woodcut of the ballad. Angela McShane has argued that political views in 17th-century ballads were expressed mostly through unornamented white-letter or roman-type ballads, often without named tunes, and often with “in jokes,” suggesting they targeted savvy political elites, as in [“The Cavalier’s Litany.”](#) We *do* increasingly see such white-letter broadside ballads at times of political debate in the 17th century, especially during the Commonwealth and Restoration. But in “The Royall Health,” we find a rare survival of a more broadly based political position, both aesthetically and metaphorically daring in its defiance of the new ruler, Cromwell.

Expanding our vision of popular culture, these rare ballads add to the views expressed by the masses about all topics, including those that span all historical eras: marriage, gender, and sex. The spinning wheel, for instance, appears often in woodcuts, texts, and even as a popular tune title of the time. It bespeaks a maid’s virtue (busy at work spinning yarn versus up to no good). In “The Bonny Scot: Or, the Yielding Lass” (4d), a maiden at her spinning wheel (pictured in the first woodcut) thus resists a young man’s tempting advances with variations on the refrain, “But still I turn’d my spinning wheel.” In the penultimate stanza, however, she gives in to her rising passion—“Till I resistless fire did feel / Then let alone my Spinning-wheel”—and concludes with yet a new version of her refrain: “The pleasure I cannot reveal, / It far surpass the Spinning-wheel.” Such frank treatment of sex by lower-class narrators (women and men alike) is striking in these rare ballads, and in ballads generally. In the course of spinning her tale, the maid succumbs to her sexual drive. Women might as easily in ballads describe cannily tricking a man into marrying them, cuckolding their husbands, or shrewishly mistreating them. They can also be heard rejecting a lover who cheated on them and even reforming bad husbands. More than in any literature of the time, broadside ballads give the low and marginal a range of voices. When audience members sing along, which ballads encourage all to do, we temporarily inhabit those other voices and subject positions.

Ballads, one might say, are the social Twitter of their time or, as Pepys writes, light-weight social “straws” that, when cast up, show “which way the wind is.” In addition to adding many unique ballads and new tunes to EBBA, these rare collections will also add many variant editions of already catalogued ballads, which differ from their predecessors by as little as a few spelling changes or as much as wholly new stanzas, typeface, and illustrations. They thus expose both popular trends and the change of such trends over time. At the most basic level, for instance, these rare collections confirm wide-ranging frustrations by all levels of the populace with the Catholic leanings of Charles II and his temporary successor, James II, increasing EBBA’s holdings of [“The Catholick Ballad”](#) (c. 1674) from 14 to 18 copies—a very high survival rate—in both black-letter and white-letter editions. In many ways, then, the proposed rare ballads will heighten EBBA’s offerings of fresh perspectives on the “masses” of early

modern England. In providing accurate tunes and easy-to-read facsimile transcriptions, furthermore, they will bring alive 17th-century popular culture even to the general public, for whom, as we have seen, ballads were originally marketed. Ballads speak not just to scholars but to men and women on the street.

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

The addition of these rare ballads to EBBA will make a major contribution to many approaches to literary studies. Foremost, they will further advance the recent turn in book studies and literary cultural studies to ephemera. In previous grant proposals, we documented little activity on ephemeral broadside ballads. This quiescence, we noted, was largely due to the difficulty of accessing the materials. Even as we submitted our last grant proposal, however, we sensed subtle—and what are now significant—changes in the way the critical straws are blowing. Since just 2010, there have been numerous books published solely on broadside ballads, by Fumerton (3), Mark Hailwood, Steve Newman, Angela McShane, and Sarah Williams, for example, as well as a plethora of articles, book chapters, and dissertations.

In all modesty, we attribute this explosion of research on broadside ballads to their becoming publicly available through EBBA. Founded in 2003 but making a real impact with its expansion via NEH funding starting in 2006, EBBA is the only website where a user can freely access over 7,000 early broadside ballads in multiple images, with deep cataloguing, and with tune recordings. The expansion of EBBA will make it an increasingly valuable research tool for literary critics of ephemera but also for those more generally interested in popular literature. For example, the huge number of ballads about gender, love, and marriage will continue to prove important to feminist literary critics, who must tackle the conundrum that the often strong female “I” in the ballad narratives is typically written by an anonymous male author.

