made the dimple in his rich dyed cheek,

suppled his joints, and dancing in

...ellow curls made him preeminently the ^

...some Sailor . One person except

Altered Text
handsome

the master-at-arms was perhaps the o...

man in the ship ^ capable of of ^ adequate intellectualy

presented

the moral phenomenon ^ in Billy Bud...

him he recognized his his own direct e...

And the insight but intensified his pass...

secret

Hand: #HM

Facs: #img_342-0042

TEI: add

Rend: superimposed _HMp

Change: #StEb

Christopher Ohge

Uniwersytet Londyński, kontakt: christopher.ohge@sas.ac.uk, ORCID ID: 0000-0001-6410-8692

Re-experiencing composition: meditations on digital scholarly editing at the *Melville Electronic Library*

Introduction

According to the computer scientist Alan Kay, 1962 was an important year for computing and particularly for the development of user interfaces. The LINC computer was released as the first personal computer. Ivan Sutherland also demonstrated his doctoral project on the Sketchpad, which introduced the first interactive computer graphics system, the first object-oriented software system, and the first

non-procedural programming language. Reflecting on this crucial time, Kay also lamented that we cannot buy a system as good as Sketchpad, partly because personal computing has gone into a different, less experimental (and experiential) direction, one that is more attuned to symbolic engagement with computers, and a single-minded pursuit of fitting all content into structured data models (such as HTML).

Incidentally, 1962 was also a banner year in the history of scholarly editing. Harrison Hayford and Merton M. Sealts, Jr. published their landmark "genetic" edition of Herman Melville's unfinished final novella, *Billy Budd, Sailor*. This edition, like any other at the time, was published in print; in hindsight, it is tempting to think what the computer scientists behind LINC and Sketchpad would have thought of the representations of the creative process in a genetic edition, which by definition is meant to "simulate" (or allow the reader to reconstruct) the creative process by attending to versions and revisions of manuscripts that are represented with "codes" (symbols meant to signify types and stages of revision).

Fig. 1. Opening of the *Billy Budd, Sailor* genetic text transcription of the manuscript, edited by H. Hayford and M. M. Sealts, Jr. University of Chicago Press, 1962, p. 281

These genetic codes stand in for narrative explanations of the phenomena: for example, "[p Ea <and > or then]" represents "in stage Ea Melville used his pencil to substitute »or then« for »and«". But of course the codes are essentially abstractions of complex phenomena. They require you to master a metalanguage (not unlike XML, which is by definition a computational metalanguage), and that metalanguage flattens the roughness and idiosyncrasies of the real phenomena of writing. In a time when you could only examine the manuscript at Harvard's Houghton Library, high-resolution digital facsimiles were non-existent, and some scholars could access the proto-digital magic of microfilms, this method of genetic coding was good enough. A type facsimile alongside a diplomatic transcription in print could have been possible, but that would have been prohibitively expensive for many editorial projects, and possibly not worth the trouble if the prevailing aim of editing was not to analyse the genesis of a work but to establish a text "fully intended" by the author.

The 1962 Hayford-Sealts edition, in conjunction with the computational experiments undertaken at roughly the same time, needless to say, reflect brilliant minds engaging in a painstaking way with critical and creative problems about how to work with complex information. These projects also foreshadow the many ways that computation and editing have failed to fully exploit the critical potentials of using computers as tools for tracking the dynamism of creativity. Here are two worlds of inquiry that are on the same track (Scholarly Editing and Computing), but it has taken a long time for the worlds to collide (or even talk to each other) and to create new thinking tools for handling the complexities of creative minds.

Another moment from computational history illustrates some of the ways that computing has lost its way. At a 1972 symposium, Kay, then working at Xerox PARC, demonstrated his Dynabook prototype (the predecessor to the laptop and tablet). In his opening statement he claimed he was about to show the "freewheeling investigation" of artists, musicians, writers, and computer scientists. His primary aim was to use the ideas of Jean Piaget, Seymour Papert and John Dewey to give children an environment for active learning – namely, improving on the LINC and Sketchpad prototypes to encourage thinking skills through craft, creativity, and critical self-reflexiveness. He foresaw a personal computer as a means for achieving better thinking about thinking through creative and dynamic activities.

Computing is a kind of pop culture, Kay said, because it essentially exists in a business ecosystem that has little

interest in history; it is interested in the future (the future being easier because it lacks the complexities of the past, of course). One way to regain some semblance of control, and again Kay suggests as much, is that we should have a more critical and historical understanding of the technological inheritance we now operate under.

Digital editors are tasked with making something useful while also being mindful of the constraints of technology to achieve a critical vision. The problem is, as Kay put it, channeling Einstein[1], we have become trapped into using symbolic systems to represent phenomena that are not like the symbol systems in any significant way. Extended to digital editing, no data model of a text can represent the realities of a creative process, but insofar as a data model is certain (i.e. with consistent and well-formed data structures), it cannot conform to reality.

Another essential question looms over this enterprise: how is editing an art? To begin to answer the question, we need to articulate how we editors stand in relation to creativity. My view has been that creativity is a mode of experience, and that editing can facilitate experience by creating "enjoyed meanings" and "situated creativity" in editions. Scholarly editing has long engaged in acts of "recovery", but it has not quite grappled with the problem of what I am calling "re-experience". By using the term "re-experience" I am not only alluding to John Dewey but also to Stanley Cavell's idea of recovering language in a deeply felt way. As he put it in *The Senses of Walden*:

> Writing… must assume the conditions of language as such; re-experience, as it were, the fact that there is such a thing as language at all and assume responsibility for it – find a way to acknowledge it – until the nation is capable of serious speech again[2].

The notion of re-experience carries with it a sense of reciprocity – the thing felt first and the new feeling of it, and how language conveys that feeling.

Many of these ideas – recovery, re-experiencing composition, adaptation – also constitute an expansion of John Bryant's theory of the fluid text[3]. Conceived as a theory of editing and revision that can be manifested in book and digital formats, this theory still requires further considerations in an increasingly data-rich scholarly ecosystem as well as pragmatic considerations of the **user experience of fluid texts** in digital editions[4]. Our ongoing experiments at the *Melville Electronic Library* (MEL) have been focused on revision

narratives, Melville's "interreadings" with different texts by himself and by others, and attempting to build the reader into the edition's apparatus.

I shall illustrate these ideas in select examples from the MEL core edition of *Moby-Dick*, and then consider the future directions of these ideas in a work-in-progress, a digital edition of Melville's review-essay *Mosses from an Old Manse*. I will then conclude by examining briefly the importance of the creative-critical implications of the *Billy Budd, Sailor* fluid text edition at MEL.

