Looking for Textual Evidence
Digital Humanities, Middling-Class Morality, and the Eighteenth-Century English Novel

Ralf Schneider, Marcus Hartner, Anne Lappert

1. Introduction

In our contribution to this edited volume we present a discussion of an attempt to identify and locate literary manifestations of the idea of the "virtuous social middle" in a large corpus of eighteen-century English novels with the help of methods and tools from Digital Humanities (DH).[1] This attempt was situated within the larger context of a research project on comparative practices in the eighteenth-century novel as part of the Collaborative Research Center (CRC) 1288 "Practices of Comparing" funded by the German Research Foundation (DFG). Our project started from three assumptions. The first was the traditional assumption held in literary history about the close connection between socio-historical developments and the "rise of the novel"[2] from "the status of a parvenu in the literary genres to a place of dominance" during the eighteenth century.[3] Second, we assumed that the cultural construction of the "the middle order of mankind"[4] and its concomitant claims about a supposedly heightened sense of 'middle-class' morality

1 *Wahrman, Dror,* Imagining the Middle Class: The Political Representation of Class in Britain, c. 1780–1840, Cambridge: Cambridge University Press, 1995, 64.

2 *Watt, Ian,* The Rise of the Novel: Studies in Defoe, Richardson, and Fielding, Berkeley: University of California Press, 1957.

3 *Rogers, Pat,* Social Structure, Class, and Gender, 1660–1770, in: J. A. Downie (ed.), The Oxford Handbook of the Eighteenth-Century Novel, Oxford: Oxford University Press, 2016, 39.

4 *Goldsmith, Oliver,* The Vicar of Wakefield, Oxford: Oxford University Press, 2006 [1766], 87.

was accompanied by a range of social processes of comparing.[5] After all, constructions of social identity tend to rely heavily on processes of othering, and comparing plays a vital role in the construction of self and other. Third, we assumed that in the emerging medium of the novel in the period under investigation, concepts of middle-class social identity were negotiated through particular *literary* strategies of comparing, whose textual manifestations can be found specifically in textual representation of characters and character constellations. Ultimately, the underlying value system concerning class identity in a novel ought to manifest itself also in the way that the behavior or dispositions of characters are described and evaluated in comparison as either desirable and adequate, or as despicable and inappropriate. As part of our strategy of substantiating those three assumptions, our project aimed at providing a more extensive review of the textual representations of social virtues and vices in the eighteenth-century English novel than available in traditional scholarly accounts of the topic so far.

In order to achieve this aim, we decided to turn to the methods of DH. We planned to identify, with the help of different types of word searches (see below), recurrent expressions that refer to social behavior in either positive or negative terms. We expected a diachronic development to be visible across the corpus, e. g., similar to the way concepts of gentility changed their semantics during the period under consideration.[6] None of our expectations were met, however, as we will demonstrate below. This prompted a reconsideration of our search strategies and ultimately led to the insight that practices of comparing and social-identity construction may be more implicit in

5 In the following, we will employ the term 'middle-class' as a synonymous stylistic variation to expressions such as 'middle order', 'middle rank', the 'middling sorts', etc. We are aware that the application of the terminology of class to discussions of eighteenth-century society is contested and comes with certain conceptual problems. For introductions to the term and concept of class in early modern Britain, see *Corfield, Penelope J.*, Class by Name and Number in Eighteenth-Century England, in: History 72 (1987) and *Cannadine, David*, Class in Britain, London: Penguin, 2000, 27, 31.

6 The concept of the gentleman, for example, changed from the narrow denotation of a man of noble birth to the more widely applicable notion of a man displaying a set of 'genteel' (moral) qualities and behaviours. During this "social peregrination" of the term, it lost "its oldest connotations of 'gentle' birth and 'idle' living, so that, in the later eighteenth century, individual vintners, tanners, scavengers, potters, theatre managers, and professors of Divinity could all claim the status, publicly and without irony" (*P. J. Corfield*, Class by Name and Number, 41).

literature than in other discourses and function in different ways. In what follows, we will first sketch the socio-cultural context of our corpus, in which the novels contribute to the negotiation of middle-class morality. We will then briefly engage with the question of the applicability of DH methods in the analysis and interpretation of literature, before we document some of our text searches and discuss the results.

2. Inventing the superiority of the middling classes

On the opening pages of Daniel Defoe's *The Life and Adventures of Robinson Crusoe* (1719) the title character's elderly father lectures the youthful protagonist on his place in the social fabric of eighteenth-century Britain. In his attempt to dissuade the restless and adventure-seeking Robinson from "[going] abroad upon Adventures", he emphasizes his son's birth into the "the middle State" of society.[7] This he declares to be "the best State in the World, the most suited to human Happiness" as it is neither "exposed to the Miseries and Hardships, the Labour and Sufferings of the mechanick Part of Mankind", nor is it "embarrass'd with the Pride, Luxury, Ambition and Envy of the Upper Part of Mankind".[8] While those remonstrations unsurprisingly fail to convince the young Robinson Crusoe, they articulate a sentiment of 'middle-class' complacency found with increasing frequency in literary and philosophical writings over the course of the eighteenth century. Defoe's fictional character constitutes only one voice in an increasingly audible choir within the cultural discourse of the period that promotes the idea of the 'middle order' as possessing a distinct and superior quality. Though this idea was neither new nor universally acknowledged,[9] it became increasingly

7 *Defoe, Daniel*, Robinson Crusoe, ed. Michael Shinagel, New York: Norton, 1994 [1719], 5.

8 Ibid.

9 On competing models of the social structure of the period, such as the notion of a bipolar "crowd-gentry reciprocity" (*Thompson, E. P.*, Customs in Common: Studies in Traditional Popular Culture, New York: New Press, 1993, 71) and the persistent traditional belief in a providentially ordained, universal and hierarchical order of social layers (e.g. *Tillyard, E. M. W.*, The Elizabethan World Picture: A Study of the Idea of Order in the Age of Shakespeare, London: Chatto & Windus, 1967 [1942]), see the discussion in *D. Cannadine*, Class in Britain, 24–56. With regard to the notion of the superiority of the 'middle-class', see also French, who argues that the aristocracy and gentry retain their dominant economic and politi-

attractive to those who saw themselves as belonging to this particular segment of society.[10] Building on the notion of a "virtuous social middle"[11] initially developed in Aristotle's *Politics*,[12] they actively engaged in the discursive construction of the middle order as a distinct social group not only by discussing its political and economic importance for the nation,[13] but also by emphatically emphasizing its moral value.[14]

David Hume, for example, thought that the upper classes were too immersed in the pursuit of pleasure to heed the voices of reason and morality, while "the Poor" found themselves entirely caught up in the daily struggle for survival.[15] As a result, in his view, only the "middle Station" affords

> "[…] the fullest Security for Virtue; and I may also add, that it gives Opportunity for the most ample Exercise of it […]. Those who are plac'd among the lower Rank of Men, have little Opportunity of exerting any other Virtue, besides those of Patience, Resignation, Industry and Integrity. Those who are advanc'd into the higher Stations, have full Employment for their Generosity, Humanity, Affability and Charity. When a Man lyes betwixt these two Extremes, he can exert the former Virtues towards his Superiors, and the latter towards his Inferiors. Every moral Quality, which the human Soul is susceptible of, may have its Turn and, and be called up to Action: And a Man may, after this Manner, be much more certain of his Progress in Virtue, than where his good Qualities lye dormant, and without Employment."[16]

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cal power in Britain throughout the eighteenth century and beyond (*French, Henry*, Gentlemen: Remaking the English Ruling Class, in: Keith Wrightson (ed.), A Social History of England: 1500–1750, Cambridge: Cambridge University Press, 2017, 269, 280). See also *Muldrew, Craig*, The 'Middling Sort': An Emergent Cultural Identity, in: Keith Wrightson (ed.), A Social History of England: 1500–1750, Cambridge: Cambridge University Press, 2017 on the emergence of the "Middling Sort" as a cultural identity during the early modern period.