The addition of many 16th-century ballads in our current proposal brings even more pressingly to the fore the question specifically of genre. What exactly is a broadside ballad anyway? 16th-century texts printed on a single sheet, while often calling themselves ballads, rarely have named tune titles and are strikingly plain. They bespeak wonders, religion, elegy, and eulogy. We have discovered many new authors’ names printed on them: Nicolas Balthorpe, L. Stopes, Arthur Bour, and—most excitingly—the dramatist John Heywood. This prominence of named authors supports Erik Nebeker’s claim that the broadside ballad of the period was socially acceptable and not yet associated with the lowly market (*Broadside Ballad and English Literary History*). The 17th-century “heyday” broadside ballads—ornamental, with named tune titles, and treating a smorgasbord of primarily secular topics—were typically anonymous precisely because they had fallen in literary and social estimations from a “high” to a “low” commercial genre. Yet, fascinatingly, around the mid-17th century, the elegy and eulogy reappear in huge numbers on broadsides, often in iambic pentameter, with little ornamentation and no tune titles. Are they hearkening back to the popular but more “legitimate” 16th-century elegy and eulogy ballad? To complicate our answer, many of the important collectors of the 17th century and later, such as the Duke of Roxburghe, often included in their self-titled “ballad” collections verse that does not resemble “heyday” broadside ballads. One might seek surety in *The New Princeton Encyclopedia of Poetry and Poetics* (1993), which defines ballad measure as alternating lines of 4-3 stresses rhymed *abcb* or *abab*. But many of our holdings titling themselves “ballads” violate this formula, and the most popular tune of the Renaissance, “Fortune my Foe,” was written for iambic pentameter. Singability becomes key when trying to determine whether single sheets of verse in their own time might have been considered ballads, and we have found ourselves in rare books rooms, more than once, quietly singing the verses of a broadside to see if they do in fact fit “Fortune my Foe.” But the fact is that there is no clear-cut answer to “What is a broadside ballad?” The printed ballad constantly morphed aesthetically, thematically, and musically throughout the 16th and 17th centuries, as it increasingly competed with other popular literary and multimedia genres, such as the pamphlet, chapbook, songbook, musical drama, and elite or “literary” broadside verse. The more we add rare 16th- and 17th-century printed ballads to EBBA, the more we see the “heyday” ballad as central to the genre. But we don’t want to exclude the puzzling pieces that show the genre’s morphings into other

literary forms, so we offer a sample of them as well, to chart for users this protean literary genre.

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

Even as broadside ballads expand our understanding of literary history, they widen the field of art history. While art historians continue to privilege prints for the upper end of the market, new work supported by EBBA has extended into popular art. For many contemporaries the pictures on broadside ballads were their most important feature, as evidenced in MCL, vol. 2.13 (**Appendix 5**), where the large woodcut illustration has been ripped away from the ballad sheet.

The case of the missing MCL picture contributes to recent art historical inquiries into the social uses of print in England. So does the phenomenon by which ballads get smaller and less ornamental towards the end of the 17th century. Cyprian Blagden attributes this aesthetic diminishment to a loss of popular appeal—a “guttering out.” But there is also evidence that the broadside ballad kept experimenting aesthetically, as it did in other ways, in an effort to stay competitive. In studying the Houghton ballads, Fumerton discovered some late very large sheets with named tune titles and with elaborate woodcuts, even engravings, such as “A true narrative of the horrid hellish Popish Plot,” to the tune of “Packingtons Pound” (1682). At SAL, we found an earlier surviving edition of the second part to this ballad (1669), wherein the printer or proud owner had hand-colored the illustrations, definitively proving how much the visual was valued (**Appendix 6**). Rather than guttering out, the ballad kept reinventing its aesthetics to attract the popular market.

There is a whole new area of art historical research waiting to be explored via the woodcut impressions that appear on ballads. Formerly derided by scholars as crude—often on the basis of smudged microfilm—these images have a graphically pleasing, folk-like quality, and are sometimes finely carved. The critical tide is turning to focus on them, as can be seen in Murphy and O’Driscoll’s recent *Studies in Ephemera*. By seeking, in this round of funding, to make available high quality color digital images of the ballads, including of the large and important Pepys collection (digitized earlier from microfilm), EBBA encourages new research both on particular images and on the ways images were re-used across genres.

These rare collections will, importantly, add many new woodcut illustrations to EBBA’s corpus, such as the two unique images in “The Royall Health to the Rising Sun” (**4c**). The addition of new prints of images already present in EBBA’s collection, furthermore, will show how contemporaries developed strong attractions to woodcuts as the cuts accumulated meanings, however common or worn down the impressions may appear to us. Two images of the Lady with Fan (who appears 50 times in the Pepys collection alone) stand side by side on MCL 2.67 (**Appendix 7**). Both seem attractive to the dashing soldier, who looks their way, despite the fact that the first is missing an eye and the second has lost her fan! The collector here has mixed up two halves of different ballads and pasted them together on his album page, and a print-shop worker ineptly left his inked mark—the hand of time—on the half sporting our two ladies. But even so—even perhaps for this very reason—the ballad fragment with its two worn ladies was considered worth collecting.