Revision narratives in *Moby-Dick*

Melville's masterpiece comes with multiple textual puzzles that have yet to be fully exploited in print scholarly editions and that we have only begun to experiment with in the digital space of MEL. Judging by Melville's correspondence during the composition of the novel, he went through a fraught period of roughly two years in which he intended to write a straightforward romance (for money) and eventually settled on the experimental tragedy that he published, yet was not apparently satisfied with it. What Melville published is also a heavily allusive text; much of his marginalia in source texts survive and are available on *Melville's Marginalia Online*[5]. How can this information interoperate with an edition of *Moby-Dick*? Another difficulty is that Melville's original manuscript and printer's copy do not survive. We know he had his manuscript privately typeset before it was sent to his American publisher Harper & Brothers. This would be a straightforward enough textual history were it not for Melville's decision to carry sheets to England for publication by Richard Bentley's firm, and in the process decided to make further revisions. Mixed in with Melville's revisions for the British edition are changes made by Bentley, ranging from changes to fit British convention to outright censorship of blasphemous and homoerotic passages. In some cases it is impossible to know whether a change is Melville's or the British publisher's.

The MEL edition of *Moby-Dick*[6] primarily gives readers access to a critical reading text based on the Longman Critical Edition (edited by John Bryant and Haskell Springer). Like the Longman edition, the MEL text gives readers ample contextual notes (some of which have been recently revised for the digital edition) as well as bolded "revision narrative" notes that explain textual cruxes. These cruxes either signify changes made by Melville or by Bentley for the British edition.

In many cases, the revision narrative notes give direct access to what are obvious moments of censorship by the British publisher: in Chapter 1, "Who ain't a slave" becomes "Who is not a slave". The following phrase was omitted owing to its blasphemous suggestion that Adam and Eve were "orchard thieves" – "The act of paying is perhaps the most uncomfortable infliction that the two orchard thieves entailed upon us. But being paid, – what will compare with it?" These variants alone are extremely valuable, as they ask what these changes of language suggest about the social conditions of publishing in Great Britain in the mid-nineteenth century, but they also ask you to ponder what is lost aesthetically in revision.

Moving beyond the historical and aesthetic affordances of analysing clear moments of British censorship, editors can also highlight creative-critical editorial problems that cannot be easily explained. An important cluster of such phenomena occurs in Chapter 132, *The Symphony*, which concerns the build-up to Captain Ahab's final chase of the White Whale.

When, for example, Captain Ahab ponders the nature of his revenge against the White Whale before engaging in his final hunt, he asks, in the first American edition:

> Is Ahab, Ahab? Is it I, God, or who, that lifts this arm? But if the great sun move not of himself; but is as an errand-boy in heaven; nor one single star can revolve, but by some invisible power; how then can this one small heart beat; this one small brain think thoughts; unless God does that beating, does that thinking, does that living, and not I.

The British edition adds "it" after the first "Ahab", thereby matching the syntax with its previous and subsequent sentences, "What is it" and "Is it I, God…?". Now the creative-critical question turns on conjecture. In this case, the addition of a single word, "it", changes the meaning of the original "Is Ahab, Ahab?". Was Melville offering a proto-existentialist transcendence of ego or was he channeling John Clare's despair, "I am, yet what I am who cares or knows?" Because it is impossible to know whether Melville or the British publisher made that change (Melville's original manuscript does not survive), the editor can engage in a creative-critical exercise because the evidence is inconclusive. The MEL digital edition, on the other hand, also uses the first American edition reading in the "base version" of its *Moby-Dick* reading text. In the spirit of its print prototype, MEL gives immediate access to the crux and highlights the problem – and its attendant critical consequences – of the American and British versions.

REVISION NARRATIVE: Who Adds an "It"?

A famous textual puzzle involves the change in Ahab's self-searching question from its American version ("Is Ahab, Ahab?") to the British ("Is it Ahab, Ahab?"). The American reading has Ahab question his entire identity at this crucial moment before he then asks the more specific set of questions regarding who motivates his actions: "Is it I, God, or who, that lifts this arm?" The British reading, with the inserted "it," creates a more direct link between the two sets of questions. But its repetition of "Ahab" seems superfluous and may be taken as Ahab either directly addressing himself or dramatically stressing himself (perhaps with a gesture of disbelief) as his own motivator.

One possible explanation for the British version is that Melville intended the British reading all along, but that the "it" was inadvertently omitted in the American edition and then replaced by Melville in the revised copy he sent to England. Another possibility is that Melville intended the American reading, then changed his mind and revised the text for the British. Also possible is that a British editor, not comprehending the American reading, added "it" to make Ahab's self-questioning parallel with the second question. Whether the result of a correction or revision, and whether authorial or editorial, the separate readings have their own logics and are equally meaningful. To compare American and British pages, click the thumbnails in the right margin.

Users can then access the material granularity of the original book page images from the first two editions.

What can be learned by studying this book-historical element of critical editing? Notice how the first American edition reads "Is | Ahab, Ahab?": the new line after "Is" does seem to reinforce the idea that the American printer may have simply neglected, in a classic typographical error, to add "it" on the next line. Maybe Melville did intend the wording that appeared in the British edition all along. As I said, though, we can really never know. The creative-critical practice, however, is more fruitful than simply engaging in theorising, as one is reconstructing in one's mind the nexus of Melville's creative practices, the preparation of texts for

"What is it, what nameless, inscrutable, unearthly thing is it; 🗎 what <u>cozening</u>, hidden lord and master, and cruel, remorseless emperor commands me; that against all natural lovings and longings, I so keep pushing, and crowding, and jamming myself on all the time; recklessly making me ready to do what in my own proper, natural heart, I durst not so much as dare? **Is Ahab, Ahab?** 🗎 Is it I, God, or who, that lifts this arm? But if the great sun move not of himself; but is as an errand-...

REVISION NARRATIVE: Who Adds an "It"? // A famous textual puzzle involves the change in Ahab's self-searching question from its American version ("Is Ahab, Ahab?") to the British ("Is it Ahab, Ahab?"). The American reading has Ahab question his entire identity at this crucial moment before he then asks the more specific set of questions regarding who motivates his actions: "Is it I, God, or who, that lifts this arm?" The British reading, with the inserted "it," creates a more direct link between the two sets of questions. But its repetition of "Ahab" seems superfluous and may be taken as Ahab either directly addressing himself or dramatically stressing himself (perhaps with a gesture of disbelief) as his own motivator.

