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A Corpus-based Analysis of Negation in Selected 19th-century American Missionary Documents in Honolulu

Abstract: The present study discusses negation in the Hawaii Corpus, which our research team has compiled by using material left in Hawaii by members of the American Board of Commissioners for Foreign Missions in the 19th century. Since our project is still at the initial stage, some of the conclusions are inevitably tentative, but this study shows that the establishment of the auxiliary *do* in negation was still in progress in the Hawaii Corpus and perhaps more generally in 19th-century English. Although it was nearing the completion, there were still some verbs that stayed with *do*-less negation to a noticeable extent. These exceptional verbs include *have*, *know*, and *doubt*, of which lexical *have* merits particular attention. While lexical *have* occurs in *do* negation in contemporary American English, it illustrates *do*-less negation fairly extensively in the Hawaii Corpus, suggesting that the establishment of *do* negation with lexical *have* was not reached in 19th-century American English. This study also demonstrates that forms of negation differ in the writings by different authors. Clarissa Armstrong's English is worthy of particular notice in this context, as its relatively informal style is characterized by various aspects of negation, including the frequency of negation itself, the use of *do*, *not*, *no doubt*, and *neither . . . or* (instead of *neither . . . nor*).

1 Introduction

The Hawaiian Mission Children's Society Library (HMCS Library) in Honolulu holds an excellent collection of 19th-century journals, letters, and an autobiography written by members of the American Board of Commissioners for Foreign Missions (ABCFM), who migrated to Hawaii in the first half of the 19th century (cf. Forbes/Kam/Woods 2018: 1). By assembling selected writings from this collection, our research team has compiled the ABCFM Hawaii Corpus (hereafter simply Hawaii Corpus), which currently encompasses approximately 653,100 words. This is to provide material for research into 19th-century American English, and more specifically the language of the missionary community. In this case study, we will discuss variable aspects of negation in the data, with a special focus on the use of the auxiliary *do* in negation. While negative constructions are relatively stable in

the 19th century, the use of *do* in negation was not yet consistent. After a brief description of the corpus, we will discuss to what extent the shift from *do* negation to *do*-less negation has been reached in it, moving thereafter to other aspects of negation in the corpus. Since the language of the writings by Clarissa Armstrong, one of the eight authors in the Hawaii Corpus, has turned out to deviate from the overall trend, the latter half of this study, where frequency of negation itself and negation with *not*, *no doubt*, and *neither* are discussed, pays much attention to her English.

In the remainder of this paper, we will begin with the description of the Hawaii Corpus (Section 2), as it forms the central part of our ongoing project. We will then shift to the discussion of negation as a case study based on this corpus, summarizing some relevant previous studies (Section 3), discussing the shift from *do*-less to *do* negation (Section 4), and exploring other aspects of negation with a particular focus on Clarissa's English (Section 5). These will be followed by the concluding section (Section 6).

2 The Hawaii Corpus

The eight authors we have chosen for the Hawaii Corpus were born between 1795 and 1805 in New England. They landed on the Hawaiian Islands in the first to fifth company or missionary group of the ABCFM, as shown in Tab. 1.¹ To give some biographical details of the members, Elisha Loomis was “responsible for the first printing in Hawaii” (Forbes/Kam/Woods 2018: 442), Levi Chamberlain became the Superintendent of the Secular Affairs of the Mission after arriving in Hawaii (170), Lorin Andrews was a chief high school instructor at Lahainaluna (62), Peter Gulick was devoted to pastoral work (293), Dwight Baldwin was involved in missionary work and also in medical practice (92), and Richard Armstrong was “a minister, teacher, advisor, and doctor” (74). Levi Chamberlain and Maria Patton got married on 1 September 1828 in Hawaii, whereas Richard and Clarissa Armstrong were sent to Hawaii as a couple. Both Clarissa and Maria had worked as teachers before their marriages (78, 172–173).

¹ For details of the companies, see Forbes/Kam/Woods (2018): members of the first company, for example, departed Boston, Massachusetts on 23 October 1819 on *Thaddeus*, which landed at Kailua on 4 April 1820, and those of the fifth company departed New Bedford, Massachusetts on 26 November 1831 on *Averick*, which arrived at Honolulu on 17 May 1832. For the biographical sketches of the authors, we rely on Forbes/Kam/Woods (2018).