Perhaps most fascinating is tracking the accumulation of meanings of woodcuts that were printed whole and later broken apart, as is the case with the impression of a cut found on MCL 1.51, “By the directions of the Scriptures” (**Appendix 8**, cut 2), which appears on ballads previously archived by EBBA only in fragments, as in [Euing 400](#). The many banderoles or “speech bubbles” left blank on the MCL ballad were (as an attentive EBBA Twitter follower pointed out) filled in on Samuel Hartlib’s pamphlet *London’s Charity* (1649) with the pleas of the poor (**Appendix 9**). This is a perfect instance of how ballad woodcuts moved across popular genres. Indeed, [Euing 401](#), which ingeniously shows 4 cut-apart and re-arranged pieces of the woodcut—the figure of the woman on the lower right in the original cut is now moved to the left, apparently to represent more prominently the destitute widow of the tale—extends the theme of dire

poverty. We are offered an expansive nexus of meaning across pamphlet and broadside ballads.

The Significance of an Expanded EBBA for the Study of Music

The addition of these rare ballads will further enhance EBBA as an invaluable research tool for studying the music of late 16th- through 17th-century England. Previously, anyone who wanted to hear ballad texts and tunes together had to find the ballad and its tune in separate sources, and then put the two together. Our music specialist estimates that it takes about 2.5 hours for a skilled musician to find the correct tune for a ballad, learn it, and record it. By providing on a single site both text and tune, whenever extant—and, remarkably, 450 of our proposed 900 rare ballads have named tunes, likely adding greatly to our 2,300 unique recordings—an expanded EBBA will save thousands of hours of research time for others.

Many of Chetham's late 17th-century broadside ballads (35%) also include a new morphing of white-letter ballads: ballads with printed or engraved musical notation on them. This aesthetic was market-driven: the ballad was competing with the new fashion for cheap songbooks. The Restoration (1660) saw the rise of musical theater, which stole ballad songs to fill out its repertoire, even developing into full-fledged "ballad operas," the most famous being John Gay's *The Beggar's Opera*. Broadside ballads responded by stealing theater songs, and a number of ballad writers wrote for both stage and street, such as Thomas D'Urfey. Since many ballads name tunes on them that we haven't yet found, such musical notation can provide tunes that would otherwise have been lost to time: e.g., the musical notation on Houghton's "The Lord Chancellors Villanies Discovered" provided the melody for the otherwise lost named tune, "Hey brave Popery, Etc.," on the Pepys ballad by the same title (**Appendix 10**). As exciting: on the verso of an engraved ballad with musical notation in Chetham's holdings is the original setting of the tune "Black-ey'd Susan" by English composer Richard Leveridge, a folk-sounding composition in stark contrast to the more highbrow setting on the sheet's recto (**Appendix 11**). Extraordinarily, EBBA holds two ballads which name that very tune title but for which we had until now found no source. Our eager singers have already recorded the ballads to the new-found tune: see, e.g., Houghton's "[William and Susan](#)."

In order to further enhance and engage users in the musical component of EBBA, with this grant we will also provide transcriptions of all musical notation printed or engraved on the broadside ballads as well as notation of the first stanza of ballad recordings for which no notation was printed on the sheets. The recordings will be created using Sibelius MIDI and played using a web-enabled MIDI player (such as MIDI.js) with a visual aid indicating the note played and the accompanying lyric to guide the viewer/listener (see "*Recordings*"). Users who are musically literate but unfamiliar with the look and methods by which contemporaries rendered music notation will thus have access to a readable score. Furthermore, all users will be able to both visually and aurally follow the movement of the tune and the necessary adjustments of tune to text. Our goal is to expand the accessibility of ballad tunes for both experts and non-experts alike, since a full appreciation of the tune is *key* to the broadside ballad experience.

Our timing in finding ways to enhance EBBA's music component is most opportune. In large part due to EBBA's influence, the scholarly music world has been abuzz with interest in popular tunes, as witnessed by new books and dissertations dedicated in large part to broadside ballad songs, the in-progress book and website on the most popular broadside tunes, *Hit Songs and their Significance in the 17th Century*, ed. Christopher Marsh and Angela McShane (for which Fumerton serves as consultant), the in-progress website *Early Modern Songscapes* (on whose Advisory Board Fumerton serves), and the UK-French project to develop an app for mobile devices that would add soundscapes to the cityscapes of early modern London, led by Sally-Jane Norman at the University of Sussex (with which EBBA has partnered). Hearing of our plans to enhance EBBA's database of songs, the American Musicological Society just this month asked Fumerton if it could collaborate with us as we proceed; we have welcomed them onboard.

In sum, in adding new rare collections to EBBA, re-filming the Pepys ballads in high-resolution color (updating their facsimile views and transcriptions), as well as enhancing our music corpus, EBBA will greatly expand understanding and appreciation of 17th-century popular culture, literature, art, and music.

B. History, Scope, and Duration

An expanded EBBA will be supported in perpetuity 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 (see also *Sustainability*). Founded in 2000 by EBBA Director Fumerton, the EMC is a fully-equipped, endowed Center with eight faculty, thirteen graduate students, and about one dozen undergraduates specializing in early modern English studies. Emeriti and affiliated faculty and students are also active in the Center's programs, especially from Art History, History, and Music. Many belong to the large EBBA [team](#) that is historically over 300 people strong. The EMC also draws on the rich technological resources of the Department's Transcriptions Center, founded by Alan Liu. In addition, the Department has a full-time staff person (Brian Reynolds) who manages all our computer and storage needs. Thus supported, the EMC maintains a strong cyber presence. EBBA is its largest project.