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Fig. 2. Reading Text View of Chapter 132, *The Symphony*, of *Moby-Dick*, with the Revision Narrative note after "Is Ahab, Ahab?". Below, left: first American edition of *Moby-Dick*. Right: first British edition of *Moby-Dick*. Courtesy the Melville Electronic Library, https://melville.electroniclibrary.org/editions/versions-of-moby-dick/132-the-symphony (access: 25.03.2023)

a nineteenth-century printer, and the aesthetic and book-historical sensibilities of the careful reader and editor.

Similarly, in these two passages in *The Symphony* it is unclear if Melville tinkered or if the British editor saw the need to reduce words:

That glad, happy air, that winsome sky, did at last stroke and caress him; the step-mother world, so long cruel – forbidding – now threw affectionate arms round his stubborn neck, and did seem to joyously sob over him, as if over one, that however **wilful and** erring, she could yet find it in her heart to save and to bless.

Close! stand close to me, Starbuck; let me look into a human eye; it is better than to gaze into **sea** or sky; better than to **gaze** upon God.

The bold words indicate variants in the British edition. In the first instance, MEL has a revision narrative note that suggests that the change both eliminates the parallelism of "to save and to bless" and removes the suggestion that Ahab is a "willful" child of a cruel world. In the second example, the revision narrative explains that the British edition changes the phrase "it is better than to gaze into **sea** or sky; better than to **gaze** upon God" to "it is better than to gaze into **the sea** or sky; better than to **look** upon God" (my emphases). Now, here is a moment for the art of editing, and for re-experience of composition: who made the second change, and why does that matter?

MEL suggests that Melville made the changes, which seem like aesthetic improvements, but unlike any other previous edition, MEL highlights the revisions and opens up the context for debate. The first example may also be an aesthetic improvement, but, as is the case with "Is Ahab, Ahab", it is difficult to judge which change makes more sense from a creative and critical perspective. But "it is better than to gaze into **the sea** or sky; better than to **look** upon God" – that really requires a deep and meaningful exploration that is nevertheless attuned to the background

information provided above. Yet it is in Melville's, and his publisher's, tinkerings in the build-up to the novel's climax that we can ask ourselves what choices of language enhance the drama.

In all of these examples, the editorial attention to language asks for critical and creative judgments and practices. The design of the edition attempts to facilitate those judgments to generate better theories about re-experiencing the work.

"Interreadings": *Hawthorne and His Mosses*

Melville's review essay of Nathaniel Hawthorne's story collection *Mosses from an Old Manse* likely played a major role in his reconception of *Moby-Dick*: in the summer of 1850 Melville received a copy of *Mosses from an Old Manse*, and shortly thereafter met Hawthorne[7]. He left extensive marginalia in his Hawthorne book, and his review reveals a nearly ecstatic appreciation for Hawthorne's genius, which he compared to Shakespeare's. It is not clear if he started writing the essay before or after he met Hawthorne. He did not sign the essay with his name, instead signing it "A Virginian Spending July in Vermont", and he eventually dedicated *Moby-Dick* to Hawthorne.
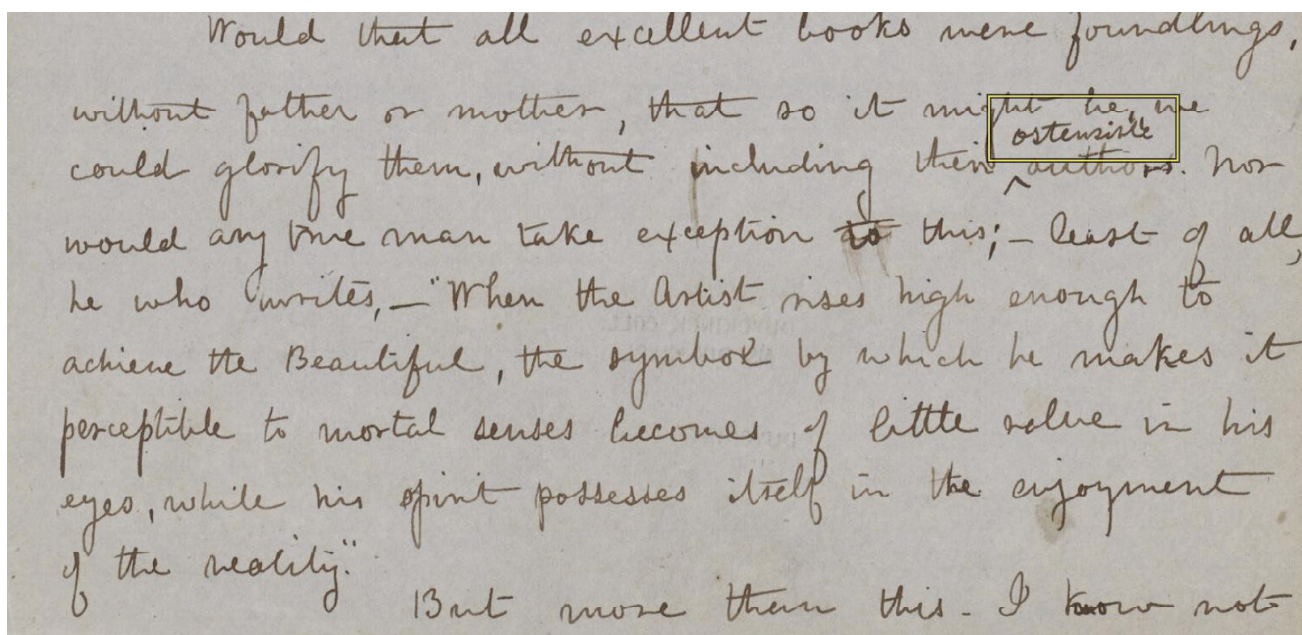

Fig. 3. Snippet from the first manuscript page of Melville's *Hawthorne and His Mosses*, with a highlighted revision in a IIIF manifest viewer. Manuscripts and Archives Division, The New York Public Library, "Hawthorne and his mosses" The New York Public Library Digital Collections, 1850, https://digitalcollections.nypl.org/items/24311810-184f-0133-2c0c-58d385a7bbd0

To briefly review the essay's textual history: the fair copy of the manuscript was produced by Melville's wife Elizabeth. Herman and Elizabeth then added revisions to the fair copy. Herman also added punctuation and filled in missing or uncertain words. In the example from page 1 of the manuscript (Figure 3, above), Melville added "ostensible" (highlighted in yellow) to the opening phrase of the second paragraph: "Would that all excellent books were foundlings, without father or mother, that so it might be, we could glorify them, without including their ˄^ostensible authors".

The editor of the magazine (and friend of Melville's) Evert Duyckinck added further revisions to the manuscript fair copy. Then at least three compositors (Lyman, McIntyre, Alexander) made further changes in preparation for the printing in Volume 7 of *Literary World* in two instalments: No. 185 (17 August 1850), on pages 125–127, and No. 186 (24 August 1850), on pages 145–147.