10 *D. Cannadine*, Class in Britain, 32–33.

11 *D. Wahrman*, Imagining, 64.

12 *Aristotle*, The Politics, trans. Carnes Lord, Chicago: University of Chicago Press, 1984, IV.11.

13 *D. Cannadine*, Class in Britain, 42.

14 The protagonist Charles Primrose in Oliver Goldsmith's *The Vicar of Wakefield*, for example, sees "the middle order of mankind" as the social sphere that is home to "all the arts, wisdom, and virtues of society" (87–88).

15 *Hume, David*, Of the Middle Station of Life, in: Thomas H. Green/Thomas H. Grose (eds.), David Hume, The Philosophical Works, Aalen: Scientia Verlag, 1964 [1742], 4:376.

16 Ibid., 4:376–4:377.

The passage indicates that Hume sees the middling class's superior virtue as the result of a sociological process. By being exposed to a wider and more complex range of social life, individuals from the middle ranks are forced to develop greater moral sensitivity and power of judgement. While he thus attempts a philosophical explanation,[17] other contemporary authors champion middle-class virtue in a more simplistic fashion by rhetorically foregrounding the idea of a stark contrast between the "generous Disposition and publick Spirit" of members of the middling ranks and the "Depravity and Selfishness of those in a higher Class".[18]

It is important to note once more that such arguments about the (moral, economic, political, etc.) superiority of a distinct middle order or class, were less "an objective description of the social order" in Britain than "a way of constructing and proclaiming favourable ideological and sociological stereotypes" of those who found themselves hierarchically situated between the poor and the powerful.[19] In this context, the development of the eighteenth-century novel as a distinct literary genre on the fast-growing market for printed material can be seen instrumental in the emergence of the (self-) image of the middle class as an economically relevant and culturally powerful social group.[20] Written by (predominantly) middle-class authors for a (predominantly) middle-class audience,[21] the novel played an important role in the invention and promotion of this group's social identity, especially by con-

17 For a discussion of Hume's position in relation to that of Aristotle, see *Yenor, Scott*, David Hume's Humanity: The Philosophy of Common Life and Its Limits, Basingstoke: Palgrave, 2016, 114–119.

18 *Thornton, William*, The Counterpoise: Being Thoughts on a Militia and a Standing Army, London: Printed for M. Cooper, 1752. Quoted from the unpaginated preface.

19 *D. Cannadine*, Class in Britain, 32.

20 The connection between the "rise of the novel" and the emerging middle class was first discussed in *I. Watt*, Rise of the Novel, and *Habermas, Jürgen*, The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society, trans. Thomas Burger, Cambridge: Polity, 2015 [1962]. For a survey of perspectives after those authors, see *Cowan, Brian*, Making Publics and Making Novels: Post-Habermasian Perspectives, in: *J. A. Downie* (ed.), The Oxford Handbook of the Eighteenth-Century Novel, Oxford: Oxford University Press, 2016.

21 Hunter points out that the readership of the novel was never restricted to one specific group only. In contrast to the argument presented here, he holds that "the characteristic feature of novel readership was its social range […] and the way it spanned the social classes and traditional divisions of readers" (*Hunter, Paul J.*, The Novel and Social/Cultural

tributing to the illustration and dissemination of the concept of middle-class morality.[22] As a result, a preoccupation with the figure of the individual forced to navigate morally complex situations, together with the frequent vilification of characters from aristocracy and gentry, as well as a complacent middle-class contentedness with being placed in the 'best' social stratum, set the tone for much eighteenth-century prose writing.[23] However, while the general connection between "the emergence of a bourgeois public sphere" and "the rise of novel writing and -reading" has long been treated as "a standard feature" of the period's literary and cultural history,[24] the aesthetic and narratological dimensions of the "invention" of middle-class superiority[25] still remain a productive field of study.

For this reason, our research project within the CRC 1288 "Practices of Comparing" set out to investigate the novel's contribution to eighteenth-century negotiation of social identity and morality by focusing on the play of narrative and stylistic strategies that constitute an important aspect of this contribution. As we are traditionally trained literary scholars, the methodological thrust of our project lay in the informed manual analysis of an ambitious, yet manageable corpus of some twenty carefully selected novels from the period. We specifically decided to focus on classical narratological analyses of aspects such as narrative situation, focalization, and perspective structure[26] as well

History, in: John Richetti (ed.), The Cambridge Companion to the Eighteenth-Century Novel, Cambridge: Cambridge University Press, 1996, 19).

22 *Nünning, Vera,* From 'honour' to 'honest'. The Invention of the (Superiority of) the Middling Ranks in Eighteenth Century England, in: Journal for the Study of British Cultures 2 (1994).

23 For more detailed surveys of the eighteenth-century novel and its contexts, see *Nünning, Ansgar,* Der englische Roman des 18. Jahrhunderts aus kulturwissenschaftlicher Sicht. Themenselektion, Erzählformen, Romangenres und Mentalitäten, in: Ansgar Nünning (ed.), Eine andere Geschichte der englischen Literatur. Epochen, Gattungen und Teilgebiete im Überblick, Trier: WVT, 1996, and the contributions in *Richetti, John* (ed.), The Cambridge Companion to the Eighteenth-Century Novel, Cambridge: Cambridge University Press, 1996 and *Downie, J. A.* (ed.), The Oxford Handbook of the Eighteenth-Century Novel, Oxford: Oxford University Press, 2016.

24 *P. Rogers*, Social Structure, 47.

25 *V. Nünning*, From 'honour' to 'honest'.

26 *Fludernik, Monika*, An Introduction to Narratology, London: Routledge, 2009, *Wenzel, Peter* (ed.), Einführung in die Erzähltextanalyse: Kategorien, Modelle, Probleme, Trier: WVT, 2004, *Nünning, Ansgar,* Grundzüge eines kommunikationstheoretischen Modells

as on the representation of fictional characters.[27] Our individual (close) readings indeed produced results that hermeneutically seem to confirm our assumptions of a middling-class preoccupation with social identity. Nevertheless, we remained painfully aware of the limited scope of our project design regarding the number of texts that we were able to incorporate into our investigation. And we wondered if we could complement the traditional literary analyses of our research by turning to DH in the attempt to engage with at least some aspects of our research on a digital and somewhat broader textual basis.

3. Between close and distant reading: using DH methods for literary analysis and interpretation

While the tentative origins of DH reach back into the first half of the twentieth century,[28] most of its methods and research questions fully emerged only during the past few decades. One branch of the wider field of DH has concerned itself with literary texts; and its exploration of the relationship between literature and the computer has taken many shapes. One major issue is the production and increasing availability of electronic (and scholarly) editions of primary and secondary works. This development has significantly widened access to literary texts and now plays a vital role in the preservation of books and other textual materials;[29] it has forced libraries and academic institutions to develop new data policies and technological solutions for storing and providing access to primary and secondary literature. Also, not only computer-related genres such as literary hypertexts

der erzählerischen Vermittlung: Die Funktion der Erzählinstanz in den Romanen George Eliots, Trier: WVT, 1989.