In view of their educational or vocational backgrounds, it appears that they were well-educated as 19th-century standard English users. Apart from Peter Gulick's autobiography and Clarissa Armstrong's letters (1839–1889), all texts are journals written in the early 19th century as shown in Tab. 1.² Some journal entries of Clarissa's texts (1831–1838) show features characteristic of “letters” such as the use of “you”: “I wish you would keep a journal, & often sketch things that you would not otherwise think worth mentioning” (Clarissa Armstrong, 1832).³

Tab. 1: Breakdown of the Hawaii Corpus (Version 1.2).

ABCFM Company	Writers	Gender	Born-Died (Texts)	No. of Words
1st	Elisha Loomis	male	1799–1836 (1824–26)	29,300
2nd	Levi Chamberlain	male	1792–1849 (1822–28)	228,500
3rd	Maria (Patton) Chamberlain	female	1803–1880 (1825–49)	69,500
3rd	Lorrin Andrews	male	1795–1868 (1827–28)	24,100
3rd	Peter Johnson Gulick	male	1796–1877 (1876–77)	55,800
4th	Dwight Baldwin	male	1798–1886 (1848–58)	139,900
5th	Richard Armstrong	male	1805–1860 (1831–34)	24,500
5th	Clarissa C. Armstrong	female	1805–1891 (1831–89)	81,500
Total				653,100

3 Negation in 19th-century American English

Negation in 19th-century English is relatively stable, when viewed within the framework of its long history, in which some major changes took place. This is perhaps one of the reasons why relatively little attention has been paid to 19th-century negation to this day. However, the development of the auxiliary *do* was

2 We have selected transcribed texts on the website (*Digital Archives: HMCS Library Journal Collection*), but the first author visited the library twice to see the original material and investigate their reliability. The current project members include Akira Moriya as well as the authors of this paper, while we would also like to acknowledge the contribution by Tomonori Iso, who was formerly a member and involved in the compilation of the corpus.

3 Clarissa's entry for 28 March 1834 proves that some of her journals were actually sent to her friends: “Yesterday I sent a journal of 80 pages, together with some pictures to my friends – Capt. Basset took them & said he expected to see a Capt. at Tahaiti bound direct to America – so in haste I sent it, & forgot to send a letter I have ready for Mother & Elizabeth – ”.

still underway. The major expansion of *do* took place in Early Modern English (Ellegård 1953; Nurmi 1999, among others), but examples of *do*-less negation, as in *I know not*, are still observed to a noticeable extent in Late Modern English, especially until the 18th century (Tieken-Boon van Ostade 1987; Iyeiri 2004). This state of affairs is continuous in the 19th century, though to a much lesser extent (cf. Curry 1992).

In recent years, thanks to the increasing availability of large historical corpora, several studies focusing afresh on 19th-century English negation have appeared. Yadomi (2015), for example, explores the *Corpus of Historical American English* (COHA) with the result that *do*-less negation as in *I know not* is observed to a noticeable extent in 19th-century American English and remnant even in the 20th century, though to a minor extent. Hirota (2020) also delves into COHA. Although his central aim is to examine the development of *have to* in Late Modern English, he also notes the widespread use of *do*-less negation with lexical *have* in 19th-century American English, refuting Varela Pérez's (2007) comment that the shift from *do*-less to *do* negation was more or less complete with *have* in the 19th century. These studies show that *do* negation was not yet established in 19th-century American English, hinting at the availability of both *do*-less and *do* negation in the Hawaii Corpus. Hence, the shift from *do*-less to *do* negation is one of the main concerns in the remainder of this paper, though some other aspects of negation will also be explored, especially in relation to the discussion of Clarissa Armstrong's English.