The textual condition of the review essay is itself a creative-critical puzzle; creative, in that Melville was writing under a pseudonym, trying to convey the felt experience of Hawthorne's stories through the persona of an anonymous Virginian (and why a Southern focus?); critical, in that the essay was initially conceived as an argument for a national American literature, but it was changed by the periodical that published the piece, *The Literary World*. As Robert Levine has argued, *The Literary World* changed Melville's essay to be more "hemispheric" than nationalistic, so traditional editors have sought to revert to most of Melville's original intentions in the manuscript, and to even make conjectures about preferred wordings that do not exist in any document, and in some cases to reject a revision Melville clearly made (presumably on the urging of Duyckinck)[8]. Levine himself opted to print the *Literary World* version because that was the text that was meant to be seen by the public (however, there is no evidence that Melville was given access to the proof before publication). The problem is, there are still some gaps in both versions that undermine their "final" authority. What is clear is Melville's willingness to collaborate on the piece, whether it was with his wife Elizabeth or with the editor of the *Literary World*. Nevertheless, it is hard to ignore the validity of clear mistakes in production that ought to be corrected, such as the *Literary World's* misprint of King Lear's "same madness of vital Truth", which was a misreading of Melville's far more interesting phrase "sane madness" in the manuscript. Valid arguments exist for adopting either the manuscript or print

version as the "authoritative text", but rather than excluding one version for the other, MEL's edition of "Mosses" will follow a "strategy of inclusion" that attempts to demonstrate the fluidity of the text as it survives in its historical (material) instantiations.

One of the reasons why digital editors care about revision is that it provides opportunities to create technical solutions for showing the creative mind at work while also presenting critical opportunities to consider the aesthetic sensibilities of the phrases pre- and post-revision. A brief example: Melville deleted the reference to "Bostonian" in "this Bostonian leaven of literary flunkeyism towards England". The rationale, first put forward by Harrison Hayford and Hershel Parker, is that Duyckinck suggested the deletion, to soften Melville's nationalistic tone and to erase references that would connect the "Virginian" to cosmopolitan critics from Boston and New York. Previous editors had simply claimed that this change lacks authority, but the change itself has documentary authority of a kind: it is a fact that Melville deleted "Bostonian" and that fact allows one to consider the important textual and aesthetic debate of nationalism versus cosmopolitanism. With digital tools it is better to surface such debates than to argue whether they have "authority" and banish some information to an editorial appendix.

One of the more extensive revisions by Melville is on leaf 15, which required a new patch to accommodate Melville's new writing.

Here is the patch with Melville's fair copy of the revised middle section (see Figures 4 and 5).

[let us] praise mediocrity even, in her own children, before she praises (for everywhere, merit demands acknowledgment from every one) the best excellence in the children of any other land. Let her own authors, I say, have the priority of appreciation. I was much pleased with a hot-headed Carolina cousin of mine, who once said, – "If there ~~was~~ were no other American to stand by, in Literature, – why, then, I would stand by Pop Emmons and his "Fredoniad," and till ᵃ ~~something~~ better epic came along, swear it was not very far behind the Illiad." Take away the words, & in spirit he was sound.

The provisional TEI/XML encoding of the first draft of the phrase below shows the thickness of revision of the original phrase that can also be recorded in the XML data:

```
<del change="metadata#StB" facs="iiifmossesmanifest.json#f016_delete-praise-sentence" hand="metadata#HM">praise <metamark>^</metamark><add change="metadata#StB" facs="iiifmossesmanifest.json#f016_add-even" hand="metadata#HM" place="above">even</add> mediocrity in her <metamark>^</metamark><add change="metadata#StB" facs="iiifmossesmanifest.json#f016_add-own" hand="metadata#HM" place="above">own</add> children, than <add place="margin-right">before</add> </del><lb/> (for anywhere, merit demands acknowledgment from every one) <lb/><metamark>^</metamark><add change="metadata#StB" facs="iiifmossesmanifest.json#f016_add-shepraises" hand="metadata#HM">she praises</add> the best excellence in the children of any <lb/> other land.
    <del>For me in a dearth of Hawthornes</del> <lb/>
    <add change="metadata#StB" facs="iiifmossesmanifest.json#f016_add-sentence" hand="metadata#HM" place="above">Said a hot-headed Carolina cousin of mine, "If there was no <metamark>^</metamark><del change="metadata#StB" facs="iiifmossesmanifest.json#f016_add-delete-otheramerican" hand="metadata#HM"><add>other American</add></del> <del change="metadata#StB" facs="iiifmossesmanifest.json#f016" hand="metadata#HM">one else</del> to stand by <metamark>^</metamark><add change="metadata#StB" facs="iiifmossesmanifest.json#f016_add-in-literature" hand="metadata#HM" place="above">in Literature"</add> said he, "why, then, I would</add><lb/>
    <del>I stand</del> <del>I</del> stand by Pop Emmons and his <lb/> <del change="metadata#StB" facs="iiifmossesmanifest.json#f016_delete-Fredoniad-sentence" hand="metadata#HM">"Freddoniad," and till something better came along,</del> <lb/> swear it was not very far behind <lb/> <del change="metadata#StB" facs="iiifmossesmanifest.json#f016_delete-thelliad" hand="metadata#HM"> <del>the Illiad.</del>
```

Draft	**Revised fair copy (on a patch)**
[let us] ~~praise ^even mediocrity in her ^own children, than before~~ (for anywhere, merit demands acknowledgment from every one) ^she praises the best excellence in the children of any other land. ~~For me in a dearth of Hawthornes~~ ^Said a hot-headed Carolina cousin of mine, If there was no ^~~other American^~~ ~~one else~~ to stand by ^in Literature" said he, "why, then, I would ~~I stand I~~ ^stand by Pop Emmons and his ~~"Fredoniad," and till something better came along,~~ swear it was not very far behind ~~the Illiad.~~	[let us] praise mediocrity even, in her own children, before she praises (for everywhere, merit demands acknowledgment from every one) the best excellence in the children of any other land. Let her own authors, I say, have the priority of appreciation. I was much pleased with a hot-headed Carolina cousin of mine, who once said, – "If there ~~was~~ were no other American to stand by, in Literature, – why, then, I would stand by Pop Emmons and his "Fredoniad," and till a ~~something~~ better epic came along, swear it was not very far behind the Illiad." Take away the words, & in spirit he was sound.

Any yet, as helpful as this data may be from a data analysis and archival standpoint, these codes are effectively more descriptive versions of the "genetic codes" seen in the Northwestern Newberry editions of Melville's works. The metalanguage is embedded within the structure of the text – again, which is useful for data analysis – but is less useful for the creative critic. What helps me more is to rearrange the text to juxtapose these particular passages.