27 *Margolin, Uri*, Character, in: David Herman (ed.), The Cambridge Companion to Narrative, Cambridge: Cambridge University Press, 2007, *Eder, Jens/Jannidis, Fotis/Schneider, Ralf (eds.)*, Characters in Fictional Worlds: Understanding Imaginary Beings in Literature, Film, and Other Media, New York: de Gruyter, 2010.

28 *Thaller, Manfred*, Geschichte der Digital Humanities, in: Fotis Jannidis/Hubertus Kohle/Malte Rehbein (eds.), Digital Humanities. Eine Einführung, Stuttgart: J. B. Metzler, 2017, 3–4.

29 *Shillingsburg, Peter L.*, From Gutenberg to Google: Electronic Representations of Literary Texts, Cambridge: Cambridge University Press, 2006.

have emerged,[30] but digital technologies have dramatically changed both the publishing and book industry, so that many literary and scholarly texts nowadays are read not from the printed page but from the displays of e-book devices.

In the context of those developments, the impact of the digital revolution on the academic infrastructure of the humanities is without question. But while computers have long found their place even in the offices of the most technophobic academics, and while even the rear-guard of traditional literary scholars use digital information retrieval systems such as electronic library catalogues and databanks, there is still widespread resistance to some other applications of digital methods in literary research. And indeed, in the realm of literary analysis and interpretation things look a bit complicated. On the one hand, textual analysis can very well apply digitized methods, in ways comparable to the strategies of computational and corpus linguistics. In the wide field of stylometrics, for instance, large corpora of texts can be scanned for the co-occurrence of particular textual features, which can then help trace historical developments in literary language, attribute authorship, or define genres.[31] Also, the themes that dominate a text can be extracted by topic modeling.[32] On the other hand, when it comes to the *interpretation* of literary works, there is some skepticism as to the ability of computer programs to support human readers in tasks of that complexity. Although textual analysis is always the *basis* for interpretation, interpretation is usually performed, after all, by highly educated, well-informed academic readers with a hermeneutic interest in exploring the meaning – or meanings – of a text. The main interest in interpretation lies in investigating a text's combi-

30 *Ryan, Marie-Laure*, Avatars of Story, Minneapolis: University of Minneapolis Press, 2006, *Ensslin, Astrid*, Hypertextuality, in: Marie-Laure Ryan/Lori Emerson/Benjamin J. Robertson (eds.), The Johns Hopkins Guide to Digital Media, Baltimore: Johns Hopkins University Press, 2014.

31 *Burrows, John*, Delta: A Measure for Stylistic Difference and a Guide to Likely Authorship, in: Literary and Linguistic Computing 17 (2002), *Jannidis, Fotis/Lauer, Gerhard*, Burrows's Delta and Its Use in German Literary History, in: Matt Erlin/Lynne Tatlock (eds.), Distant Readings: Topologies of German Culture in the Long Nineteenth Century, Rochester: Camden House, 2014. See also the extensive introduction and survey by *Juola, Patrick*, Authorship Attribution, in: Foundations and Trends in Information Retrieval 3 (2006), 233–334, http://dx.doi.org/10.1561/1500000005.

32 *Jannidis, Fotis*, Quantitative Analyse literarischer Texte am Beispiel des Topic Modelings, in: Der Deutschunterricht 5 (2016).

nation of thematic, aesthetic and rhetorical features which are understood to be culturally embedded in complex ways. Both ample contextual research and the close scrutiny of textual features are therefore generally considered prerequisites of literary interpretation.

The 'distant' reading, i. e., the computerized analysis of textual patterns in texts, that DH have introduced to literary scholarships, thus looks fairly incompatible at first sight with the close reading and interpretation strategies practiced by the scholar trained in literary hermeneutics. Franco Moretti famously spoke of distant reading as "a little pact with the devil: we know how to read texts, now let's learn how not to read them".[33] But the advantage of distant reading is that it allows scholars to detect features across a number of texts that could only with difficulty and considerable use of resources be tackled by individual close readings. While the computer may lack the ability to detect 'qualitative' differences, it is its promise of a seemingly boundless quantitative analytical scope that turns it into a potentially powerful analytic tool. Moreover, DH not only offers the opportunity to extend existing research strategies in a quantitative fashion, but the playful exploration of digital tools may also lead to unexpected results and even contribute to the emergence of new research strategies. Emphasizing the productive power of playfulness and creativity, Stephen Ramsay advocates an informal "Hermeneutics of Screwing Around" as a valid computer-based research strategy for the Digital Age in an influential paper.[34] Concerned with the limited scope of the hermeneutical (close) readings in our project, we were intrigued both by this lure of quantitative analysis and the emergence of the "somewhat informal branch of text interpretation delightfully termed *screwmeneutics*" after Ramsay.[35] Therefore, we decided to embark on a complimentary investigation of the textual manifestations of some concepts of middle-class virtue in the eighteenth-century novel with the help of DH.

33 *Moretti, Franco*, Distant Reading, London: Verso, 2013, 48.

34 *Ramsay, Stephen*, The Hermeneutics of Screwing Around; or What You Do with a Million Books, in: Kevin Kee (ed.), Pastplay: Teaching and Learning History with Technology, Ann Arbor: University of Michigan Press, 2014 [2010].

35 *McCurdy, Nina et al.*, Poemage: Visualizing the Sonic Topology of a Poem, in: IEEE Transactions on Visualization and Computer Graphics 22 (2016), 447.

4. From search to research: some examples

Our approach to using DH was unusual in so far as we did not take the more common route from distant to close reading but proceeded vice versa. Since we had already invested considerable effort in the (close) reading and analysis of our original corpus of ca. twenty eighteenth-century novels, we began our journey into the field of DH equipped with a solid set of expectations about the literary negotiation of social identity during the period under investigation. Starting from the hermeneutical findings of our investigation, we then attempted to corroborate our results, by taking our research into the realm of computing, more precisely, by expanding the corpus of novels under investigation and developing ideas on how DH tools could help us to support our arguments. Our first step in this process was to expand our text base by creating a digital corpus of 55 novels (see the list in the appendix to this article), thus more than doubling the number of texts. We decided to look at some of the most well-known novels from the eighteenth century as well as to include some lesser known works that were however well received during the period in question. Further, we intentionally included works from different genres such as sentimental novels, gothic novels, coming-of-age stories and adventure novels, in order to do some justice to the considerable variety and diversity in eighteenth-century literary production.[36]

Already during the process of compiling and preparing the corpus, however, we encountered the first methodological challenges. While DH offers a great variety of tools and approaches, digitized texts are only ever suitable for a research purpose as they are prepared accordingly. In other words, if we were to look for complex sentence structures, or even narrative patterns conveying middle-class ideology, these structures would have to be tagged beforehand in each text. This means that passages that we consider as good examples for such patterns would have to be identified and electronically annotated accordingly in the hidden plane of text information, the markup. Not only did we need digital copies of all novels, but a lot of tagging by hand would have been necessary. The reason is that no program can automatically

36 See *J. Richetti*, The Cambridge Companion, *Nünning*, *Ansgar and Vera*, Englische Literatur des 18. Jahrhunderts, Stuttgart: Klett, 1998, and *Backscheider, Paula R./Ingrassia, Catherine* (eds.), A Companion to the Eighteenth-Century English Novel and Culture, Chichester: Wiley-Blackwell, 2006.

mark up more complex structural features such as comparisons between characters that are not made explicit on the textual level, but are evoked through characters acting differently in comparable situations, a strategy frequently used in prose fiction. To tag the texts for such features would be a very time-consuming process that presupposes an answer to our original question, namely what role practices of comparing play on a structural level in the textual constructions of social identity. This question would need to be answered before the markup could begin, since these structures would have to be analyzed before they could then be tagged in all texts of our corpus. We would further risk to exacerbate the danger of confirmation bias that is structurally inherent to our approach anyway, as we would run the danger of finding exactly what we placed there during the tagging process. The sheer number of working hours that would have to be put into creating new digital versions with tags made *this* type of digital research impractical for a first, tentative and playful digital exploration of our expanded corpus of eighteenth-century novels.