With a modest UCSB Instructional Improvement Grant 2003-04, Fumerton formed a team to research how best to gain digital rights and structure a database for mounting online ballad images and metadata. In June 2003, she gained unprecedented rights from the Pepys Library to mount online its 1,882 ballads—the single largest collection of 17th-century broadside ballads. Due to the Library's restrictions at the time, we necessarily had to work from microfilm which we had digitized to the then archival standard of 400 ppi. Unfortunately, Pepys's album books were unbound when the microfilm was made and the ballads were photographed close-up, leaving out much of the album paper. The black-and-white images also made it impossible to detect the difference between ballad and album paper onto which the trimmed and often cut-apart ballads had been pasted, so that only two views are available, as currently seen in [Pepys 1.124-125](#) (for the proposed three new views, see **Appendix 12a-c**). All subsequent holdings of EBBA have been digitally photographed in high-resolution (600 ppi) color, allowing us to create for users an “album facsimile” view, as seen in [Roxburghe 1.146-147](#) (where the ballad has been cut apart and pasted onto facing pages) and [Euimg 27](#) (where the ballad has been pasted onto a backing sheet). For loose ballad sheets kept in boxes or folders, no “album facsimile” view is shown, e.g., [Huntington Britwell 18330](#).

With about \$150,000 from UCSB and UC for 2004-06, the EBBA team mounted online the Pepys ballads as ballad sheet facsimiles with basic cataloguing. We also held a two-day international conference on broadside ballads, which led to an edition (Ashgate 2010), co-edited by Fumerton and Anita Guerrini. We were awarded an NEH Reference Materials Grant for 2006-08 to complete the Pepys Archive, which consisted of \$325,000 from the NEH and co-support of \$192,899 from UCSB. We have not looked back.

Four subsequent NEH awards as well as significant UCSB cost-share, third-party pledges, and volunteer work have allowed EBBA to grow exponentially: we next archived the second largest collection of broadside ballads of the 17th century, the British Library's Roxburghe Ballads (over 1,500 items) and then large collections from the University of Glasgow and Huntington Libraries (c.1,000 total), the National Library of Scotland (1,754), and, in our current grant, Harvard's Houghton Library ballads (1,237). With each new funding, we have made major upgrades to EBBA's infrastructure and interface, led by our digital specialist, Associate Director Dr. Carl Stahmer, including [visualizations](#) (upon which we will expand with this grant), an image association tool, and implementation of MorphAdorn to allow searching across variant spellings and syntax. We continue aggressively to publicize our research: most recently, through a teaching edition of the Pepys ballads, ed. Fumerton, with ten EBBA contributors (2013); a major 2-day Huntington Library conference (2014); a special issue of *The Huntington Library Quarterly* (forthcoming, 2016); and an e-book of “how-to” videos and critical essays on the making of broadside ballads, in UCSB's new and innovative press, [The EMC Imprint](#) (forthcoming, 2015).

With NEH funding, we can realize the crucial end-phase toward completion of this invaluable project. We have fully identified the rare materials in need of next archiving and have received substantial pledges of cost-share from UCSB as well as enthusiastic support from our four collaborating libraries, including third-party pledges and either at-cost—or in the case of the Beinecke—free high-resolution color images.

Archiving the 900 rare ballads as well as re-filming and remaking the 1,882 Pepys images in color—including, finally, album facsimile images!—bringing the Pepys transcriptions up to our current standards and updating the Pepys facsimile transcriptions accordingly, as well as adding the music enhancements we propose, will take 24 months of work by an EBBA team consisting of 9 graduate students working half-time during the summer months and 11 graduate student together with 6 undergraduate interns working part-time during the academic years. They will be led by Drs. Fumerton and Palmer-Browne, as well as by Caroline Bennet and Erik Bell, EBBA’s Music Specialists. Dr. Geiger, ESTC Director, will serve as consultant. Dr. Stahmer will redesign the EBBA website using a responsive design suitable for smart-devices as well as computers and add functionality to perform computational analyses of EBBA’s holdings and to visualize the results. The number of new ballads we plan to archive (900) is fewer than we are currently archiving with the Houghton’s holdings, but dealing with multiple libraries; remaking the Pepys images, retranscribing them, and making new facsimile transcriptions for them; as well as enhancing the music component of the site with the interactive “Minstrel” (see “*Recordings*”) and upgrading the website, will make the work during this grant period equivalent to that of previous grants. We are also subject this round to increased wages and to the highest Indirect Cost Rate (IDC) we have ever faced—51.3%—which makes full NEH funding crucial to our realizing our goals (see “Budget.”)