It is always fascinating for a creative writer or critic to see what passages in a great piece of writing were the product of multiple revisions. Yet neither the comparison above nor its representation in TEI/XML reveals the dynamism of Melville's changes of mind at work in this crucial point in the essay where he is building up to the strong statement that "America be heedful of the increasing greatness among her writers" and that the originality of the country's writers should be prioritised. Nevertheless, the XML has facsimile attributes pointing the transcription to the IIIF data of the manuscript image, which is an improvement[9]. Representation is still an important part of our work and can facilitate reliable descriptions: for example, the TEI/XML will allow us to create lists of revised words in each stage, and to produce basic statistics of revision (e.g. number of deletions and additions). Yet that activity is often done at the expense of making connections, or, what Susan Wolfson called "interreadings" (modifying Keats's verb to "interread"), which are "an immersion in language and effect thickened by an attention to a web of references"[10]. The pull toward representation, as I have written before, is important but comes with a double-bind[11]: as we express the complexities of our editorial decisions using semantic tags, we do so to evince a "depth model" of the documents (which is to say, providing the truest

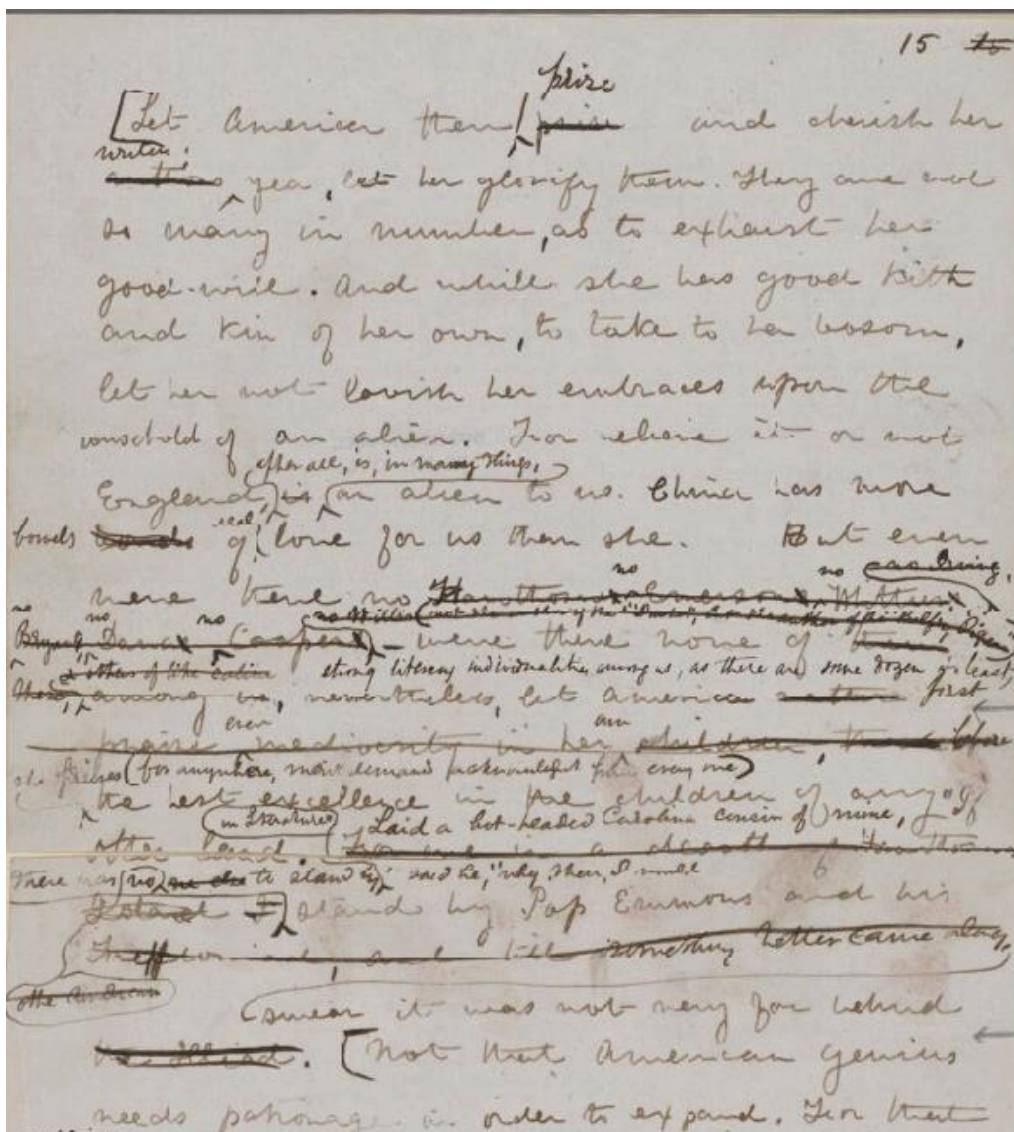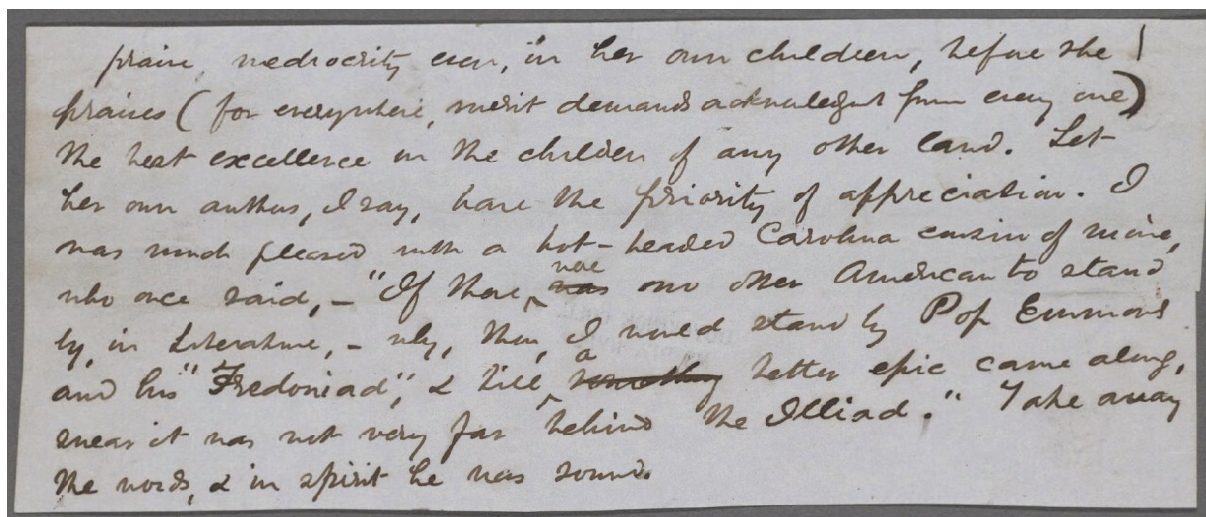Fig. 4. Top half of Leaf 15 of the manuscript of *Hawthorne and His Mosses*, https://melville.electroniclibrary.org/editions

