Crowdsourcing Bentham: beyond the traditional boundaries of academic history

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Abstract:

The *Bentham Papers Transcription Initiative*[1,2] (*Transcribe Bentham* for short) is an award-winning crowdsourced manuscript transcription initiative which engages students, researchers, and the general public with the thought and life of the philosopher and reformer, Jeremy Bentham (1748–1832), by making available digital images of his manuscripts for anyone, anywhere in the world, to transcribe. Since its launch in September 2010, over 2.6 million words have been transcribed by volunteers. This paper will examine *Transcribe Bentham*'s contribution to humanities research and the burgeoning field of digital humanities. It will then discuss the potential for the project's volunteers to make significant new discoveries among the vast Bentham Papers collection, and examine several examples of interesting material transcribed by volunteers thus far. We demonstrate here that a crowd-sourced initiative such as Transcribe Bentham can open up activities that were traditionally viewed as academic endeavors to a wider audience interested in history, whilst uncovering new, important historical primary source material. In addition, we see this as a switch in focus for those involved in digital humanities, highlighting the possibilities in using online and social media technologies for user engagement and participation in cultural heritage.

1. Introduction: Crowdsourcing and the *Transcribe Bentham*

In recent years, there has been a movement in the cultural and heritage industries to trial crowdsourcing (the harnessing of online activities and behaviour to aid in large-scale ventures such as tagging, commenting, rating, reviewing, text correcting, and the creation and uploading of content in a methodical, task-based fashion)[3] to improve the quality of, and widen access to, online collections. A number of projects have harnessed public enthusiasm for contributing to cultural heritage, such as the National Library of Australia's *Trove*,[4] which successfully recruited legions of amateur and family historians to correct the OCR text of digitised newspapers, and Ancestry.com's *World Archives Project*,[5] which encouraged genealogists to transcribe name indexes. Building on this, there have been attempts to crowdsource a more complex task traditionally assumed to be carried out by academics: the accurate transcription of manuscript material. *Scripto*, developed by the Center for History and New Media at George Mason University,[6] and *T-Pen* from Saint Louis University,[7] are only two of a number of open-source tools currently in development which aim to facilitate manuscript transcription. No projects, however, have tested the feasibility and practicalities of crowdsourcing manuscript transcription within an academic context, or examined its impact on scholarly editing. *Transcribe Bentham* was begun to establish whether crowdsourcing can be used successfully for both scholarly work and for widening public access to manuscripts, whilst also hoping that it would contribute to the transcription of a particular set of historical manuscripts.[8]

Transcribe Bentham is co-ordinated by University College London's (UCL) Bentham Project,[9] in partnership with UCL Centre for Digital Humanities,[10] UCL Library Services,[11] UCL Learning and Media Services, the University of London Computer Centre (ULCC),[12] and 'the crowd'. It was initially funded under a twelve-month grant from the Arts and

Humanities Research Council's (AHRC) Digital Equipment and Database Enhancement for Impact scheme (DEDEFI),[13] and launched to the public in September 2010. Since 1 October 2012, for two years, *Transcribe Bentham* is funded by the Andrew W. Mellon Foundation, and the British Library has joined the project consortium. The initiative intends to engage students, researchers, and the general public with the thought and life of the philosopher and reformer, Jeremy Bentham (1748–1832), by making available digital images of his manuscripts for anyone, anywhere, to access and transcribe.

Bentham's works had a profound historical impact and are still of major contemporary significance. In ethics, Bentham was founder of the modern doctrine of utilitarianism—that the right and proper end of all action is the promotion of the greatest happiness. Bentham's so-called 'felicific calculus' is the inspiration for cost-benefit analysis, while his 'Nonsense upon Stilts' is a hugely important critique of the doctrine of natural rights (forerunning the modern conception of human rights).[14] Bentham detailed a systematic theory of punishment which emphasised deterrence, proportionality, and the reformation of the offender.[15] His writings on the early history of New South Wales—written around 1802 to 1804—were devastating critiques of the practice of transporting convicts to Australia: the ideas they contained proved highly influential in the decision to abandon transportation in 1840.[16] Bentham advocated female suffrage,[17] was a major theorist of representative democracy,[18] and proposed an international court of arbitration to promote peace between nations.[19] However, Bentham is perhaps best known for two things: his proposed panopticon prison, or at least Michel Foucault's interpretation thereof;[20] and for requesting that his body be preserved as an 'auto-icon' after his death. Bentham's wishes were carried out, and his dressed skeleton is on public display, seated in a wooden box at UCL.[21]

The Bentham Project was founded in 1959 to produce a new, critical edition of *The Collected Works of Jeremy Bentham*, based both on Bentham's published works and

unpublished manuscripts; UCL Library's Special Collections holds some 60,000 manuscript folios (c. thirty million words), and the British Library a further 12,500 (c. six million words). Thus far, twenty-nine volumes of the *Collected Works* have been published,[22] and a total of around 26,000 manuscript folios have been transcribed. Prior to the public launch of *Transcribe Bentham*, the majority of the Bentham Papers, comprising a resource of enormous historical and philosophical importance, were therefore un-transcribed and their contents largely unknown, rendering our understanding of Bentham's thought—together with its historical significance and continuing philosophical importance—at best provisional, and at worst a caricature.[23]