As a consequence of these first challenges we moved away from the idea to investigate complex syntactic and narrative structures, and turned to word and phrase searches as a feasible alternative, for which an array of DH tools are available, and for which simple text files suffice.[37] In this context, our assumption was that key terms denoting middle-class virtues and vices would be detectable in abundance across the novels of our corpus. While programs such as *AntConc* are especially promising when zooming in on individual texts, *Voyant* proved to be more efficient when searching larger collections of texts. Generally speaking, it is interesting to look at the frequency of words within one text and within a corpus, since words that occur very frequently (except for functions words such as conjunctions or articles, which we excluded from all searches) are likely to hint at the thematic focus of a text. Sometimes, however, the opposite of an expected word frequency may be revealing, too, as was the case in the searches we document below. Since we were also interested in diachronic developments, we began by using Voyant, which offered a direct comparison of word frequencies and the context

37 Project Gutenberg is the most easily accessible online text collection for such purposes. Although random checks of Project Gutenberg texts against the printed scholarly editions we had read suggested that the former are not always entirely reliable, we decided that for the first stage of word searches, the results were unlikely to be heavily distorted.

of their appearance across the corpus as a whole. We added the year of publication to the title in order to have the novels appear in chronological order of their publication, so that any diachronic changes would be immediately visible. Since the larger framework of our project was the study of the forms and functions of practices of comparing, our very first tentative approach was to run searches for words and particles that explicitly produce comparisons (such as *more/less than*, and words containing comparatives or superlatives ending on *-er* and *-est*). The result was that comparative words and particles occurred indeed frequently in our corpus ("more"=14196 times, "less"=2531, "than"=12161, "like"=4555). However, looking closer at our results it became apparent that words such as more were not always used to create an explicit comparison, but in many cases appeared in other contexts, such as to emphasize the expressed meaning ('still the more'), or to indicate temporality ('once more') in phrases like 'little more than', 'still the more', 'many more' and 'once more' (see fig. 1). Hence, the results of the context search put the result of the word frequency in question and provided a first indication that comparing in prose fiction might work in less explicit ways than in some other discourses.

Fig. 1: Word search for "more" and immediate contexts

Document	Left	Term	Right
15) 174...	to pay us such interest: I thought what the interest would come to,' with much	more	of the same kind; but I have, I believe, satisfied you with this taste. "My
15) 174...	to support one who kept pace with the expenses of Sir George Gresham. "It is	more	than possible that the distress I was now in for money, and the impracticability of
15) 174...	subject of my serious deliberation; and I had certainly resolved on it, had not a	more	shameful, though perhaps less sinful, thought expelled it from my head."--Here he hesitated a
15) 174...	life began to be numbered among my wants; and what made my case still the	more	grievous was, that my paramour, of whom I was now grown immoderately fond, shared the
15) 174...	fear of seeing his ghost." "I shall shortly doubt, Partridge," says Jones, "whether thou art	more	brave or wise."--"You may laugh at me, sir, if you please," answered Partridge; "but
15) 174...	never found a horse in my life: but I'll tell thee what, friend, thou wast	more	lucky than thou didst know of; for thou didst not only find a horse, but
15) 174...	acquainted him that he had been misinformed as to the sum taken, which was little	more	than a fifth part of what he had mentioned. "'I am sorry for it with
15) 174...	whether he had most feared my death or wished it, since he had so many	more	dreadful apprehensions for me. At last, he said, a neighbouring gentleman, who had just recovered
15) 174...	he partly owed his preservation to my humanity, with which he professed himself to be	more	delighted than he should have been with my filial piety, if I had known that
15) 174...	desires of a foolish old fellow. Such solicitations, however, had no effect, and I once	more	saw my own home. My father now greatly solicited me to think of marriage; but
15) 174...	the necessaries of life, I betook myself once again to study, and that with a	more	inordinate application than I had ever done formerly. The books which now employed my time
15) 174...	the Holy Scriptures; for they impart to us the knowledge and assurance of things much	more	worthy our attention than all which this world can offer to our acceptance; of things
15) 174...	to think all the time I had spent with the best heathen writers was little	more	than labour lost: for, however pleasant and delightful their lessons may be, or however adequate
15) 174...	were the worst of company to each other: but what made our living together still	more	disagreeable, was the little harmony which could subsist between the few who resorted to me
15) 174...	and promised to bring him the rest next morning; and after giving him a little	more	advice, took my leave. "I was indeed better than my word; for I returned to
15) 174...	that side.' "This apothecary was one of the greatest politicians of his time. He was	more	delighted with the most poultry packet, than with the best patient, and the highest joy
15) 174...	I had no arms, to have executed vengeance on his baseness. "I was now once	more	at liberty; and immediately withdrawing from the highway into the fields, I travelled on, scarce
15) 174...	an end to all my apprehensions of danger, and gave me an opportunity of once	more	visiting my own home, and of enquiring a little into my affairs, which I soon
15) 174...	to be the ringleader. Thus, as our duty to the king can never be called	more	than our second duty, he had discharged us from this by making it incompatible with
15) 174...	of rebellion in any people." "I promise you, sir," says Jones, "all these facts, and	more	, I have read in history, but I will tell you a fact which is not
15) 174...	this kingdom in favour of the son of that very King James, a professed papist,	more	bigoted, if possible, than his father, and this carried on by Protestants against a king

We then turned to other word searches. Collecting results from our (close) reading of the selected text from our original corpus and in the playful spirit of "screwmeneutics"[38] we developed a list of terms that describe behavior and

38 *N. McCurdy et al.*, Poemage, 447.

dispositions in negative and positive ways that we considered to be important for the negotiation of social identity in eighteenth-century English novels. In particular, we decided to look for positively and negatively connotated adjectives, but also noun phrases used in characterization by narrators and other characters, or in self-characterization. With this we aimed to make apparent the contrast between what were considered desirable or undesirable character traits and actions and how these conceptions changed throughout eighteenth-century literature. For this purpose, we created two lists of adjectives we came across in our close reading process and in our reading of secondary literature on the construction of social identity in the eighteenth century.[39] In the group of positive terms, we had collected such words as "gentle", "gallantry" and "virtuous"; the negative ones included "foppish", "conceited", "impertinence", etc. We then added other terms from these and related semantic fields and complemented the adjectives and adverbs with the pertinent noun phrases in an attempt not to overlook relevant textual manifestations. This gave us a list that included the words "gentle" and "gentleman", "gallant" and "gallantry", "grace", "graceful", "gracious" and "graciousness", "polite" and "politeness" "virtuous" and "virtue" for the positively connotated behaviors and attitudes; the negatively connotated ones included "fool" and "foolish", "fop", "foppish" and "foppery", "disagreeable", "conceited" and "conceitedness", "vulgar" and "vulgarity", "impertinent" and "impertinence", "impetuous" and "impetuosity", as well as "negligent" and "negligence". For efficient text searching, the truncated forms of these words were used.[40] Our list then had for instance *gentle*, tender*, grac*, gallant*, polit*, sweet* virtu*, modest*, moderat*,* on the positive side, and *fop*, fool*, disagreeab*, conceited*, vulgar*, impertinen*, impetuo*, negligen** on the negative.