Fig. 5. Revised fair copy patch for the middle of leaf 15 of the manuscript of *Hawthorne and His Mosses*, https://melville.electroniclibrary.org/editions

description and representation of the document through codes), but that model structurally undermines the original intention of "hypertext". As described by Ted Nelson, hypertext was not meant to provide depth models of documents as self-contained hierarchical objects, but rather to facilitate the relationships between documents and their contexts within a vast network of discourse[12]. Like many other digital editions, MEL is good at representing documents, but it does not entirely succeed in connecting information to other important bits of information.

And connections offer the critical payoffs. In the paragraph following the heavily revised paragraph shown above, Melville offers one of his most famous passages: "But it is better to fail in originality, than to succeed in imitation. He who has never failed somewhere, that man can not be great. Failure is the true test of greatness". Melville may have been thinking of that passage in his essay on Hawthorne when he came to write his own justification for what himself called his botch of a novel, *Moby-Dick*, in Chapter 32, *Cetology*:

> There are only two books in being which at all pretend to put the living sperm whale before you, and at the same time, in the remotest degree succeed in the attempt. Those books are Beale's and Bennett's; both in their time surgeons to English South-Sea whale-ships, and both exact and reliable men. The original matter touching the sperm whale to be found in their volumes is necessarily small; but so far as it goes, it is of excellent quality, though mostly confined to scientific description. As yet, however, the sperm whale, scientific or poetic, lives not complete in any literature. Far above all other hunted whales, his is an unwritten life[13].

This is a sly continuation of his Hawthorne essay applied to his own narrator, Ishmael, speaking, as it were, for the Melvilles of America: both books about whaling, by Englishmen, are scientific descriptions that lack in originality[14]. But the subtle admission is of the inevitability of failure – the sperm whale's life cannot be complete because there are those elements that cannot be written about and can only be elucidated in relation to the incomplete (human) experience of the whale when it briefly surfaces.

Attending to the original draft of the leaf from *Hawthorne and His Mosses* seems to confirm the hypothesis that Melville composed this piece quickly[15], and yet, for Melville, completeness was always elusive if not impossible. He also misquoted Hawthorne in several instances, and in his correspondence he seems to have thought he had written too quickly. Melville, in this case, did not really abide by the Romantic maxim of emotion recollected in tranquility – these were manic times for Melville, who was also in the midst of producing one of his most dense novels (*Moby-Dick*) in a mere two years.

The scholarly editor can prepare these elements for the reader so that they can engage with textual fluidity and formulate judgments about the significance of the relations between composition, literary experience, and the preparation of texts, both historically and in the present. MEL is currently attempting to implement some of these ideas in its forthcoming digital edition of *Hawthorne and His Mosses*. We will feature a diplomatic transcription of the manuscript, with genetic codes in TEI/XML that identify important elements of revision and pre-publication changes, but we will also link to a IIIF manifest viewer which will allow users to inspect the areas of revision on the digital facsimile. A reading text of the essay will be similar to the *Moby-Dick* or *Billy Budd* reading texts, except it will be designed to facilitate the kinds of interlinkages mentioned above with *Moby-Dick*.

The Hawthorne example also reinforces a creative-critical point, or a lesson in the role of computers as dynamic tools for creativity: namely, these historical documents are the products of contingencies, which are worth studying in their own right and ought not to be reduced to abstractions. As soon as we abstract away from the contingencies of experience, it is too easy to lose those important elements of intentions and relational aesthetics. At MEL we admittedly use abstractions – the metalanguage of TEI/XML – but we also attempt to design the edition to bring the reader back to the sources of writing and inspiration, whether they are draft manuscripts, first editions of books, or artworks that inspired Melville. Melville's musings on originality and failure not only applied to himself as the great novelist of the sperm whale, but they are also useful to consider in relation to computational editing itself. These digital experiments of the text can be used to expand the remit of creative-criticism, to facilitate more interlinkages between textual elements, and, it is to be hoped, to provide better clues about the mysterious nature of creativity itself.

The (incomplete) narrative and the reader: *Billy Budd, Sailor*

I mentioned *Billy Budd* earlier in this essay because it raises several issues relating to the art of textual editing: textual fluidity, incomplete manuscripts, revision, textual annotation, readerly engagement. *Billy Budd* is also arguably the most complicated of the three model editions published at MEL because it is Melville's final, uncompleted work of fiction, the manuscript of which was discovered in a bread tin decades after Melville's death, in the 1920s.

The MEL edition of *Billy Budd*[16] presents a critical reading text (with contextual and textual annotations) that is closer to the manuscript than any other edition of the work. The reading text also features thumbnail links to its corresponding manuscript page, which presents the foundational editorial work of the MEL text: a diplomatic transcription of the manuscript with genetic codes, as well as a cleaned-up version of the diplomatic text, called the "base text", which is the basis of the reading text. Readers are therefore encouraged to toggle back-and-forth between an edited reading text and the manuscripts themselves. Many of the contextual notes in the reading text take the form of "revision narratives" which highlight the editorial problems in the manuscript.

One of Melville's most famous passages, in Chapter 21, demonstrates the art of scholarly editing, with a metaphor about the subtle boundary between sanity and insanity:

> Who in the rainbow can draw the line where the violet tint ends and the orange tint begins? Distinctly we see the difference of the colors, but where exactly does the one first blendingly enter into the other? So with sanity and insanity. In pronounced cases there is no question about them. But in some supposed cases, in various degrees, supposedly less pronounced, to draw the exact line of demarkation few will undertake, though for a fee becoming considerate some professional experts will. There is nothing nameable but that some men will or undertake to do it for pay.

What is less known is that this profound thought was closer to a rough draft than a completed thought. As the manuscript shows[17], Melville inscribed this phrase entirely in pencil (which he tended to use when he was tinkering and revising, not writing a fair copy). Moreover, this was done at a late stage of composition, during a phase when Melville evidently was complicating the character Captain Vere, who found himself in the difficult ethical situation of whether to execute Billy Budd for killing his superior officer Claggart or to vindicate Billy's actions on the grounds that Claggart falsely accused Billy of mutiny. Any interpretation of *Billy Budd* stands to gain from accessing the essential background information of the incomplete manuscript, the changes of mind during different stages of revision, and the interpretive consequences for analysing those stages[18].