Transcribe Bentham allows students, researchers, scholars and the general public alike to help explore and widen access to this material. At the heart of the project is a collaborative transcription platform, based on a customised MediaWiki.[24] Volunteers are presented with a high-quality digital image of a Bentham manuscript, and a plain-text box into which they type their transcript. Transcribers are also asked to encode their work in Text-Encoding Initiative (TEI)[25]-compliant Extensible Mark-up language (XML), but rather than requiring that volunteers learn mark-up, they can instead use a bespoke 'transcription toolbar' which adds the relevant tags to sections of, and places in, the text. Volunteer-produced transcripts of the required standard—i.e. those which, after being submitted to project staff for checking of textual accuracy and encoding consistency,[26] are considered complete—have two purposes. First, transcripts are uploaded to UCL's digital Bentham Papers repository[27] and linked to the relevant manuscript image. Access to the repository for study and research is free. The repository also greatly increases the speed at which others can be given access to transcribed material, and encoded transcripts allows the Bentham Project to electronically publish preliminary texts of Bentham's works, as has been done recently with the controversial

unpublished third volume of Bentham's work on religion and sexual morality, *Not Paul, But Jesus*.[28]

Second, the transcripts will also make a valuable contribution to research. Bentham Project editors will be given a head-start in producing *Collected Works* volumes by the availability of draft transcripts, and since volunteers frequently transcribe manuscripts which have not been read since Bentham composed them, they can potentially make new discoveries (see section 4). In this sense, *Transcribe Bentham* is a collaboration between a 'traditional' scholarly editorial project, historians, digital humanists, library professionals, digital curators, and experts in digitisation, with the project's success reliant upon volunteers who have given—and continue to give—their valuable time and effort to benefit others.

This paper will examine *Transcribe Bentham*'s contribution to humanities research and the burgeoning field of digital humanities. It will then discuss the potential for the project's volunteers to make significant new discoveries among the vast Bentham Papers collection, and examine several examples of interesting material transcribed by volunteers thus far.

2. Progress

As of 15 March 2013, 2,454 users had registered an account with *Transcribe Bentham* (Figure 1).[29] Volunteers have transcribed or partially-transcribed a total of 5,243 manuscripts, 4,975 (94%) of which were deemed to be of the requisite standard for uploading to UCL's digital repository.[30] Since the project began, volunteers have worked on an average of 40 manuscripts per week, though from 31 December 2011 to 15 March 2013, this has increased to 45 per week (Figure 2). Volunteers are currently working on an average of 2,340 manuscripts per year, whereas a full-time member of staff might be expected to produce around 2,000 transcripts each year, on the basis that he or she could transcribe ten manuscripts per day.[31] Volunteers have carried out a vast amount of work, the true volume of

which is perhaps obscured by an exclusive focus on the number of manuscripts on which work has been started: volunteers have transcribed—so far—an estimated 2.7 million words, including the extensive mark-up.

[Figure 1: User accounts registered, manuscripts worked on, and completed transcripts, 8 September 2010 to 15 March 2013.[32]]

[Figure 2: rate of transcription, 8 Sept 2010 to 15 March 2013.]

It is worth noting that, like other crowdsourcing projects, the majority of the work in *Transcribe Bentham* has been carried out by a minority of users.[33] Only 369 (fifteen per cent) of the 2,454 registered users have transcribed anything, and almost two-thirds of those who have have worked on only one manuscript (Table 1). The overwhelming bulk of the transcription has been done by fifteen 'Super Transcribers', who comprise the strong core of *Transcribe Bentham*, and whose work generally requires minimal editorial intervention (Figure 3).[34] These volunteers are highly motivated, but such heavy reliance upon them puts *Transcribe Bentham* in a potentially precarious situation: if even one of the currently participating 'Super Transcribers' ceases participation, then the rate of transcription will reduce noticeably. Furthermore, though their work rate is prodigious, 'Super Transcribers' comprise only a tiny portion of those registered with *Transcribe Bentham*, and the fact remains that eighty per cent of all those registered with the project were not motivated to transcribe anything at all. That the overall rate of participation is low suggests that many were overwhelmed and found the task rather daunting, and that improvements must be made to the transcription interface before volunteer recruitment and retention will increase.[35]

[Table 1: Number of manuscripts worked on by volunteers, 8 September 2010 to 15 March 2013.]

[Figure 3: Contributions of *Transcribe Bentham*'s 'Super Transcribers', as of 15 March 2013.]