Upon archiving the rare ballads specified for this grant, we will have reached the 75% mark of EBBA’s goal. With the further inclusion of the Bodleian ballads via our interoperable database, that percentage rises to 88%. We are almost there! Excitingly, the British Library now wants us to include its other important broadside ballads (c. 1,500) in our next grant. In our final grant, we plan to make a sweep of the many small collections in mostly US libraries, such as the Chapin Library at Williams College (which has already pledged free high resolution images of its 38 pre-1701 broadside ballads). Taken together, these small collections will total c. 850. In these last two phases of EBBA, we will continue to update the site with the latest technological innovations before celebrating its successful completion.

C. Methodology and Standards

Mounting the Ballad Images

From 600 ppi color digital TIFF images, EBBA will create JPEGs of “album facsimiles,” “ballad sheet facsimiles,” and “facsimile transcriptions.” The album facsimile will reflect the ballad as it appears assembled in a collection, showing the loose backing paper onto which it is pasted or, if bound, any album border and binding. The ballad sheet facsimile will crop out most of the backing/album paper and present the ballad as it approximately appeared when originally printed. Finally, the facsimile transcription transforms the color image to grayscale and removes the original print, replacing it with modern type so that users can easily read the ballads without sacrificing appreciation of the relationship between illustration and text (the 3 views can be seen for a ballad pasted onto backing paper in [Euing 27](#)). Finally the transcription is viewable and searchable as “text transcription” (linkable to “raw xml”).

Cataloguing the Ballads

As with all collections added to EBBA, the rare ballads proposed for inclusion in this grant will be catalogued using the ESTC as our starting point, whenever an entry is available. However, in keeping with careful decisions made in developing EBBA, we will add important information that supplements

current MARC records, including “refrain”; “imprint”; “license”; “collection”; “pages”; “location”; “shelfmark”; “black letter”; “ornament”; and “keywords” (via a drop-down list to secure consistency and transparency). See, e.g., [citation result for Pepys 1.124-125](#). Such cataloguing also ensures granularity of metadata. Tunes and woodcut impressions are separately catalogued. In the [Advanced Search](#), tunes are searchable by imprint, tune title, and standard tune title—the title assigned to variant names of the same tune—and impressions are searchable by keywords. Also among search results, users can click on “Impressions” and find all matches in the database to images similar to those appearing on any ballad, the matches created by human cataloguers working jointly with our digital Image Association Tool.

Ballad Transcriptions

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. Determining just how much to “modernize” the original text was difficult and time-consuming. In the end, we decided that it was important to preserve most of the original spelling, so as to capture a “feel” of the original, while at the same time converting to modern print features of the type that impede readability for the non-expert; see [rules for transcription](#). To ensure the highest level of accuracy, after initially transcribing the Pepys ballads with just one transcription and a checker—which let too many errors slip by—we adopted the industry practice of “double keying.” Each ballad is independently transcribed by two people, and the transcriptions are then compared by a third person using Microsoft Word’s Merge Documents feature. We look forward to applying this high standard to the Pepys transcriptions by adding a second set of keying.

Recordings

In performing our rare collections of ballads, we will employ the same standards established for the previously archived collections. We have carefully considered a number of factors that impact the interpretation of the ballad as song and have chosen to use a comfortable, “natural” singing tone, tending towards clear articulation, with minimal ornamentation and vibrato, so as not to obscure the basic melody or text. We also record most of the ballads *a cappella*, since the ballad tradition is a singer’s tradition, and we want to highlight the art of unaccompanied balladry. An unaccompanied voice also gives the most unadorned version of the melody, so as to clearly illustrate the connection between text and tune.

There are only a handful of works on tunes of broadside ballads; the most comprehensive and well-researched work is still Claude M. 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 the rare ballads proposed for this grant for which there are known tunes—estimated at 500. Of these estimated 500 ballads, we will likely only record about 300, since our policy is in most cases not to re-record a ballad if a duplicate recording already exists in the archive. We use the rough rule that ballad texts that are 80% similar are, for the purposes of the tune, duplicates. 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 our extant recordings (“Packington’s Pound,” for instance, has several known versions), the ballad tune is recorded. Tunes are sung by trained postdoctoral, graduate and undergraduate singers. We use a state-of-the-art recording studio that provides the highest recording standards.

Since full appreciation of the tune is crucial to the ballad experience, EBBA plans in this stage to expand its music resources by including tune notation transcriptions, a project we call “Minstrel.” Minstrel would display any printed early modern music notation on the ballad sheet alongside a mostly-diplomatic transcription based on current music notation standards. We have found that notation on the ballads often differs from what Simpson gives for the tunes, even once we compensate for Simpson’s frequent re-

rendering of the notation into a different key (see **Appendix 13**). Also, in cases where notation has been described by Simpson as “meaningless” or “nonsense,” that notation will nevertheless be transcribed, since we cannot know for sure whether contemporaries in fact considered such notation nonsense. Perhaps they viewed it as simply ornamental, or as an attractive complement to the new fashion for cheap songbooks, or as something more melodically meaningful. We will also provide notation of the first stanza of ballad recordings for which no notation was printed on the ballads; users experienced in music will be able to compare our transcriptions against Simpson’s standard notation to see just how much adjustment had to be made in applying tune to text (see **Appendix 14**). EBBA’s musicologists working under Stahmer will use Sibelius to create a MIDI transcription of each ballad, which will be serialized as both a binary MIDI file and MIDI XML. These will be displayed by the site as a musical score transcription along with ballad text in a time-synced audio with a visual pointer that follows the musical notes as they are being played (**Appendix 15**). Listeners can thus both visually and aurally follow the tune and text. Such an interactive tool will expand accessibility of ballad tunes for experts and non-experts alike.