4 *Do*-less vs. *Do* Negation in the Hawaii Corpus

4.1 Overall Trend with All Lexical Verbs

As mentioned in the previous section, *do*-less as well as *do* negation is expected to appear in the Hawaii Corpus, which comprises 19th-century texts in American English. There are indeed both types in the dataset, as in (1)–(4):

- (1) . . . but I *see not* how I can do it, especially as I am requested to address them again tomorrow. (Dwight Baldwin, 1857)
- (2) He left her at Lahaina and *did not see* her on the way. (Levi Chamberlain, 1827)

- (3) . . . whether they are to join the church I *know not*. (Clarissa C. Armstrong, 1859)
- (4) *We do not know* what they were taken for. (Clarissa C. Armstrong, 1832)

Before discussing different tendencies due to different verbs and different authors, it is appropriate to see the overall trend in the Hawaii Corpus. When all lexical verbs are considered, including lexical *have* and *need*, there are 1,010 relevant examples in the corpus, of which 199 (19.7%) illustrate *do*-less negation and 811 (80.3%) *do* negation.⁴

From these statistics, it is probably safe to state that the establishment of *do* negation is nearing completion.⁵ Although *do*-less negation is not yet negligible, this is, to a large extent, due to the inclusion of all lexical verbs. It is well-known that some verbs display a clear and exceptional preference for *do*-less negation, which are therefore conventionally excluded from analysis. The first to note is lexical *have*, whose behaviour deviates from that of other lexical verbs even today: in British English at least, it still retains *do*-less negation, particularly when it is used in the stative sense, as in “We haven’t any butter” (Quirk et al. 1985: 131).⁶ It is, therefore, of no surprise if lexical *have* behaved differently from other verbs in the past. This is why it is almost customary to exclude it from analysis.

The inventory of additional verbs to be set aside is controversial: the list can be long or short. The minimum will be to exclude *know* and *doubt* only, both of which stayed with *do*-less negation until rather late and, like *have*, tended to be frequent enough to affect the overall statistics if included (cf. Tieken-Boon van Ostade 1987), whereas the maximum could be anything like Söderlind’s (1951) list of verbs that occur only in *do*-less negation in John Dryden’s prose, namely *believe*,

⁴ *Need* and *dare* are known to be often ambiguous as to whether they are an auxiliary verb or a lexical one, but in the Hawaii Corpus this ambiguity does not arise. First of all, it does not yield any examples of *dare* of the non-auxiliary use. As for *need*, the dataset yields four examples of the non-auxiliary use, none of which are ambiguous: they are followed either by *to*-infinitives or noun phrases, as in: [...] *he did not need to be referred to places in the Bible* (Levi Chamberlain, 1823); and *Man does not need a master in practical religion* (Dwight Baldwin, 1857).

⁵ Cf. the scale of language change presented by Nevalainen/Raumolin-Brunberg (2003: 54–55): incipient (below 15%), new and vigorous (15–35%), mid-range (36–65%), nearing completion (66–85%), and completed (over 85%).

⁶ Quirk et al. (1985) note in addition the third alternative *have got* for the stative meaning. See also Trudgill/Nevalainen/Wischer (2002) for the stative and dynamic uses of *have* in British and American English.

care, change, deny, derive, desire, die, do, fear, give, go, insist, leave, mistake, perform, plead, pretend, proceed, prove, stand, stay, suffer, and value. Visser's (1969: 1534) list of *wot*, *know*, *trow*, *care*, *doubt*, and *mistake* and Ellegård's (1953: 199) list of *know*, *boot*, *trow*, *care*, *doubt*, *mistake*, *fear*, *skill*, and *list* are also often used for deciding on the verbs to exclude or at least to treat separately in previous studies (cf. Nurmi 1999).⁷ This study opts for the shortest, namely a separate treatment of *have*, *know*, and *doubt*, which would affect the data when mixed with the other verbs. They will be discussed, but separately in this study.⁸ The following two sections will deal with the further refining of the data of *do*-less and *do* negation.

4.2 *Have* in the Lexical Use

Negation of *have* in the lexical use merits special attention. It is almost conventionally excluded from the analysis of *do* negation, but this immediate exclusion has curtailed our chance to know about *do*-less and *do* negation of this verb. As mentioned in the introduction, contradicting remarks are available on *have* in the lexical use: Hirota (2020) shows that the rate of *do* negation of the lexical verb *have* is just above 20% even in the 1900s, refuting Varela Pérez's (2007) remark that the shift to *do* negation of lexical *have* was more or less complete in 19th-century American English. It is, therefore, worth examining to what extent lexical *have* retains *do*-less negation in our dataset.

The Hawaii Corpus finds both *do*-less and *do* negation with lexical *have*:

- (5) The day *had not* the least appearance of a Sabbath. (Lorrin Andrews, 1827)
- (6) *I did not have* much time to read. (Dwight Baldwin, 1857)

As expected, the distribution of the two constructions of lexical *have* differs significantly from the overall trend discussed in the previous section: the eight

⁷ Although Ellegård's list is often used in studies on the auxiliary *do*, it may need updating when viewed retrospectively from the computer age. The first author wonders, for example, if it is necessary to have *boot* in the list of this kind.