Figure 1 shows the frequency of both the negative and the positive search terms across our corpus. Since the corpus was organized chronologically, the graphic ought to show whether certain terms were used more or less frequently in later publications than in earlier ones. As we see in the diagram, usage did vary considerably, but this variation shows no indication

39 *V. Nünning*, From 'honour' to 'honest', *D. Wahrman*, Imagining.

40 Using truncated forms, i. e., a word stem closed by an asterisk, allows the system to find instances of the stem in all variations and word classes; for example, *gentl** would not only include the results for "gentle", but also for "gently", "gentleman", "gentlemanly", etc.

of being related to diachronic changes during the time period. Frequencies rather vary from text to text. In fact, while individual texts may deviate from the median in a significant fashion, the overall frequency of the terms under investigation seems to remain more or less consistent over the entire eighteenth century as far as our corpus is concerned.

The underlying assumption guiding our approach was that the social changes in the understanding of the virtues and vices listed above would somehow be reflected by changing word frequencies. Especially for *gentle** did we expect to find a significant diachronic development, as notions of gentility changed from a rather narrow denotation of gentle birth to an understanding of polite behavior by the end of the century that made it possible for men from a significantly wider range of society to claim the status of a "Gentleman" (see FN 6). Contrary to our expectations, however, we were unable to discern significant developments in our search result.

While *gentle** indicated at least a slight discernible decrease of usage (see fig. 2), none of the other terms offered a visible indication of a diachronic development. Put differently, word *frequencies* did not hint at the emerging construction of a middle-class identity during the period, as described by eighteenth-century social history. One possible explanation for this may be that frequency cannot capture what a term *means*: While narrators and characters in late eighteenth-century novels may use all variations of the words "gentle", "gentleman", etc. as frequently as those in the early phase, they may simply mean different things by those terms.

With this possible explanation in mind, we decided to turn away from questions of diachronic development within the eighteenth century. Our next step was to look at the total word frequency of our search terms in the entire corpus. In order to corroborate our assumption that these terms play a significant role in the topics of the novels, we checked their position in the list of the most frequently appearing words within the body of novels under consideration. However, we were once more disappointed. The word count showed that out of the words we were looking for, most were situated in the lower ranks of the count, whereas words such as 'said', 'Mr', 'time' and 'little' came up top of the list (see fig. 3). From our search list, only *gentleman* managed to enter the top 100 at position 81, followed by *virtue* at 239. The results for our negative terms proved to be even less impressive with, for instance, *fool*, reaching only the top 2000 of the most frequently used words in the corpus. Our positive terms generally ranked higher than our negative

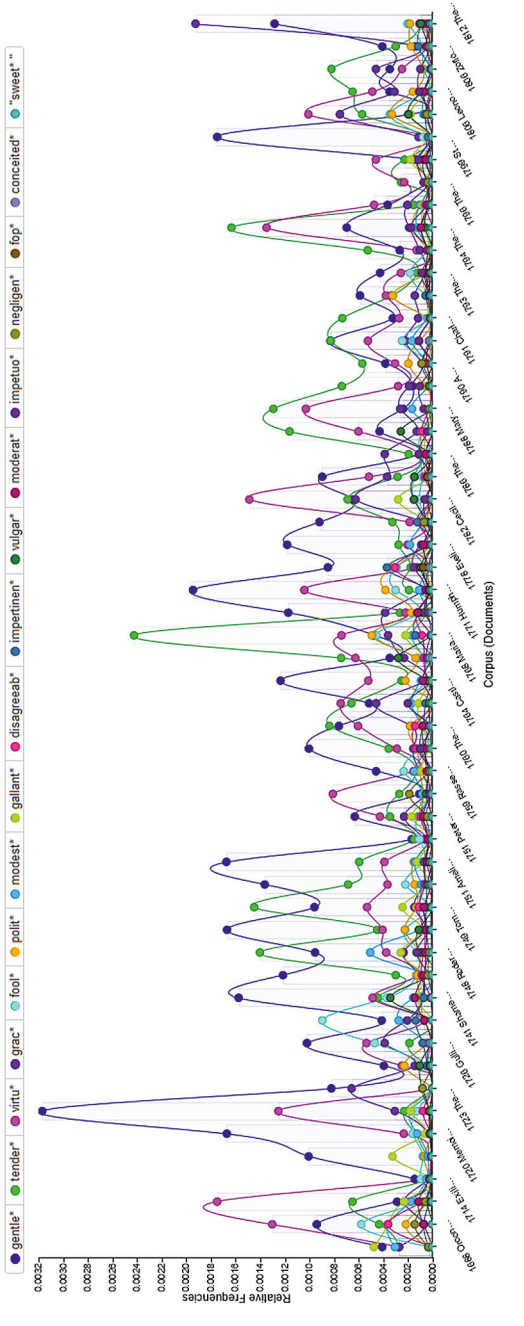

Fig. 2: Frequency of negative and positive terms across the corpus

terms with *virtue* at position 239 (1370 occurrences), *agreeable* at 440 (892 occurrences), *sweet* at 450 (881 occurrences), and *tender* at 299 (1163 occurrences). None of the negative terms made it above *fool* at position 1420 and with 329 occurrences. With all our negative terms ranking rather low and quite a number of our positive terms ranking comparatively higher and with a look at the most frequent words (especially "dear", "great", and "good"), one may speculate whether character traits might have been negotiated more in terms of stating an ideal during the period. This would mean that texts rather state what should be aimed for, while at the same time only implicitly hinting at negative traits and behaviors and hence, at what to avoid. On the other hand, our experience with words and particles that explicitly produce comparison showed that word frequency tells us little about the contexts of use, and hence little about the diverse meanings individual words can take on in different contexts. Such a bold claim would therefore need more data via context searches or a more elaborate analysis via close reading.