Digital Technology: Information Architecture

EBBA was initially developed before the wide-scale implementation of publication platforms such as Wordpress and Drupal, and before the development of archive-specific platforms such as Omeka. As such, the site is delivered using a custom developed PHP platform. Migration to an alternate platform is unnecessary as the current platform remains fully functional and was previously upgraded to run under the most current version of PHP, ensuring a shelf-life that will exceed currently scheduled version rollouts of all widely used community platforms (**Appendix 16** shows planned major platform releases). The development planned for the proposed cycle will, however, take advantage of a variety of disciplinary “best practices” that have emerged over the past eight years in order to ensure the site’s functionality, longevity, and interoperability. EBBA’s underlying information architecture builds upon that developed with EBBA’s fourth NEH grant (2012-2014) and an NEH Digital Start-Up Grant for the development of image recognition software to better catalogue woodcut impressions. EBBA has always utilized a four-pronged Image/Recording/Database (SQL)/XML data storage. 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. Under the aegis of our recent Start-Up award, the infrastructure for an additional, integrated catalogue of individual woodcut impressions was added to this backbone. 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, which creates digital images of various sizes on-the-fly based on user request parameters, eliminates the need for storage of derivative images, and automatically inserts relevant metadata directly into delivered JPEG files in the form of XMP data. Additionally, raw TEI/XML and MARC-XML records for all broadsides in the archive 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 provides editors with a GUI for generating TEI/XML for ballads, eliminating the need for textual editors to have direct knowledge of TEI or XML (**Appendix 17**). 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.

Data: “RESTSql”

A relational MySQL database lies at the core of EBBA’s information architecture. Because the aggregate nature of the broadsides as collections of reusable text, image, music, and ornamentation calls for a cataloguing strategy that is more flexible than the traditional MARC record, and because best practices in data architecture strive towards a separation between data storage and presentation models, EBBA’s

database was designed to be as object-oriented and non-format-specific as possible. The agnostic nature of the data storage facilitates adoption of a variety of industry best practices for information access and exchange, particularly Linked Open Data oriented services. At the data level, each ballad is considered as a collection of sub-objects (text, woodcut impression, tune, etc.), each of which has its own unique entry in the database and is catalogued individually. MARC, TEI, RDF, Web, etc. views are constructed either as associated tables in the database that store a map of relationships (for example, Ballad A is composed of Impressions A and C, Tune G, Textual Unit Z, etc.) or on-the-fly as needed via computational logic, as is the case with our generated MARC records. This allows us to easily present EBBA data in a variety of human and machine-readable forms, thereby providing the best user experience and maximizing EBBA's functionality in a Linked Data ecosystem.

Human Web Gateway: "Screenside"

EBBA was born a full seven years before the release of the world's first smartphone and four years before work commenced on a new hypertext standard that would become HTML5. As such, EBBA's display, interactivity, and functionality do not take advantage of the many advanced features and normalized structures defined in the HTML5 specification. Additionally, the overall design template is not responsive, meaning that it is not actively able to present itself in a manner suitable for multiple display platforms such as smartphones and tablets. The requested funding will allow us to redesign EBBA's human user interface to capitalize on HTML5 interactivity and to provide a responsive design so that users on all platforms can access the archive. This will improve the user experience and ensure the functional longevity of the interface.

Data Analysis and Visualization: "Portal"

With the addition of the rare ballad collections supported by the requested funding, EBBA will contain approximately 88% of extant ballads from both the 16th and 17th centuries. This represents an important and statistically representative sample on which to run various forms of analysis. The application of emerging modes of data analysis would allow scholars of textual, cultural, and material history to ask complex questions, leading to important new discoveries in a variety of disciplines. EBBA will package several configurable statistical analytic techniques to facilitate this type of work. The minimum set of techniques exposed with this funding will include topic modeling, word frequency and association analysis, named entity metadata and extraction network analysis, and regression analysis. In all cases, users will be able to configure data sets and parameters (such as, for example, defining a limited text or metadata set for analysis or defining the comparison factors for regression analysis and word association analysis) using a simple, point and click interface. Finally, results from all analytic functions will be delivered to the users as d3.js visualizations, as web-displayed raw data tables, and finally as downloadable comma separated (.csv) data (**Appendix 18**).