⁸ *Mistake* is another verb often mentioned in this context – it is shared by the lists of Söderlind (1951: 215–216), Ellegård (1953: 199), and Visser (1969: 1534) –, but seems to be rarer than *know* and *doubt*. The Hawaii Corpus does not provide any relevant examples of this verb.

authors in the Hawaii Corpus provide a total of 60 relevant examples, of which as many as 56 (93.3%) illustrate *do*-less negation (e.g., *have not*) and only four *do* negation (e.g., *do not have*).⁹ Dwight Baldwin and Clarissa Armstrong give two examples each of *do* negation side by side with a much larger number of *do*-less negation, while all the other authors constantly use *do*-less negation when lexical *have* is involved.

Hence, *have not* is predominant in the entire dataset, irrespective of whether *have* is dynamic or stative in meaning. In other words, the result shows that lexical *have* was among the exceptionally conservative verbs that stayed essentially with *do*-less negation in the 19th century even in American English, corroborating Hirota (2020). Therefore, in the discussion of *do*-less and *do* negation in the following sections, lexical *have* will be set aside from statistics. For the sake of consistency, the policy hereafter is to exclude *need* and *dare* in addition, which, like *have*, display the double functions as an auxiliary and a lexical verb, though in practice their inclusion or exclusion hardly affects any results, since there are only four examples of *need* in the lexical use (one example of *do*-less negation and three of *do* negation) and there are no examples of *dare* in the lexical use in the Hawaii Corpus.¹⁰

4.3 Do-less and Do Negation Once Again

Apart from lexical *have*, we have decided, as mentioned above, to discuss *know* and *doubt* separately, both of which are explicitly more conservative than the overall trend. In the Hawaii Corpus, the behaviours of *know* and *doubt* indeed deviate from the overall trend. See Fig. 1, which shows the raw frequencies of *do*-less and *do* negation of these verbs as against the other relevant verbs. It justifies the separate analysis of *know* and *doubt* from the other verbs. *Doubt* is not as frequent as *know*, but it clearly favours *do*-less negation, contrary to the near establishment of *do* negation in the Hawaii Corpus in general. The verb *know* fluctuates between *do*-less and *do* negation, but its behaviour differs significantly from the remaining verbs, with which the use of *do* negation reaches 90.8% (739/75+739). All in all, Fig. 1 reconfirms with further confidence that the shift to *do* negation is nearing its completion in the language of the Hawaii Corpus, though there are some minor exceptions. Hereafter, we will exclude *know* and *doubt* in addition to *have* and *need* in the lexical use, when *do* negation is discussed.

⁹ *Have to* is not counted in these statistics.

¹⁰ See Note 4 above.

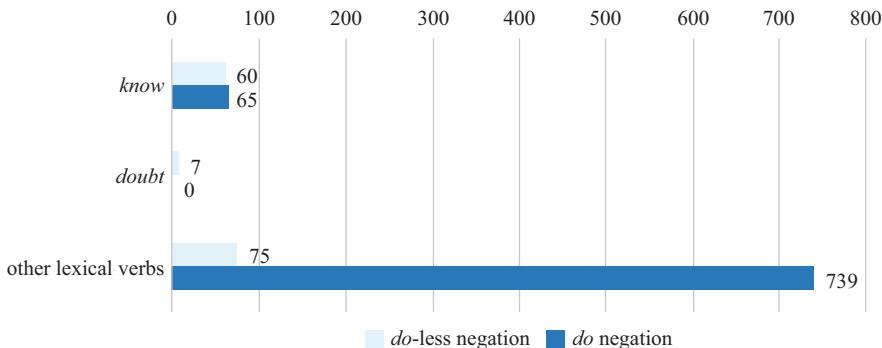


Fig. 1: Raw frequencies of *do-less* and *do* negation of *know*, *doubt*, and other lexical verbs (excluding *know* and *doubt* as well as *have* and *need*) in the Hawaii Corpus.