3. Transcribe Bentham **and Digital Humanities**

The media-wiki plugins developed for *Transcribe Bentham* are of particular interest to the digital humanities community for a number of reasons. Firstly, it was important for us to embed in our project best-practice understanding of how to mark-up and deliver electronic texts, and therefore we decided to encourage TEI-compliant XML encoding via the transcription toolbar.[36] In part, it was an experiment to assess how TEI mark-up would be greeted beyond the usual user community: although we deliberately did not stress that encoding of transcripts was compulsory, the level of uptake by volunteers has been good, with most super-transcribers mastering the tag-set. *Transcribe Bentham* has, to an extent, demonstrated that volunteer labour can be used to undertake the type of detailed mark-up tasks generally perceived to be the preserve of those trained in XML and TEI.

It was always our intention to make the *Transcribe Bentham* code available to others, and the MediaWiki plug-ins developed by the project have been made freely available.[37] Staff from ULCC have since worked with representatives from the Public Record Office of Victoria, Melbourne,[38] and we were delighted to see a customised version of the *Transcribe Bentham* software adapted for their pilot transcription project.[39] Code reuse in the Digital Humanities is still extremely rare, and—as other institutions are also exploring and testing the software—the impact of *Transcribe Bentham* is not necessarily limited to Bentham manuscripts, but to other collections, demonstrating the strength of the crowd-sourcing approach to transcribing manuscripts. We hope that an upgraded version of the Transcription

Desk software, produced under funding from the Mellon Foundation and now also available for reuse and customisation, will prove even more attractive to other institutions.[40]

Finally, *Transcribe Bentham*, can also be seen as a public engagement and outreach project (whilst so many digital projects are designed for a niche scholarly audience, *Transcribe Bentham* was designed to engage with as wide an audience as possible), demonstrating the interest in, and use of, digital tools to further and assist humanities scholarship. There is a growing movement within the digital humanities field to develop tools and techniques which spread the traditionally time-intensive task of reading handwritten materials across a volunteer pool: *Transcribe Bentham* is only one of a range of projects such as *Scripto*, *T-Pen*, *Old Weather*,[41] and *From the Page*.[42] These projects demonstrate that harnessing internet technologies can allow as wide an audience as possible to interact with, and contribute to, the understanding of primary source material.

4. New discoveries

Much of the Bentham collection has yet to be fully—or even adequately—explored, and since volunteers in many instances transcribe manuscripts which have not been read since Bentham wrote them, there is potential for *Transcribe Bentham* participants to make significant and interesting discoveries. New strands of Bentham's thought, or alterations of current understandings of his position on various issues will most likely only come to light after time is taken to compile manuscripts into works (or parts of works), and after they are edited into coherent and structured texts: a task dependent on identification and transcription of all relevant manuscripts for a particular work.[43]

For example, Dr Michael Quinn of the Bentham Project is currently editing Bentham's writings on political economy, and whilst the transcription for the first two volumes was almost complete before the launch of *Transcribe Bentham*, the prospect of building on the

work of volunteer transcribers in the attempt to reconstitute a complete text of 'A Tract Intituled [sic] Circulating Annuities', which has never before been published, is as exciting as it is challenging. Bentham spent almost twelve months planning, drafting, and revising this major work, before deciding to provide a précis of his text in a work entitled 'Abstract or Compressed View of a Tract intituled [sic] Circulating Annuities'. [44] If the mass of substantive and illustrative material provided by the recent publication of the full text of 'Pauper Management Improved' is compared with the truncated 'Outline' of that work which Bentham himself published, [45] there is reason to be optimistic that the publication of an unexpurgated text of Bentham's Annuity Note scheme will present an exciting resource to scholars and historians of economic thought alike. The work of *Transcribe Bentham* volunteers will significantly expedite work on this material, and thus contribute to its first publication. [46]

In other areas of interest, a number of interesting items have already been identified through crowdsourced transcription, detailed below.

4.1. The treatment of animals

Bentham is regarded as a hero to the animal rights movement: activists often aprovingly quote Bentham as having said—in the context of establishing the rights of a living being— 'the question is not: Can they *reason*? nor, Can they *talk*? but, Can they *suffer*?' [47] Though this is frequently adopted as a slogan, it is in fact a partial quotation which does not necessarily represent Bentham's true position. The fuller remark makes it clear that Bentham believed that killing animals for food is perfectly acceptable, since they 'have none of those long-protracted anticipations of future misery that we [humans] have', but he did maintain that their deaths should be made as painless as possible, and that tormenting animals should be forbidden. [48] Bentham was, therefore, not against the infliction of pain on animals *per se*,

but the infliction of useless pain, in much the same way as he would balance the effects of any pain-inflicting act by considering any corresponding pleasures to which it might give rise.