API: "Cyberside"

Increasing interest in the Semantic Web and Linked Data has brought machine readability of data to the forefront of digital thinking. EBBA has always been committed to providing machine gateways to its data, including the enduring publication of queryable MARC output (see UCSB Davidson Library Commitment, **Appendix 20**) and early experiments with a common ballad ontology (IBBA) developed in collaboration with the Bodleian Library as part of a JISC funded initiative. The requested funding will allow EBBA to extend this offering to data specifically formatted for the Linked Data web. EBBA will use an implementation of Apache's Jena/Fuseki triplestore database and server stack to expose EBBA data through a queryable Sparql endpoint. Results will be returned as RDF-Json using the IBBA, RDA, Schema.org, and BIBFRAME namespaces. This will allow connectivity with an extensive set of archival, library, and World Wide Web resources, aggregators, and interfaces.

Preparation and Digitizing of Ballad Images

The ballads will be made available by each library in 600 ppi color TIFF images. The raw TIFF files 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 sheet facsimiles. They 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 library photographer. For the ballad sheet facsimiles, however, we will use Adobe Photoshop to trim away any excess border beyond the ballad sheets themselves and to approximate the appearance of the ballad as it came off the press. To create the facsimile transcriptions, or modern type images, an image team has been trained to use Adobe Photoshop to grayscale and adjust the image, and then cut out the early modern text of each facsimile, replacing 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. Finally, each unique woodcut impression that appears on the sheets will be extracted using Photoshop and saved as its own file for cataloging and inclusion in our Ballad Impression Archive (BIA).

D. Sustainability of Project Outcomes and Digital Content

UCSB's Dean of Humanities and Fine Arts has pledged to sustain EBBA for the next 10 years in the University of California Curation Center's digital archive repository, [Merritt](#). UCSB's endowed Early Modern Center and English Department will then assume responsibility for ensuring EBBA's long-term sustainability either in Merritt or another repository, if a more suitable one develops in the next decade. While EBBA is in development (c. 7-8 years), the archive will furthermore be housed as a fully functioning website in the UCSB English Department on a 12-core high-performance server that delivers 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, virtualized operating system environments, local network, and backups are all managed by the Department's Systems and Network Administrator, Brian Reynolds. After completion, the EBBA website will continue to be housed and maintained on the Department server for as long as is financially feasible, while at the same time being sustained in a suitable institutional repository like Merritt (see UCSB Dean and English Department Commitment Letters, **Appendix 20**). Finally, a static version of the website will be permanently preserved through the University of California's web archive collaboration with the Internet Archive.

E. Dissemination

The goal of an expanded EBBA is to provide easy and free access to the images, texts, songs, citation information, and subject matter of English broadside ballads leading up to, including, and immediately following the printed ballad heyday of the 17th century. All the libraries in the current proposal have granted EBBA digital permissions; no password or other restrictions need impede access to the site.

UCSB Faculty, graduate students, and postdocs as well as those now in tenure-track positions elsewhere actively promote EBBA in talks, publications, courses, and popular media (see **Appendix 3e-f**). We are proud to have published a second volume, edited by Fumerton, consisting of critical essays together with a representative sampling of Pepys facsimile transcriptions. A third book-length collection of essays is forthcoming in *The Huntington Library Quarterly*, and a fourth book on the practical experience of making a broadside ballad and the ways it changes our understanding of the ballad as cultural artifact is forthcoming as an e-book, edited by Drs. Fumerton, Stahmer, and Andrew Griffin, in the new innovative

press, [The EMC Imprint](#). In the spring of 2014, we held a large, international conference at the Huntington Library. The NEH is always acknowledged in these promotions. A Google search of “EBBA” or “broadside ballads” brings up our website among the top two entries. As our Letters of Support testify, we have achieved broad acclaim (**Appendix 21**). We expect recognition will continue to grow as the content and features of EBBA expand. Finally, we will announce the NEH grant and EBBA’s expansion via media outlets across the world.

F. Work Plan

EBBA’s plan of work is based on its extensive experience with cataloguing ballads; creating album and ballad sheet facsimiles; transcribing them; making facsimile transcriptions; and finding, learning, and recording authentic tunes. 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 dates and names of authors, printers, and publishers of the period and access to available ESTC catalogue entries, in consultation with Dr. Geiger); 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; 40 minutes to create a facsimile transcription of a ballad; 2.5 hours to research and record a ballad song; 30 minutes per ballad to catalogue the woodcut impressions; and a year for Stahmer working 10% time directing transcription of the printed or recorded music notation (20-30 minutes per ballad) as well as 2 RAs at UC Davis each working 10 hours a week to redesign EBBA’s infrastructure and interface.