These are the only verbs to be excluded in the analysis of *do*, since our policy is to limit such exclusions to the minimum. Still, it is probably appropriate to state that there are more potential candidates to be considered in this relation. They remain included in the statistics for the sake of simplicity and consistency, but are worth mentioning. The first are biblical expressions, the existence of which is a characteristic feature of our dataset:

- (7) Woe is me if I *preach not* the Gospel. (Dwight Baldwin, 1857)
- (8) I am found of them that *asked not* for me. (Levi Chamberlain, 1824)

Considering the missionary nature of the corpus, it is of no surprise that reference to the Bible is on occasion incorporated into the text. Due to the biblical tone of the discourse in general, it is not always easy to extract relevant passages only, but one can identify 30 plus examples at least that are citations from the Bible, spreading among different authors with some concentration on Levi and Maria Chamberlain. As in (7) and (8), they usually illustrate *do-less* negation. They could also have been excluded from analysis, but this would have only strengthened our argument that *do* negation is fairly well established in the Hawaii Corpus, highlighting even further the exceptional behaviours of *know* and *doubt*.¹¹

The last to be noted, though included in the statistics, is *let*. At first sight, it may look like a verb to be immediately separated, since it takes the *do-less*

¹¹ Two examples of biblical translations have been excluded for a different reason, i.e., their use of lexical *have*.

forms *let us not* and *let's not* in contemporary English, suggesting that it has always been exceptional in the history of English. On the other hand, it is not always mentioned as an exceptional verb in previous studies of *do* negation (cf. 4.1. above), probably because its exceptional behaviour applies only to hortative *let us not* or *let's not*, which may not be so frequent in written English. In the Hawaii Corpus there are 16 examples of *let* used with *not*, of which only two, both fairly biblical, are relevant:

- (9) *Let us not be weary in well doing* (Dwight Baldwin, 1857)
- (10) *O Lord, let us not be slack in doing the parents' duties!* (Dwight Baldwin, 1848)

As expected, both (9) and (10) illustrate *do*-less negation, but this does not mean that *let us not* and *let's not* have always been in these forms. Referring to Visser (1963–1973), Denison (1998) gives examples of *don't let's* and *let's don't*, together with the comment that negation of *let's* has three possible forms “*let's not V* and *don't let's V*, both recorded from the seventeenth century, and AmE *let's don't V*, from 1918” (p. 253). There is, therefore, reason to treat *let* when the contrast between *do*-less and *do* negation is considered. *Do* negation is existent in the history of hortative *let*.

When all usages of *let* are considered, it is still a verb that favours *do*-less negation. Of the remaining 14 examples of *let*, only two are in *do* negation, both in similar contexts and by the same author:

- (11) *It is high time for me to be in bed now as baby *did not let* me sleep till two last night & it is now almost eleven o'clock.* (Maria Chamberlain, 1840)
- (12) *My baby was very restless last night. *Did not let* me sleep till 3 o'clock.* (Maria Chamberlain, 1840)

The rest are in the imperative, illustrating *do*-less negation, as in:

- (13) *Let them not say we are tabu: . . .* (Levi Chamberlain, 1828)

While the construction here may look ambiguous as to whether *not* modifies *let* or the infinitive verb *say*, it is perhaps appropriate to consider (13) as an illustrative case of *do*-less negation, since examples like (14), where *not* is located immediately after *let*, are also encountered repeatedly in the corpus:

(14) Lord *let not* me thus invert the order of things; *let not* this curse hang over my head, let me not deceive myself; . . . (Maria Chamberlain, 1825)

This example suggests that *let not me* and *let me not* are mere alternatives.

In view of the fairly strong tendency for *let* to occur in *do*-less negation, it could also have been excluded from analysis, though its inclusion does not affect the overall trend as it is infrequent. The exclusion would again only strengthen the trend revealed above: the shift from *do*-less to *do* negation is nearing its completion except with some specific verbs.¹²

4.4 *Do*-less vs. *do* Negation in the Writings of the Eight Authors

We have hitherto made a fairly extensive analysis of *do*-less and *do* negation, dealing with the corpus as a whole. This helps to see the overall trend in the corpus, but there are, in fact, eight authors involved, whose different tendencies are also of interest. Figure 2 exhibits the rates of *do*-less and *do* negation in their writings. As in the previous section, the statistics exclude *know*, *doubt*, as well as *have* and *need*. The graph shows that the predominance of *do* negation is a shared feature across the board. This is of no surprise, since the eight members are all from the same area in the United States, belonging to the same generation. They stayed in the same community in Hawaii, with a shared aim. Still, some authors appear to merit attention: Elisha Loomis and Maria Chamberlain are inclined to preserve *do*-less negation to a larger extent than others, whereas Dwight Baldwin and Clarissa Armstrong are progressive, showing an almost consistent use of *do* negation.¹³