Volunteers have transcribed a number of manuscripts which contextualise and support these views. Firstly, volunteer Diane Folan transcribed a recollection from Bentham's childhood (Figure 4), which though mentioned in the nineteenth century edition of his works, was not expanded upon by the editor.[49] Writing at some point between 1774 and 1780, Bentham recalled how, at the age of four or five:

> I took it into my head to amuse myself with putting ear-wigs in the candle. I had no malice to the ear-wigs (poor insects): for my disgust at them if I had conceived any would have led me rather to have avoided them than to have handled them in that matter. But the writhings of their bodies, added to the little explosions made by the moisture of their juices composed a scene which amused my curiosity.[50]

One of the family's servants—'Martha', according to Bentham's biographer—noticed what the young Jeremy was doing, and:

> asked me [for] what I thought the ear-wigs must suffer, and what I could have to say [for myself if any one that was stronger than I should] serve me in the same manner. I was struck with remorse. I looked back upon the deed with horror: and from that time I have been nearly as attentive to the feelings of the brute part of the creation as of the human.[51]

This manuscript provides valuable anecdotal detail about Bentham's childhood, and complements what is already known about his views on how animals should be treated.

[Figure 4: JB/027/026/004, displayed in UCL's Bentham Papers digital repository.]

In manuscripts composed between 1776 and 1786, Bentham wrote extensively on the penal code and attempted to define and set out punishments for a variety of offences. A handful of unpublished manuscripts relate to cruelty to animals, which Bentham described as a state of affairs in which as if 'any person is wantonly instrumental in hurting or worrying an animal'.[52] Bentham clearly states that an 'act is to be deemed wanton when performed deliberately for the sake of seeing the animal suffer and not for any useful purpose'. 'Useful purposes', which could justify the infliction of suffering or 'chastisement', included: 'making the animal subservient to the conveniences of man in the way of food, physic, cloathing [sic], conveyance or manufacture'; preventing injury to a person; and making 'experiment to promote medical of other useful knowledge'.[53]

In two manuscripts transcribed by volunteers Peter Hollis and Simon Shields, Bentham also suggested that 'restraining men from exercising cruelty on inferior animals is of use on three accounts':

> 1. For the offender's own sake … to prevent their giving way to habits of cruelty or insensibility, which where indulged are apt to lead men into the worst of crimes. He who has no feeling for brutes, will have but little for his fellow creatures.
>
> In this point of view, an act of direct legislation against cruelty to animals is an act of direct legislation against Personal Injuries, Murder and Incendiarism; and in short against all crimes which have malice for their source.
>
> […]

2. For the sake of other men … a considerable mischief is sometimes done by cats and other domestic animals when worried by the cruelty of children; mischief but more particularly in large towns,[54] by horned cattle driven to madness by the cruelty of their drivers.

3. For the sake of the animals themselves … To a benevolent mind misery, let it be found where it willcan never be an object of indifference. What reason can man give why he should be permitted to hurt other animals except that it is out of their power to prevent it. If there be any arguments by which man can be justified in being[55]

Here is further evidence that Bentham believed that the infliction of 'wanton' pain upon animals should be considered a punishable offence: such action harms the animal itself, hardens the individual to cruelty, and could cause mischief to the community. *Transcribe Bentham* volunteers are, therefore, helping to clarify further what is known about Bentham's position vis-à-vis the treatment of animals.

4.2. Bentham, the Panopticon prison, convict transportation, and early New South Wales

A large collection of manuscripts uploaded to *Transcribe Bentham* in April 2012 relate to Bentham's writings, dating from 1802 to 1804, on the early history of New South Wales, convict transportation, the panopticon prison, and penal policy.[56] This material consists of notes collated by Bentham, earlier and partial drafts of published works, and a great deal of unpublished material.

Bentham was one of the earliest and most influential critics of convict transportation to Australia, a practice which began in 1788 and ended in 1868. During this eighty year period,

an estimated 160,000 men, women and children were transported to New South Wales, Van Diemen's Land (renamed Tasmania in 1856), Norfolk Island, and Western Australia.[57] Bentham's antipathy to transportation is in part traceable to his belief that the government's favouring of transportation had thwarted the construction of his panopticon penitentiary, the 'simple idea in Architecture' which—Bentham argued—would have solved at a stroke all trouble in managing criminals.[58] Bentham invested a great deal of money, energy and time in the panopticon scheme, which he believed had all been wasted owing to the perfidy of the British government; 'they have murdered my best days', he complained.[59]

Bentham's bitterness and frustration at having his protests ignored is evident in one unpublished, volunteer-transcribed manuscript, in which he bemoaned in June 1802 that '[t]he more evident it became that the conduct of men in power in my instance was indefensible the more decided were they not to hear of it [Bentham's complaints]'.[60] This discovery from *Transcribe Bentham* may add to the debate over the precise period at which Bentham developed the idea of 'sinister interests'—that legislators did not necessarily act in the best interests of those they ruled—and the timing of his conversion into a political radical, convinced of the need for a representative parliament with universal adult suffrage. The manuscript appears to support Philip Schofield's contention that it was 'the panopticon experience which began to convince him [Bentham] that nothing worthwhile could be achieved through the existing political structure in Britain'.[61]