Fig. 3: Top 40 most frequent words in the corpus

	Term	Count	Trend
1	said	202...	
2	mr	107...	
3	time	101...	
4	little	8293	
5	man	8070	
6	good	7974	
7	great	7865	
8	sir	7596	
9	shall	7385	
10	know	7325	
11	lady	6809	
12	mrs	6299	
13	make	6287	
14	heart	6073	
15	miss	5835	
16	think	5762	
17	having	5610	
18	thought	5470	
19	mind	5372	

	Term	Count	Trend
20	came	5237	
21	say	5072	
22	house	4990	
23	day	4978	
24	till	4869	
25	dear	4837	
26	cried	4834	
27	lord	4831	
28	life	4796	
29	father	4689	
30	told	4565	
31	come	4563	
32	like	4555	
33	love	4515	
34	way	4473	
35	soon	4392	
36	long	4389	
37	young	4310	
38	hand	4206	
39	let	4141	
40	world	4027	

Fig. 4: Position of the word "conduct" in the word count

179	light	1680	
180	cause	1675	
181	order	1669	
182	true	1669	
183	ill	1651	
184	castle	1649	
185	affection	1645	
186	heaven	1645	
187	conduct	1639	
188	god	1622	
189	pleased	1617	
190	countenance	1613	
191	matter	1608	
192	certain	1606	

After none of our search terms had turned out to feature prominently among the most frequent words in the corpus, our next step was to turn to what we *could* find on the list of most frequent words (figs. 3 and 4). For this we went through this list looking for terms we felt to exhibit some kind of relationship to contemporary discussions of social identity. In this way, we found that comparably frequently used in our corpus were "honour" (no. 54 in the word-frequency list), "poor" (no. 47), "character" (no. 141) and "conduct" (no. 187; see fig. 4), with the word "conduct", referring to the overall comportment of a person. From those results, we considered "conduct" to be particularly interesting. The term, appearing most frequently in Wollstonecraft's *Maria, Or, The Wrongs of Woman* (1798) and least frequently in Fielding's *Shamela* (1741), is not only eponymous to the eighteenth-century genres of the conduct book and the conduct novel, but generally constitutes a key concept of the literary and cultural movement of sensibility.[41,42] For this reason, we decided to play around some more and searched for the word "conduct" in the sentimental novels of our corpus separately.[43] Once more, we received a fairly inconclusive diagram (fig. 5): Between the middle and the end of the eighteenth century, sentimental novels feature the term "conduct" in varying ways.

While interesting for the formulation of new research questions,[44] this did not help us in terms of our thesis on the literary negotiations of social identity. In fact, the visualization suggested that a diachronic change in the

41 *V. Nünning*, From 'honour' to 'honest'.

42 The low result for *Shamela* could be interpreted in different ways. On the one hand, it could mean that this text, being a parody of one of the most influential of the early sentimental novels, wanted to avoid the term by way of taking a critical stance on the genre of the sentimental novel, which was heavily influence by the conduct book. On the other hand, Fielding may simply have counted on the reader to realise that both the original and the parody deal with conduct, without having to make that explicit.

43 The sentimental novels or parodies thereof in our corpus are, in chronological order: Samuel Richardson's *Pamela* (1740), Henry Fielding's *Shamela* (1741) and *Amelia* (1751), Laurence Sterne's *Tristram Shandy* (1759), Oliver Golding's *The Vicar of Wakefield* (1766), Henry Mackenzie's *The Man of Feeling* (1771), Tobias Smollet's *Humphrey Clinker* (1771), Frances Burney's *Evelina* (1778), Maria Edgeworth's *Castle Rackrent* (1800) and Jane Austen's *Sense and Sensibility* (1811).

44 Such as: Is a separation of a genre and its parodies necessary, and if so, how can such a distinction be upheld? In how far does the illustration present a visualization of genre negotiations by means of comparison? Is this wave movement even coincidental due to the novels in the corpus?

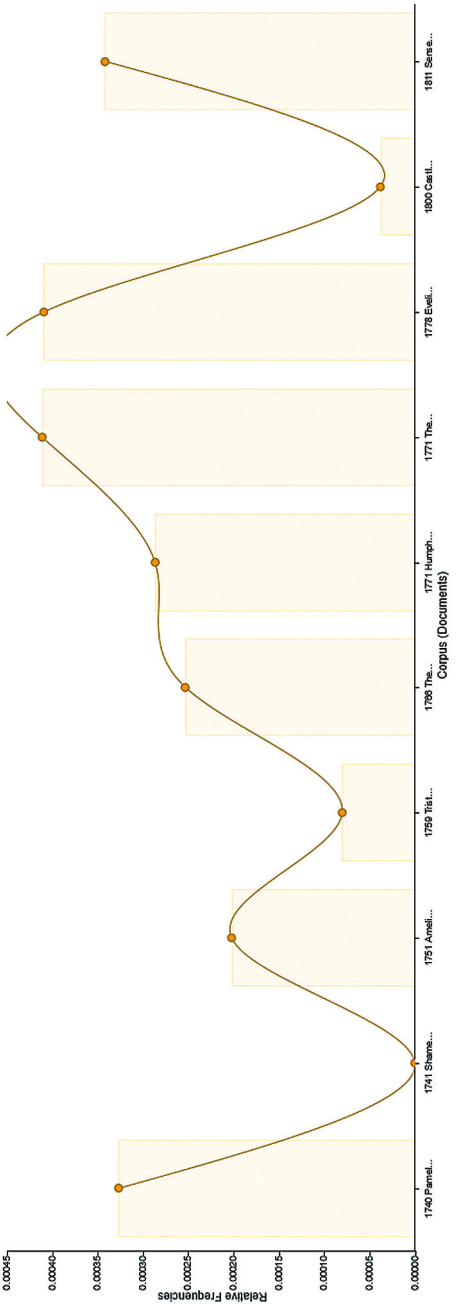

Fig. 5: Occurrence of "conduct" in selected sentimental novels

usage of particular words is rather difficult to argue for, based on the type of distant reading we engaged in our work with Voyant. Another visualization tool by Voyant offers users the opportunity to look for the context and the co-occurrence of individual terms in a corpus. Here it became apparent that "conduct", while mainly appearing as a noun in connection with adjectives that qualify it, also appears as a verb, and does so most frequently in our Gothic novels (figs. 6 and 7). With their tendency to set the action in regions both temporally and spatially remote from eighteenth-century England, the Gothic novels can comment on contemporary English society at best by implication, so that the latter finding pointed once more at the need for further close reading and interpretation.

Fig. 6: Examples for sentences containing "conduct" (1)

1) 1688 ...	a man who has led them on to battle with	conduct	and success; of whom I shall have occasion to speak
1) 1688 ...	to arms, and the occasions given him, with the good	conduct	of the old general, he became, at the age of
1) 1688 ...	moans with sighs and tears. What reports of the prince's	conduct	were made to the king, he thought good to justify
1) 1688 ...	forgetting how time ran on, and that the dawn must	conduct	him far away from his only happiness, they heard a
1) 1688 ...	and to the world, that depended on his courage and	conduct	. But he made no other reply to all their supplications
1) 1688 ...	word and honour he would find the means to re-	conduct	him to his own country again; assuring him, he had
2) 1713 ...	Aunt, my Lady Martial, a virtuous Matron, under whose pr...	conduct	I might learn a little of the Town Politeness, its
2) 1713 ...	in which I had greatest Need of her Counsel and	conduct	; and as most young People have too great an Opinion
2) 1713 ...	try if Jealousy would work upon me, but all my	conduct	had been with Caution and Circumspection, quite different from Passion
3) 1714 ...	said Clelia, that I always liv'd at Rome, under the	conduct	of my wise and honourable Parents, the noble Fabius, my
3) 1714 ...	if I may so say) into the right Way, and	conduct	us thro' unknown Paths, to what we desire, or, at
3) 1714 ...	my Duty. I who had, by my disobedient and unwary	conduct	, in some Degree tarnish'd the Glory of my illustrious Family
3) 1714 ...	that even the Line of Reason is not able to	conduct	me through its wild Mazes. On every Hand I see
3) 1714 ...	Accommodation, after so many great and dangerous Fati...	conduct	you to your Apartment. Book 3 Having left Clarinthia and