Summer 2016:

- Palmer-Browne works 50% time leading a team of 9 graduate student RAs working 52.9% time on digital imaging and cataloguing. Palmer-Browne also collaborates with Stahmer on responsive design.
- Bennet works 26.7% time researching available tunes for the ballads and inputting each ballad’s tune and standard tune title into database designed by Stahmer.
- co-ordinating with Stahmer, Bell spends 44% time on notation transcriptions from existing recordings.
- Stahmer works 10% time on “Minstrel” and finalizing analytic services to be implemented and modeling user configuration interfaces and visualization strategies as well as collaborating with Palmer-Browne on wireframing of responsive design. Stahmer also identifies and hires undergrad programmers.
- Lead ballad singer (TBD) works 3.5% time recording ballads.

September 2016 - March 2017:

- Citations for new collections completed and Pepys ballads re-mounted online with color album and ballad sheet facsimiles.
- Palmer-Browne works 50% time leading 1 graduate student GSR working 50% time and 8 graduate student RAs each working 10% time on transcribing and checking ballads; Palmer-Browne and Fumerton also lead undergraduate independent studies on creating facsimile transcriptions.
- Bennet works 26.7% time researching and cataloguing available tunes in consultation with Stahmer.
- Bell works 44% leading a team of 2 graduate student RAs each working 10% time and 2 undergraduate interns on cutting out notation from ballad sheet facsimiles and creating modern notations.
- Lead ballad singer (TBD) works 3.5% time recording ballads.
- Stahmer works 10% time overseeing student programmer coding of analysis engines and coordinating work by Bennet/Bell on “Minstrel.”

April 2017 - June 2017

- Transcribing ballads completed; making facsimile transcriptions and recording ballad tunes continued at the same relative pace.
- Fumerton teaches grad course on the new collections; essays generated are mounted in EBBA; curators of each library also provide provenance essays.
- Palmer-Browne works 50% time leading 1 graduate student GSR working 50% time and 7 graduate student RAs each working 10% time on making facsimile transcriptions.
- Bennet works 26.7% time researching and cataloguing available tunes in consultation with Stahmer.

- co-ordinating with Stahmer, Bell works 44% time overseeing recordings and transcriptions.
- Lead ballad singer works 3.5% time recording ballads.
- Stahmer works 10% time overseeing student programmer coding of analysis engines and “Minstrel.”

Summer 2017:

- Palmer-Browne works 50% time leading a team of 6 graduate student RAs who each work 53% time on making facsimile transcriptions; X-Ballading; and cataloguing woodcut impressions.
- Bennet works 26.7% time researching and cataloguing available tunes in consultation with Stahmer.
- co-ordinating with Stahmer, Bell works 44% time supervising 3 graduate student RAs who work 53% time on recording ballad tunes and making tune notation transcriptions.
- Lead ballad singer works 3.5% time recording ballads.
- Stahmer works 10% time overseeing student programmer work implementing responsive design and developing musical transcription/recording functionality for “Minstrel.”

September 2017 - June 2018:

- Completion of all facsimile transcriptions, recordings, music notations, music file editing, X-ballading, and cataloguing of impressions.
- Stahmer works 10% time overseeing student programmer work implementing visualization and musical transcription functionality for “Minstrel” in website and implementing Apache/Jena Sparql endpoint.
- Libraries delivered facsimile album pages and citation information to mount on their own websites.
- ESTC is delivered MARC records of all new citations and ESTC creates links to new EBBA images.
- Announcement on UCSB and international websites of newly expanded EBBA.

Subsequent to this NEH Grant

July 2018 - June 2020:

Full archiving of smaller collections at the British Library, including Huth and Bagford (c. 1,625 items).

July 2020 - June 2022:

Inclusion of small collections of ballads at libraries in UK and across the US (approximately 850 items).

G. Staff (for full resumes, see Appendix 19; for Advisory Board Members, see “participants”)

Director of Project: Patricia Fumerton

Fumerton is Professor of Renaissance English Literature and Culture, founder of the UCSB English Department’s Early Modern Center, and much-published expert on 17th-century broadside ballads. She will be responsible for final editorial control of EBBA. She will work 20% time on the project during the academic years and 34.5% and 50% time, respectively, for the 2 months of each summer on the project.

Associate Director and Technical Specialist: Carl Stahmer

Stahmer holds a PhD in English from UCSB in digital humanities and is Director of Digital Scholarship at the UC Davis Library. He is also technical consultant to the Advanced Research Consortium (ARC) and to the ESTC. Stahmer will work 10% time on EBBA during the grant.

Assistant Director: Megan Palmer-Browne

Palmer-Browne holds a PhD in English from UCSB, and has worked on EBBA since 2007. She has assisted in developing cataloging keywords, image processing procedures, woodcut cataloguing keywords, and transcription rules. She will work 50% time on EBBA during the grant.

Music Specialist (Tune Research): Caroline Bennet

Caroline Bennet has an MA in Ethnomusicology from UCSB and has been the lead in researching EBBA tunes as well as working on recording them, since 2010. She will devote 26.7% time during the grant.

Music Specialist (Singing/Notation): Erik Bell

Erik Bell has an MA in Music Theory from UCSB and has been lead singer and recorder of EBBA tunes since 2012. Expert as well in transcribing music notation, he will work 44% time during the grant.

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.