The first of two published works in which Bentham criticised transportation was *Panopticon versus New South Wales* (1802), which takes the form of two open letters to the then Home Secretary, Lord Pelham. Volunteer transcribers have made a potentially very exciting discovery: there is, in fact, a third, unpublished letter which has never before been identified in the literature, and the re-unification of the complete work will further expand our understanding of Bentham's thought on this issue.[62]

Panopticon versus New South Wales is an angry condemnation of transportation, a punishment Bentham considered to be utterly useless. He argued that it offended the principle of effective and proportionate punishment, as convicts given varying sentences of transportation would, essentially, all be deported from Britain for life. Transportation was uncertain, as no-one could determine for sure how much (or how little) pain would be inflicted, while the individual convict's crime mattered little in his treatment: a vicious but skilled convict might be assigned to an indulgent master and be well-treated, while a much less dangerous but unskilled one-time thief could languish on public farms or at a penal settlement. Furthermore, transportation was not only a poor deterrent as the punishment occurred out of sight of the general population, but did nothing to reform those so punished. Finally, the society created in New South Wales by the 'excrementitious mass' sent there was immoral, and would be a burden on the mother country for years to come. Set against this picture of Antipodean perversity was Bentham's efficient, cheap, orderly and reformative panopticon. *Panopticon versus New South Wales* had little immediate impact, but the arguments it contained proved to be more influential after Bentham's death, and they were rehearsed in great detail by those campaigning for the abolition of transportation to New South Wales during the 1830s.[63] However, *Panopticon versus New South Wales* must be read with some caution, as it is an extremely tendentious work in which Bentham's use of evidence can be constantly called into question.[64]

Bentham extended his attack on transportation and the British government in a second, lesser-known work entitled *A Plea for the Constitution*, written in 1802–03 but not published until 1812 because of its potentially incendiary contents.[65] Amongst other things, Bentham argued in the *Plea* that the governors of early New South Wales had no authority from parliament to make binding local regulations, and that they, therefore, could neither make such rules, nor punish those who transgressed against them (and any punishments already

inflicted were illegal). Bentham realised that this was a dangerous argument, telling his brother Samuel that '[o]f the publication of these discoveries a natural consequence would be the setting of the whole Colony in a flame'.[66] Though Bentham suppressed the *Plea*, there is evidence that a copy did reach New South Wales, and that his arguments may well have influenced those who deposed Governor William Bligh in the bloodless 'Rum Rebellion' of January 1808.[67]

In an unpublished manuscript discovered and transcribed by volunteer Lea Stern, Bentham discussed the offences committed against the British constitution in New South Wales, and the 'tyranny' which had been 'so happily planted' in the colony:

> Against such dominion, established as it is, "<u>insurrection</u>" may surely be said to be a <u>right</u>, if not as some would add, "a <u>duty</u>." <u>Insurrection</u>, <u>conspiracy</u>, <u>treason</u>, every thing of that sort is accordingly "compassed and imagined": <u>treason</u>, not precisely against the constitution indeed, but unquestionably against the despotism so lately built upon the ruins of it.[68]

Here, Bentham essentially offers a justification for violent insurrection against the Governor of New South Wales. The *Plea* was strident enough in tone as it was, and Bentham was certainly counselled against publishing it by his friends:

> the more I read of [the *Plea*],' wrote Charles Bunbury MP on 6 June 1803, 'the more desirous I am that it should *not* be published; It will bring upon you Enemies irreconcileable, and procure you Friends only amongst the Malefactors of New South Wales. It's [sic] ingenuity, and Acuteness render it more objectionable, for the sharper the Knife, the Deeper the Wound.[69]

Bentham clearly thought better of publishing such an openly seditious argument, and left it out of the final version of the *Plea*.

Work by volunteers will ensure that *Transcribe Bentham* assists scholars in recovering complete versions of both *Panopticon versus New South Wales*, and *A Plea for the Constitution*, and contribute to understanding of Bentham's thinking on convict transportation, colonies, law, and his thwarted panopticon scheme. It will also assist in helping to trace the impact of Bentham's thought and its influence—which is perhaps underestimated—on later critiques of transportation.

5. Conclusion

This paper has demonstrated that not only has *Transcribe Bentham* used digital means to successfully open up the activity of scholarly transcription to a wide, online audience, but it has uncovered material which is contributing to our knowledge of Bentham, and wider historical and philosophical debates and discussions. As more material is transcribed by volunteers, our knowledge will grow, as will the mass of Bentham texts now being made immediately available through UCL Library's digital repository to scholars worldwide. This voluntary transcription initiative will inform the new volumes of the *Collected Works of Jeremy Bentham*, indicating the scholarly contribution that crowdsourced effort can make.

Transcribe Bentham is indicative of a new focus in digital humanities scholarship: reaching out to encourage user participation and engagement, whilst providing tools which can be repurposed for others. It is now our aim to maintain the trajectory we have set, demonstrating the applicability of crowdsourcing approaches to bona-fide scholarship in the humanities, whilst encouraging volunteers to aid us in transcribing a fascinating body of historical documents.