Fig. 7: Examples for sentences containing "conduct" (2)

31) 177...	is lawfully entitled. It is true, that Mrs. Mirvan would	conduct	this affair with more delicacy than Mrs. Selwyn; yet, perhaps
31) 177...	when, with the eye of penitence, thou reviewest thy past	conduct	! Hear, then, the solemn, the last address, with which the
31) 177...	so obviously, without considering the strange appearance ...	conduct	. Alas, my dearest Sir, that my reflections should always be
31) 177...	you are, you will adopt a very different style and	conduct	in future." I then rose, and was going, but he
31) 177...	in the world who would have any influence over my	conduct	." "And will you, then, restore to me that share of
31) 177...	in great indignation; and assuring him I would make his	conduct	as public as it was infamous-I left the house
31) 177...	manner almost unanswerable, besought me to leave to hi...	conduct	of the affair, by consenting to be his before an
31) 177...	very sorry for it!-Lord Orville must himself think this	conduct	strangely precipitate." "No, my dear, you are mistaken; Lord Orville
31) 177...	seemed something so little-minded in this sudden change of	conduct	, that, from an involuntary motion of contempt, I thanked her
31) 177...	will certainly be offended; but if you allow me to	conduct	you, though she may give the freer scope to her
31) 177...	My sole view is to explain the motive of my	conduct	in a particular instance, and to obviate the accusation of
31) 177...	may know I dare defend, as well as excuse, my	conduct	. "CLEMENT WILLOUGHBY." What a strange letter! how proud and how
31) 177...	for no more; the chaise now waits which is to	conduct	me to dear Berry Hill, and to the arms of
32) 177...	told him that a servant from the Baron waited to	conduct	him to the Castle. He took leave of Wyatt's wife

5. Discussion

The results of our investigations with Voyant were unexpected to say the least. They are not only at odds with important voices in secondary literature,[45] but they also contradict our own close reading experiences that confirm the conceptual relevance of the listed virtues and vices in the portrayal of characters in the eighteenth-century novel in general. Our expectation was to find diachronic developments of the words used to describe presumably middle-class virtues and flaws displaying an increase of frequency towards the end of the eighteenth century. We based our expectations on the assumption that the social identity of the 'middling' classes began to be constructed in negotiations in and beyond literature during this time period.[46] By use of visualization tools we expected to be able to localize the moment these negotiations entered literature on a word level, but instead the results indicate that as far as our searched terms and our corpus are concerned no such change is traceable. Confronted with these findings, we naturally began to question our search strategies, including the list of terms we had thought to be so prominent in eighteenth-century discussions of virtues and vices. But we also wondered whether the infrequent appearance of those terms and the lack of clearly discernible diachronic developments in their application could also be explained differently, for example, by considering the traditional distinction made in literary studies between *telling* and *showing*.[47] Thus, we speculated that our findings may indicate a tendency to show virtues by means of the description of behaviors rather than by naming them explicitly. However, such a claim can only be upheld by a closer analysis in terms of close reading as a complementary method to the usage of DH tools.

Further, it seemed that when working with computation techniques, there is the danger that significant differences between texts belonging to the various subgenres of the novel that constitute the overall corpus may disappear from view. While a scholar has certain background information on literary and cultural history available in close reading, a computer is rather

45 E. g., *A. Nünning*, Der englische Roman.

46 *D. Wahrman*, Imagining, *Schwarz, L. D.*, Social Class and Social Geography: The Middle Classes in London at the End of the Eighteenth Century, in: Social History 7 (1982).

47 *Herman, David*, Story Logic: Problems and Possibilities of Narratology, Lincoln: University of Nebraska Press, 2002, 171–172.

ignorant towards contextual details in its application of distant reading on a text. This bears problems as well as promises. But we wondered whether these subgenre specific groups such as Gothic novels, or Sentimental novels, had not better be analyzed by searching them separately. The justification for dealing with these separate groups of novels belonging to different subgenres separately lies in literary-historical conventions and definitions of, e. g., the Sentimental Novel, or Gothic Novel. The very fact that DH overlooks such conventions and definitions in the production of data, makes us aware of their potential relevance for analysis and interpretation. In the words of McCarty, DH forces us to "ask in the context of computing what can (and must) be known of our artifacts, how we know what we know about them and how new knowledge is made".[48] Just as in the case of words and particles which explicitly produce comparisons, and with the different rankings of positive and negative terms, our usage of DH tools challenged us to acknowledge that computing can only ever give us information on texts in form of data. How we read and interpret these numbers and results foregrounds the responsibility of informed research. It is easy to quickly jump to false conclusions if the numbers seem to support the desired argument. But especially when we combine traditional research with DH methodology taking into consideration all the different aspects that influence the results (e. g., the corpus, the genre, the scope of each text, the relation to other literary works of the same time period, etc.) becomes a difficult yet, important task for every scholar in the humanities.

For our usage of Voyant this meant we had to realize that even when we received results that seemed to corroborate our assumptions, this did not really mean direct support for our argument in terms of numbers. It only meant that we needed to question these results again in order to avoid running the risk of prematurely interpreting unanticipated quantitative data in the light of our underlying argument. In the case of the term *conduct*, for example, we seemed to have found a frequently used word that could support our argument of the negotiation of social identity in terms of morals in the eighteen-century English novel. Instead, further testing via other visualization tools offered by Voyant made clear that this seemingly simple link between word frequency and research question offered a false security

48 *McCarty, Willard*, Encyclopedia of Library and Information Science, New York: Dekker, 2003, 1231.

(figs. 2, 4, and 5). Looking at the context of the usage of the word "conduct", we could not support our argument but had to face that the various different contexts of occurrences of "conduct" varied significantly in meaning. This means that only in a few cases of the many occurrences did "conduct" actually appear in contexts that we had in mind and that supported our argument (figs. 7 and 8). Another example for the need to treat numeric results with caution was the result of the search term *fool*. The 1741 novel *Shamela* by Henry Fielding, which was written as a parody of Samuel Richardson's highly influential sentimental novel *Pamela*, showed a peak in the frequency of the word "fool" (551 occurrences) in comparison to the other novels. Strikingly, the second highest frequency of the word "fool" was actually found in Richardson's *Pamela*, with 175 occurrences. The temptation to construct some intertextual correlation between both texts with regard to their top positions in the word count for "fool" was great: Fielding might have picked up an inherently significant feature of Richardson's novel and exaggerated that for the purposes of satire. However, when we took into account the overall length of the two texts, this argument collapsed: While 551 occurrences of *fool* seem noteworthy in the relatively short novel *Shamela* (14.456 words), there is nothing significant about the term's appearance in *Pamela* given the total length of this work. With 227.407 words Richardson's novel is over fifteen times longer than that of Fielding. Thus, given the massive text of *Pamela*, the count of 175 occurrences of *fool* dwindles into comparative insignificance.