The next leaf[19] substantiates the idea that Melville was revising to complicate Captain Vere's psyche. On this leaf the narrator is trying to consider the implications of the rainbow metaphor as applied to Vere's dilemma. The question is, then, was Vere mentally stable or not. Do the concepts of "duty" and "rule of law" correspond to mental stability? Melville's first draft reads:

> Whether Captain Vere ~~was~~ had suddenly become the victim of aberation, and whether the ~~proceedings~~ part he took in the events shortly to be given, confirm ~~it, this~~ the supposition, I for one, decline to determine.

> In other words, there are instances when it is next to impossible ~~justly~~ ^positively^ to determine whether a man is ~~of sound or unsound mind~~ in his mind or beginnning to be otherwise.

In this passage the narrator talks through his uncertainty about whether Vere's judgement could be "unsound". That revision of "positively" to replace "justly" is fascinating in the context of a story that is fundamentally about justice – the adverb form of "just" is replaced by a different kind of judgement. Also, the fact that Vere was part of the "proceedings" before he played a "part" suggests that Melville continued to place Vere in this situation as an active agent rather than as a pawn in a larger system (of proceedings). However, these two sentences were unsatisfactory to Melville, as he deleted both of them with multiple, wavy strokes of his pencil.

The revised passage, also inscribed in pencil, reads: "Whether Captain Vere, as the Surgeon professionally and privily surmised, was really the sudden victim of any degree of aberration, every one must determine for himself by such
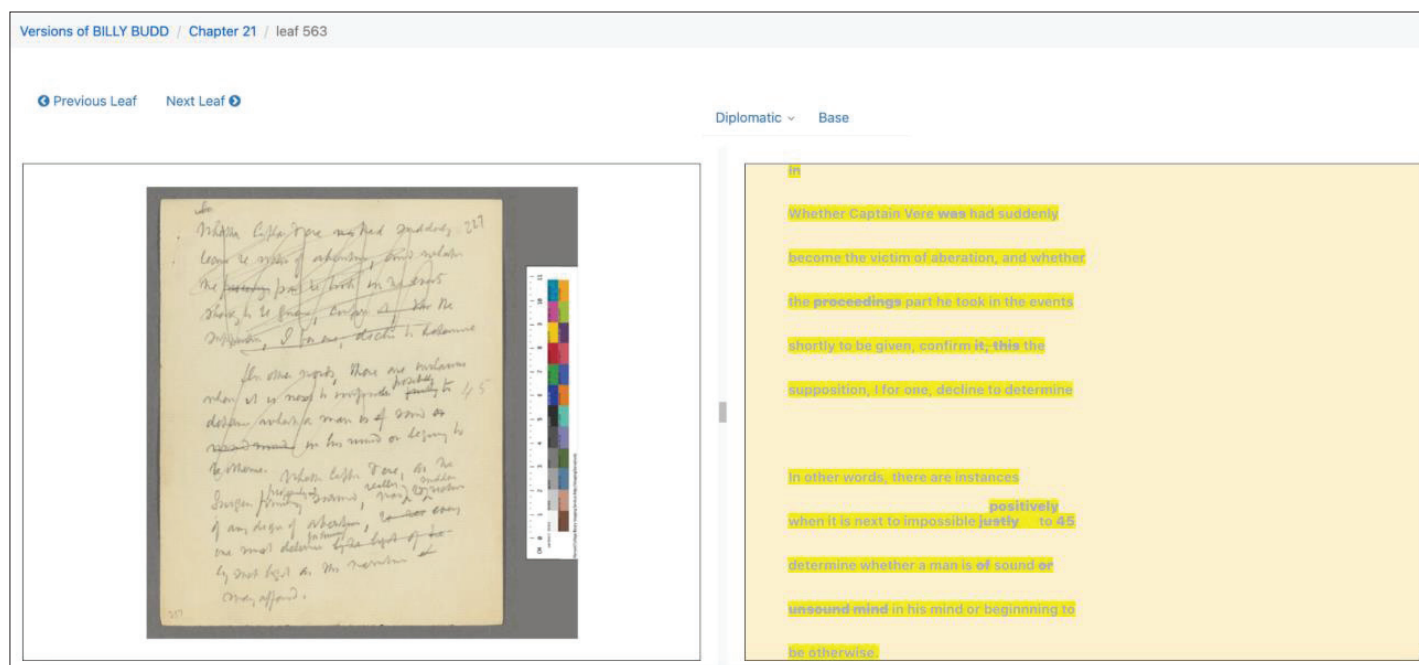
> *Billy Budd* is arguably the most complicated of the three model editions published at MEL

Fig. 6. Diplomatic transcription of Leaf 563 of the *Billy Budd* manuscript, Chapter 21, https://app.textlab.org/transcriptions/18291

light as the narrative may afford". Putting himself to the side, Melville's narrator hands it back to the reader. **The narrative is everything; now discuss**. And we, the readers, should heed the directive and consider the aesthetic implications of it. The point here about the art of editing is that we at MEL are less concerned with the text "finally intended", or the reader's passive engagement with a text on which all the important decisions have already been made. We are certainly still focused on intentions – but they are fluid intentions, which are inscribed in actions by various agents from author to publisher to editor to reader.

By re-experiencing these compositional movements, the edition puts writing back at the centre as an experiment of language, and invites the reader, as Paul Eggert has also recently argued, to be central to the editorial enterprise[20]. The editor then becomes the reader and agent who will build digital tools that get other readers closer to the intricacies of this composition.

Concluding thoughts

There is still a large gap between what we would like to do in digital scholarly editing and what is practicable. It would be an excellent engineering problem to evince what a "Sketchpad" or Dynabook-informed approach to digital

scholarly editing might look like. And yet, the resources required to do so are currently lacking. MEL, for instance, was fortunate to receive substantial support from Hofstra University and the National Endowment for the Humanities (USA), not to mention hours of volunteer labour from a large network of Melville scholars, but MEL lost its core funding and institutional backing in 2019, and in 2020 it successfully transformed its digital edition into a static site using minimal computing principles. On the one hand, this is a positive development that shows the value of well-designed editions that follow minimal computing principles[21], but, on the other hand, it shows how expensive and difficult it still is to build and maintain digital editions that reflect the ambitions of interconnectivity and interoperability. The ideas presented in this essay are mainly theoretical interventions, but it would take more resources to effect them in a practical way. This is why I am currently more optimistic about creative-critical approaches to digital textual studies, as Mathelinda Nabugodi and I recently showed in our recent special issue of *Textual Cultures* on "Creative-Critical Provocations": with more sustainable data, and better framing of that data with curation principles, researchers have a better chance to engage with these textual issues now than they would have when we only had print editions[22]. The art of scholarly editing, then, will consist partly of designing technical solutions for facilitating the dynamism of writing and editing itself – editing, not

only as a technical craft, but as a creative-critical practice – but also, a kind of open-ended, limited, platform-independent creative experiment.