[1] We are grateful to those who have worked on *Transcribe Bentham* for their contribution to the project upon which this paper is based, including: Philip Schofield, Justin Tonra, Valerie Wallace, Martin Moyle, Tony Slade,Richard Davis and José Martin. Philip Schofield and Michael Quinn offered many helpful comments on an earlier draft of this paper, and particular thanks are owed to Michael Quinn for information about how the work of volunteer transcribers will assist his work in editing Bentham's writings on political economy. We are grateful to the Arts and Humanities Research Council, under whose auspices Transcribe Bentham was launched, and to the continuing support of the Andrew W. Mellon Foundation.

[2] *Transcribe Bentham* project, http://blogs.ucl.ac.uk/transcribe-bentham, last accessed 10 November 2012.

[3] R. Holley, 'Crowdsourcing: How and Why Should Libraries Do It?**',** *D-Lib Magazine*, vol. 16, 2010, http://www.dlib.org/dlib/march10/holley/03holley.html.

[4] *Trove*: http://trove.nla.gov.au/newspaper, last accessed 3 August 2012.

[5] *World Archives Project*: http://community.ancestry.com/wap/download.aspx, last accessed 3 August 2012.

[6] *Scripto, a Community Transcription Tool*: http://scripto.org/, last accessed 3 August 2012.

[7] *T-PEN: A Transcription Tool for Digital Humanities*: http://digital-editor.blogspot.com/, last accessed 3 August 2012.

[8] T. Causer, J. Tonra and V. Wallace, 'Transcription maximized; expense minimized? Crowdsourcing and editing The Collected Works of Jeremy Bentham', *Literary and Linguistic Computing* 27 (2012), 119–137.

[9] *UCL Bentham Project*, http://www.ucl.ac.uk/bentham-project, last accessed 10 May 2012.

[10] *UCL Centre for Digital Humanities*, http://www.ucl.ac.uk/dh, last accessed 10 May 2012.

[11] *UCL Library Services*, http://www.ucl.ac.uk/library, last accessed 10 May 2012.

[12] *University of London Computer Centre*, http://www.ulcc.ac.uk, last accessed 10 May 2012.

[13]*Arts and Humanities Research Council's DEDEFI scheme*, http://www.ahrc.ac.uk/FundingOpportunities/Pages/dedefi.aspx, last accessed 10 May 2012.

[14] J. Bentham, *Rights, Representation and Reform: Nonsense Upon Stilts and Other Writings on the French Revolution*, ed. P. Schofield, C. Pease-Watkin and C. Blamires (Oxford: Oxford University Press 2002).

[15] J. Bentham, *An Introduction to the Principles of Morals and Legislation* (hereafter *IPML*), ed. J. H. Burns and H. L. A. Hart, and intro. F. Rosen (Oxford, 1996), 125–279; J. Bentham, *Théorie des Peines et des Récompenses*, ed. E. Dumont, 2 vols (London, 1811); and J. Bentham, *The Rationale of Punishment*, ed. R. Smith (London, 1830). For the difficulties in assessing Bentham's theory of punishment, see H. Bedau,

'Bentham's Theory of Punishment: Origin and Content', *Journal of Bentham Studies* 7 (2004) http://discovery.ucl.ac.uk/1323719/.

[16] J. Bentham, 'Panopticon versus New South Wales', and 'A Plea for the Constitution', in J. Bowring, ed., *The Works of Jeremy Bentham*, 11 vols (Edinburgh, 1838–43) (Henceforth '*Bowring*'), iv. 173–248, and 249–85.

[17] M. Williford, 'Bentham on the Rights of Women', *Journal of the History of Ideas* 36 (1975), 167–76.

[18] J. Bentham, *Constitutional Code, Vol. 1*, ed. F. Rosen and J. H. Burns (Oxford: Oxford University Press 1983).

[19] J. Bentham, 'Principles of International Law, Essay IV: A Plan for an Universal and Perpetual Peace', in *Bowring*, ii. 545–60.

[20] J. Bentham, 'Panopticon; or, the Inspection-House' in *Bowring*, iv. 37–172. See also M. Foucault, *Discipline and Punish: The Birth of the Prison*, transl. A. Sheridan (London, 1977). First published as *Surveiller et Punir: Naissance de la Prison*.

[21] Bentham's Auto-Icon, http://www.ucl.ac.uk/Bentham-Project/who/autoicon, and the 'Virtual Auto-Icon', http://www.ucl.ac.uk/Bentham-Project/who/autoicon/Virtual_Auto_Icon, last accessed 24 May 2012.

[22] The most recently published volume is *On the Liberty of the Press, and Public Discussion, and Other Legal and Political Writings for Spain and Portugal*, ed. C. Pease-Watkin and P. Schofield (Oxford: Oxford University Press 2012). Another volume is in submission: *On Sexual Irregularities: Writings on Religion and Sexual Morality*, ed. P. Schofield, C. Pease-Watkin and M. Quinn.