We were left with the paradox that while being considered more precise and accurate in terms of quantitative and statistical occurrences than traditional methods of close, DH actually seemed to blur any assumption of a precise answer to questions of literary analysis. In our case, DH appeared to be more suitable for finding new questions than to offer or support conclusive answers to interpretative assumptions. Voyant was able to give us the exact number of word frequencies, to tell us which word appeared how often in which novel, and even offered us to compare these frequencies across the corpus directly, while allowing us at the same time to look for the specific contexts of the words. All of this was very helpful, but mainly to question our own approach and its underlying categories. We set out to look for literary negotiations of social identity and how these were influenced by practices of comparison, just to be faced with the problem that comparison was already included in every aspect of our own approach. Instead of making clear distinctions more apparent, DH made us question these distinctions from the

start. If this were the end of it, we would come out of this experiment quite disillusioned. Instead we are inspired by what seems to offer a new methodology for approaching literary texts. While the usage of computing in literary studies is often feared to turn literary analysis into a mere equation whose solution would render all further examination of a text vain and shallow, the opposite seems to be true. DH offers a chance to engage in a more playful, more open-minded yet at the same time equally critical approach to literature and its study that eventually draws research back to the text and the question of how texts are embedded in various discourses.

6. Conclusion

At first sight, our engagement with text search and visualization tools for the analysis of a corpus of eighteenth-century English novels could be summarized in terms of discouragement and frustration – an experience that appears to be shared by scholars in other DH projects but that is apparently rarely admitted in DH. According to Jasmine Kirby "[w]e don't talk enough about failure in the digital humanities".[49] Our failure to corroborate some of our assumptions with numerical data, and the necessity to proceed from the observation of word counts to the wider contexts of our findings in fact triggered two insights. First, if the actions and dispositions of humans in social interaction that the eighteenth-century novel negotiates as desirable or undesirable are much less explicitly mentioned than expected, the novel must have other ways of presenting them. Second, the practices of comparing, too, appear to be situated on *other* levels than that of the text surface, at least in the corpus under scrutiny in our project. The lack of simple numerical proof garnered from distant reading was, in our case, a productive 'failure', because it helped us formulate the hypothesis that literary practices of comparing involve the structural juxtaposition of characters in comparable settings and plot segments. As Nina McCurdy and her colleagues have demonstrated, there is some irony in the fact that the more precision a DH tool offers, the more it makes sense to 'screw around' with it to render new interesting and exciting research questions. Narrow research questions in DH often offer a

49 *Kirby, Jasmine S.*, How NOT to Create a Digital Media Scholarship Platform: The History of the Sophie 2.0 Project, in: IASSIST Quarterly 42 (2019), https://doi.org/10.29173/iq926.

variety of open, inconclusive results, while 'screwing around' seems to lead to unexpected, innovative questions.[50] None of this narrows literary research down to a question of software engineering and mathematical bean counting, but rather computation techniques in form of tools offer a playful exchange between the traditionally trained scholar and DH to find ever new ways of reading texts together in the midst of the *"beautiful mess"* that is literature.[51]

What our search for textual evidence also appeared to show was that available strategies of tagging the words and passages of a text – the production of markup – could much profit from taking into account the research questions of literary scholarship. Existing markup algorithms performed autonomously by computer programs, may be helpful and time-saving, and they certainly have improved much in recent years; still, they rarely capture any of the more content-related questions pertaining to literary analysis, let alone interpretation. What, in the case of our project, really would have helped would have been the automatic isolation and tagging of passages that contain comparisons; this however, is nowhere in sight. We also encountered problems in the visualization of results, even though our corpus was, in DH terms, very small. How could meaningful illustrations be produced if hundreds, or even thousands, of books were subjected to data-mining? Visualization tools will also have to be further developed to match the research designs of the humanities better.

After our venture into DH, we still believe that no computer can 'find out' anything about the meaning of a text on its own. Therefore, while the scholar's limitations are quantitative, those of computer programs appear to lie in the quality of their findings. Nor will a text be 'readable' to a computer at all, if it has not been previously read, processed and digitized by humans, increasingly automatized programs of parsing and tagging notwithstanding. The solution to the apparent incompatibility of close and distant reading lies, unsurprisingly, in the fact that the two strategies can, and ought to be, regarded as complementary rather than competitive, as Stephen Ramsay, among others, has argued.[52] As we have shown, to make use of DH methods can help literary scholars to focus and re-formulate their questions and research strategies, and to reconsider their assumptions about what literary texts do and how they do it.

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50 *N. McCurdy et al.*, Poemage, 447.

51 Ibid., 445.

52 *S. Ramsay*, The Hermeneutics.

Appendix 1: Extended corpus of English eighteenth-century novels

1688	*Oroonoko*	Aphra Behn
1713	*The Amours of Bosvil and Galesia*	Jane Barker
1714	*Exilius*	Jane Barker
1719	*Robinson Crusoe*	Daniel Defoe
1720	*Memoirs of a Cavalier*	Daniel Defoe
1722	*Moll Flanders*	Daniel Defoe
1723	*The Lining of the Patch Work Screen*	Jane Barker
1724	*John Sheppard*	Daniel Defoe
1726	*Gulliver's Travels*	Jonathan Swift
1740	*Pamela*	Samuel Richardson
1741	*Shamela*	Henry Fielding
1743	*Jonathan Wild*	Henry Fielding
1748	*Roderick Random*	Tobias Smollett
1749	*Fanny Hill*	John Cleland
1749	*Tom Jones*	Henry Fielding
1750	*Harriot Stuart*	Charlotte Lennox
1751	*Amelia*	Henry Fielding
1751	*Betsy Thoughtless*	Eliza Fowler Haywood
1751	*Peter Wilkins*	Robert Paltock
1752	*The Female Quixote*	Charlotte Lennox
1759	*Rasselas*	Samuel Johnson
1759	*Tristram Shandy*	Laurence Sterne
1760	*The Adventures of Sir Launcelot Greaves*	Tobias Smollett
1762	*Millenium Hall*	Sarah Scott
1764	*Castle of Otranto*	Horace Walpole
1766	*The Vicar of Wakefield*	Oliver Goldsmith
1768	*Maria; Or, The Wrongs of Woman*	Mary Wollstonecraft
1769	*Emily Montague*	Frances Brooke
1771	*Humphrey Clinker*	Tobias Smollett
1771	*The Man of Feeling*	Henry Mackenzie
1778	*Evelina*	Frances Burney
1778	*The Old English Baron*	Clara Reeve
1782	*Cecilia*	Fanny Burney
1784	*Imogen*	William Godwin
1786	*The Heroine*	Eaton Stannard Barrett

1786	*Vathek – An Arabic Tale*	William Beckford
1788	*Mary – A Fiction*	Mary Wollstonecraft
1789	*Castles of Athlin and Dunbayne*	Ann Radcliffe
1790	*A Sicilian Romance*	Ann Radcliffe
1791	*A Simple Story*	Elizabeth Inchbald
1791	*Charlotte Temple*	Susanna Rowson
1791	*Romance of the Forest*	Ann Radcliffe
1793	*The Castle of Wolfenbach*	Eliza Parsons
1794	*Caleb Williams*	William Godwin
1794	*The Mysteries of Udolpho*	Ann Radcliffe
1796	*Memoirs of Emma Courtney*	Mary Hays
1796	*The Monk*	Matthew Lewis
1798	*Wieland*	Charles Brockden Brown
1799	*St Leon*	William Godwin
1800	*Castle Rackrent*	Maria Edgeworth
1806	*Leonora*	Maria Edgeworth
1806	*Wild Irish Girl*	Sydney Owenson
1806	*Zofloya*	Charlotte Dacre
1811	*Sense and Sensibility*	Jane Austen
1812	*The Absentee*	Maria Edgeworth

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