Key Words: Herman Melville, fluid text, revision narrative, *Melville Electronic Library* (MEL), *Moby-Dick*, *Billy Budd, Sailor*, *Hawthorne and His Mosses*, textual editing, digital humanities

Abstract: This essay returns to some fundamental notions in computing history to argue for a creative and dynamic form of scholarly editing in the digital space as a form of creative-critical practice. Constituted as a complementary method to the tradition of critical editing, which attempts to provide the most correct description and single representation of the text, the editor attuned to creative-critical methods seeks to brings readers of the edition closer to the energies of writing – composition, revision, text-making, and the context of texts and their relational contexts. These ideas are demonstrated by three examples from the *Melville Electronic Library's* work on *Moby-Dick*, *Billy Budd, Sailor*, and the forthcoming digital edition of *Hawthorne and His Mosses*.

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[1] Kay was alluding to Einstein's statement about mathematics in his lecture *Geometry and Experience* (London 1922): "As far as the laws of mathematics refer to reality, they are not certain; and as far as they are certain, they do not refer to reality".

[2] S. Cavell, *The Senses of Walden*, Chicago 1992, p. 33. Cavell would use "re-experience" again in modes of analysis, especially film and drama; see, e.g. *Something Out of the Ordinary*, in: idem, *Philosophy the Day After Tomorrow*, Cambridge, MA–London 2006, p. 65. See also idem, *Ending the Waiting Game: A Reading of Beckett's "Endgame"*, in: idem, *Must We Mean What We Say? A Book of Essays*, Cambridge 2015, p. 110; B. Ogden, *What Philosophy Can't Say About Literature: Stanley Cavell and "Endgame"*, „Philosophy and Literature" 2009, Vol. 33, p. 127.

[3] See J. Bryant, *The Fluid Text: A Theory of Revision and Editing for Book and Screen*, Ann Arbor 2002; idem, *Melville Unfolding: Sexuality, Politics, and the Versions of Typee*, Ann Arbor 2008; idem, *Editing Melville in Manuscript*, „Leviathan" 2019, Vol. 21.2 (June), pp. 107–132.

[4] I explain this pragmatic thinking about editing and experience extensively in my *Publishing Scholarly Editions: Archives, Computing, and Experience*, Cambridge 2021.

[5] See https://melvillesmarginalia.org/ (access: 25.03.2023).

[6] See https://melville.electroniclibrary.org/versions-of-moby-dick (access: 25.03.2023).

[7] N. Hawthorne, *Mosses from an Old Manse*, London 1846. A digital surrogate is available on *Melville's Marginalia Online*: https://melvillesmarginalia.org/Share.aspx?DocumentID=16&PageID=420 (access: 25.03.2023). See also the critical introduction by Jonathan A. Cook at https://melvillesmarginalia.org/intro.aspx?id=16 (access: 25.03.2023).

[8] R. S. Levine, *Why We Should Be Teaching and Writing about The Literary World's 1850 "Hawthorne and His Mosses"*, „J19: The Journal of Nineteenth-Century Americanists" 2017, Vol. 5.1, pp. 179–189. Project MUSE, doi:10.1353/jnc.2017.0009. See also the notes to *Hawthorne and His Mosses* in the Northwestern Newberry edition of *The Piazza Tales and Other Prose Pieces: 1839–1860*, eds. H. Hayford et al., Evanston–Chicago 1987, pp. 652–690.

[9] IIIF stands for the International Image Interoperability Framework (https://iiif.io/) which is a set of open standards for sharing image data through APIs.

[10] S. Wolfson, *A Greeting of the Spirit: Selected Poetry of John Keats with Commentaries*, Cambridge 2022, p. 12.

[11] Ch. Ohge, *Digital Editing and "Experience […] looked upon as a kind of text": A Provocation in Three Exhibitions*, „Textual Cultures" 2022, Vol. 15.1, pp. 91–107.

[12] T. Nelson, *Xanalogical Structure, Needed Now More Than Ever: Parallel Documents, Deep Links to Content, Deep Versioning, And Deep Re-Use*, „Comput. Surveys" 1999, Vol. 31.4, pp. 1–32; idem, *What Box?*, in: *Intertwingled. The Work and Influence of Ted Nelson*, eds. D. R. Dechow, D. C. Struppa, London 2015, pp. 133–150.

[13] See https://melville.electroniclibrary.org/editions/versions-of-moby-dick/32-cetology (access: 25.03.2023).

[14] To facilitate another connection: Melville's annotated copy of Thomas Beale's *Natural History of the Sperm Whale* (1839), which is well worth any reader's attention, is available on *Melville's Marginalia Online*, edited by Steven Olsen-Smith, https://melvillesmarginalia.org/Share.aspx?DocumentID=7&PageID=17 (access: 25.03.2023).

[15] See pp. 654–55 of the Northwestern Newberry edition notes.

[16] See https://melville.electroniclibrary.org/versions-of-billy-budd (access: 25.03.2023).

[17] See https://app.textlab.org/transcriptions/16370 (access: 25.03.2023).

[18] J. Wenke, *Melville's "Ragged Edges": "Billy Budd, Sailor" and the Arts of Incompletion*, in: *A New Companion to Herman Melville*, eds. W. Kelley, Ch. Ohge, Hoboken 2022, pp. 184–196.

[19] See https://app.textlab.org/transcriptions/18291 (access: 25.03.2023).

[20] P. Eggert, *The Work and the Reader in Literary Studies: Scholarly Editing and Book History*, Cambridge 2019.

[21] For more information on minimal computing principles, see the recent special issue of "Digital Humanities Quarterly" 2022, Vol. 16.2, http://digitalhumanities.org/dhq/vol/16/2/index.html (access: 25.03.2023), and the Global Outlook DH working group at https://go-dh.github.io/mincomp/about/ (access: 25.03.2023). For more on the environmental implications of minimal computing, see the Digital Humanities Climate Coalition Toolkit section on minimal computing: https://sas-dhrh.github.io/dhcc-toolkit/toolkit/minimal-computing.html (access: 25.03.2023). On publishing inefficiencies in digital editions, see also Chapter 5 of Ch. Ohge, op. cit.

[22] See „Textual Cultures" 2022, Vol. 15.1: *Creative-Critical Provocations*, eds. M. Nabugodi, Ch. Ohge.