[23] For a discussion of the development of *Transcribe Bentham*, see Causer, Tonra and Wallace, 'Transcription maximized'.

[24] Mediawiki: http://www.mediawiki.org/wiki/MediaWiki, last accessed 3 August 2012.

[25] Text Encoding Initiative: http://www.tei-c.org/index.xml, last accessed 3 August 2012.

[26] For the quality-control process, see Causer, Tonra and Wallace, 'Transcription Maximized?', 128–30.

[27] UCL's Bentham Papers digital repository: http://www.ucl.ac.uk/library/bentham, last accessed 10 May 2012.

[28] See http://www.ucl.ac.uk/Bentham-Project/publications/npbj/npbj.html, last accessed 7 May 2013.

[29] Discounting project staff and 448 blocked spam accounts.

[30] For a discussion of the recruitment of *Transcribe Bentham* volunteers, see T. Causer and V. Wallace, 'Building a Volunteer Community: Results and Findings from *Transcribe Bentham*', *Digital Humanities Quarterly* 6 (2012), http://www.digitalhumanities.org/dhq/vol/6/2/000125/000125.html.

[31] There is, admittedly, some imprecision in this estimate, as Bentham manuscripts differ greatly in terms of length, complexity, and legibility. See T. Causer and M. Terras, '"Many hands make light work. Many hands make merry work": *Transcribe Bentham* and crowdsourcing manuscript transcription', in Mia Ridge, ed., *Crowdsourcing Our Cultural Heritage* (forthcoming).

[32] The gaps in the number of user accounts registered and transcripts completed are owing to vacation periods. The rate of transcription in January 2011 increased dramatically owing to the publication of a feature on *Transcribe Bentham* in the *New York Times*. For the impact of this and other media coverage, see Causer, Tonra and Wallace, 'Transcription Maximized', and Causer and Wallace, 'Building a volunteer community'.

[33] See, for example, Holley, 'Crowdsourcing: How and Why Should Libraries Do it?', section 4.

[34] For 'Super Transcribers', see Causer and Wallace, 'Building a Volunteer Community', and Causer and Terras, 'Many Hands'.

[35] See Causer, Tonra and Wallace, 'Transcription Maximized', 127, 130–33, and Causer and Wallace, 'Building a Volunteer Community', for factors which may have limited participation, and potential ways of improving the transcription interface.

[36] *Text-Encoding Initative*: http://www.tei-c.org/index.xml, last accessed 15 June 2012.

[37] *Code for Transcribe Bentham MediaWiki plugins*: http://code.google.com/p/tb-transcription-desk/, last accessed 15 June 2012.

[38] Public Records Office of Victoria (PROV): http://prov.vic.gov.au, last accessed 15 June 2012.

[39] *PROV Transcription Pilot Project*:
http://wiki.prov.vic.gov.au/index.php/Category:PROV_Transcription_Pilot_Project, last accessed 15 June 2012.

[40] Upgraded Transcription Desk software, https://github.com/onothimagen/cbp-transcription-desk, last accessed 28 July 2013.

[41] *Old Weather*: http://www.oldweather.org/, last accessed 4 August 2012.

[42] *From the Page*: http://fromthepage.com/, last accessed 31 July 2012.

[43] For more the Bentham Project's editorial work and production of *The Collected Works of Jeremy Bentham*, see P. Schofield, *Bentham: A Guide for the Perplexed* (New York, 2009), 19–43.

[44] See *Bowring*, iii. 101–48. The 'Abstract or Compressed View' also appears in W. Stark, ed., *Jeremy Bentham's Economic Writings*, 3 vols (London, 1952–4), ii, 201–300.

[45] See J. Bentham, 'Pauper Management Improved', in . M. Quinn, ed., *Writings on the Poor Laws, Volume II* (Oxford: Oxford University Press 2010), 1–405, and compare with J. Bentham, 'Outline of a work entitled Pauper Management Improved' in the same volume, 487–659 (also published at *Bowring*, viii., 369–439).

[46] Box 2, http://www.transcribe-bentham.da.ulcc.ac.uk/td/Category:Box_002, last accessed 24 May 2012.

[47] Bentham, *IPML*, 283.

[48] Bentham, *IPML*, 282–3. See also a letter from Bentham to the *Morning Chronicle*, 9 March 1825, 1.

[49] J. Bowring, 'Memoirs and Correspondence', *Bowring*, x. 17.

[50] JB/027/026/004, http://www.transcribe-bentham.da.ulcc.ac.uk/td/JB/027/026/004, transcribed by Diane Folan, revision of 8 September 2011 This, and subsequent transcripts, have been edited for coherence by incorporating and/or discarding Bentham's additions and deletions. For the diplomatic transcripts, please visit the web links.

[51] UCL Bentham Papers collection (hereafter UC), JB/027/026/004, http://www.transcribe-bentham.da.ulcc.ac.uk/td/JB/027/026/004, transcribed by Diane Folan, revision of 8 September 2011. The square brackets are Bentham's own.

[52] UC JB/072/214/001, http://www.transcribe-bentham.da.ulcc.ac.uk/td/JB/072/214/001, transcribed by Matt Mitterko, revision of 22 May 2012.

[53] UC JB/072/214/001, http://www.transcribe-bentham.da.ulcc.ac.uk/td/JB/072/214/001, transcribed by Matt Mitterko, revision of 22 May 2012.

[54] UC JB/072/214/002, http://www.transcribe-bentham.da.ulcc.ac.uk/td/JB/072/214/002, transcribed by Simon Shields and Peter Hollis, revision of 10 February 2012.

[55] UC JB/072/214/003, http://www.transcribe-bentham.da.ulcc.ac.uk/td/JB/072/214/003, transcribed by Simon Shields and Peter Hollis, revision of 10 February 2012.

[56] Box 116, http://www.transcribe-bentham.da.ulcc.ac.uk/td/Category:Box_116, last accessed 24 May 2012.

[57] Transportation from the British Isles began in 1615 with the sending of prisoners as indentured labour to the North American colonies, though the British practice of transporting convicts did not cease until the closure of the penal settlement at the Andaman Islands in 1945. Relatively few convicts were transported to Australia during the period in which Bentham wrote, and most were in fact transported after 1815. For a useful summary, see H. Maxwell-Stewart, 'Convict Transportation from Britain and Ireland, 1615–1870', *History Compass* 8 (2010), 1221–1242.

[58] Bentham, 'Panopticon' in *Bowring*, iv. 39. The panopticon prison was designed with a central inspection tower, with the prisoners' cells arranged around it; the prison inspector could then see into any cell at any time, unbeknown to the inmates. Bentham argued that the prisoners would have to assume they were always being watched, and so would amend their behaviour to avoid punishment.

[59] Bentham quoted in J. Semple, *Bentham's Prison: A Study of the Panopticon Penitentiary* (Oxford, 1993), 244. See 218–81 for more detail on Bentham's attempts to have the panopticon built.

[60] UC JB/116/261/001, http://www.transcribe-bentham.da.ulcc.ac.uk/td/JB/116/261/001, transcribed by Lea Stern, revision of 8 June 2012.

[61] Schofield, *Guide for the Perplexed*, 12–3.

[62] See, for example, manuscripts headed 'Letter, 3rd', at UC JB/116/049/002, http://www.transcribe-bentham.da.ulcc.ac.uk/td/JB/116/049/002, transcribed by Lea Stern, revision of 4 May 2012, and UC JB/116/502/001, http://www.transcribe-bentham.da.ulcc.ac.uk/td/JB/116/502/001, transcribed by Diane Folan, revision of 15 June 2012.

[63] Transportation to New South Wales ceased in 1840, but continued to Van Diemen's Land until 1853. Convicts were transported to Western Australia between 1850 and 1868.

[64] R. V. Jackson, 'Bentham's Penal Theory in Action: the Case Against New South Wales', *Utilitas* 1 (1989), 226–41; R. V. Jackson, 'Theory and Evidence: Bentham, Collins, and the New South Wales Penal Settlement', *Australian Journal of Politics and History* 39 (1993), 318–29; J. B. Hirst, *Convict Society and Its Enemies: A History of Early New South Wales* (Sydney, 1983); J. Ritchie, 'Towards Ending an Unclean Thing: The Molesworth Committee and the Abolition of Transportation, 1837–1840', [*Australian*] *Historical Studies* 17 (1976), 144–64; B. Smith, *Australia's Birthstain: The Startling Legacy of the Convict Era* (Crows Nest, NSW, 2008), 200–21.

[65] *A Plea for the Constitution* is also known as *The True Bastile* [sic].

[66] Jeremy Bentham to Samuel Bentham, c.21 August 1802, J. Dinwiddy, ed., *The Correspondence of Jeremy Bentham, Vol. VII: January 1802 to December 1808* (Oxford, 1988), 90.

[67] A. Atkinson, 'Jeremy Bentham and the Rum Rebellion', *Journal of the Royal Australian Historical Society* 64 (1978), 1–13; J. Gascoigne, *The Enlightenment and the Origins of European Australia* (Oxford, 2002), 103–47; G. Karskens and R. Waterhouse, '"Too Sacred to be Taken Away": Property, Liberty, Tyranny, and the "Rum Rebellion"', *Journal of Australian Colonial History* 12 (2010), 1–22.

[68] UC JB/116/275/003, http://www.transcribe-bentham.da.ulcc.ac.uk/td/JB/116/275/003, transcribed by Lea

Stern, revision of 27 April 2012. See preceding manuscripts for the fuller discussion. Original emphasis.

[69] Bunbury to Bentham, *Correspondence of Jeremy Bentham, Vol. VII*, 236. Original emphasis.