Some of the documents by Dwight and Clarissa are dated late, extending to the second half of the 19th century. While this may be relevant to the relatively larger proportions of *do* negation in their writings, one also needs to be aware that *do* negation has been established to a lesser extent in Peter Gulick's *Autobiography*, which was also written in the late 19th century. The difference in genres may be

¹² While this section has dealt with biblical examples and the verb *let* as two separate issues, some examples belong to both categories. Hence, the examples that need attention are not so numerous in the end.

¹³ It also deserves attention that Dwight and Clarissa are progressive in the use of lexical *have* as well, which has not been included in the statistics here. The four exceptional examples of *do* negation of lexical *have* are shared by Dwight and Clarissa (two examples each), though one of the examples of *have* in Clarissa's writings is causative. As discussed above, *do*-less negation is essentially the norm with lexical *have* in our corpus.

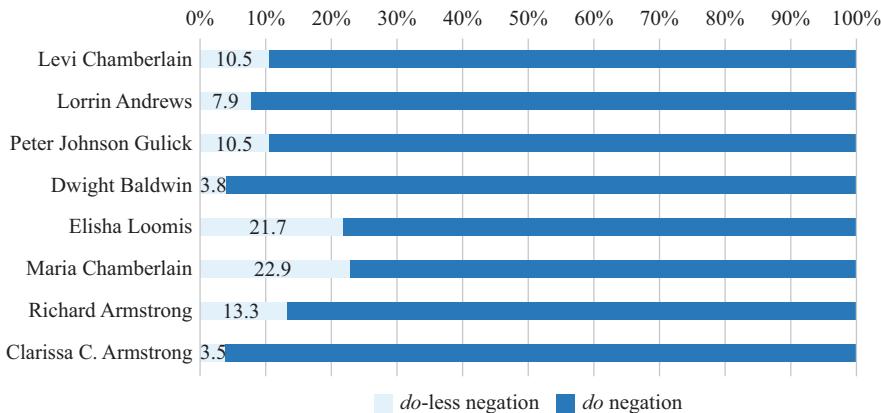


Fig. 2: The rates of *do-less* and *do* negation in the writings of the eight authors.

relevant to this: the readership of autobiographies is generally wider than that of journals, in that they are more public. To fully explicate the stylistic differences among the eight authors' writings, however, further extensive research is necessary, including not only negation but other linguistic aspects.

At the present stage of our project, we are at least confident that the style of Clarissa's writings is relatively less formal, when compared with other texts in the corpus. This applies not only to her letters, which are clearly private, but also to her journals, which are often written in relatively informal style like letters, sometimes even with an addressee (cf. Section 2). The extensive use of *do* negation in her writings, therefore, probably corroborates the alleged view that the expansion of *do* is a change from below (cf. Tieken-Boon van Oostade 1990; Blake 1996). In the remaining sections, where we investigate some additional features of negation, we will highlight the relatively informal style of Clarissa's English.

5 Additional Aspects of Negation with a Particular Focus on Clarissa's English

5.1 Frequency of Negation

The present section explores other aspects of negation than *do*, with a particular focus on Clarissa's English, which is allegedly relatively informal. The first to consider is the frequency of negation itself. It is known about Present-day English that negation is attested more commonly in spoken than in written English

(Tottie 1981). Although the contrast between spoken and written English may be difficult to confirm in historical data, Iyeiri's (2018) analysis of Benjamin Franklin's English in the 18th century demonstrates that a comparable result is obtainable on the scale of formality: negation tends to be more frequent in relatively informal writings than in formal ones. In the Hawaii Corpus, negation is indeed the most frequent in Clarissa's texts, confirming the stylistic inclination of her English. Fig. 3 shows two types of statistics, both to see how frequent negation is in her writings as against the entirety of the Hawaii Corpus: the normalized frequencies of negative items (including the cases of partial negation) and of negative clauses:¹⁴

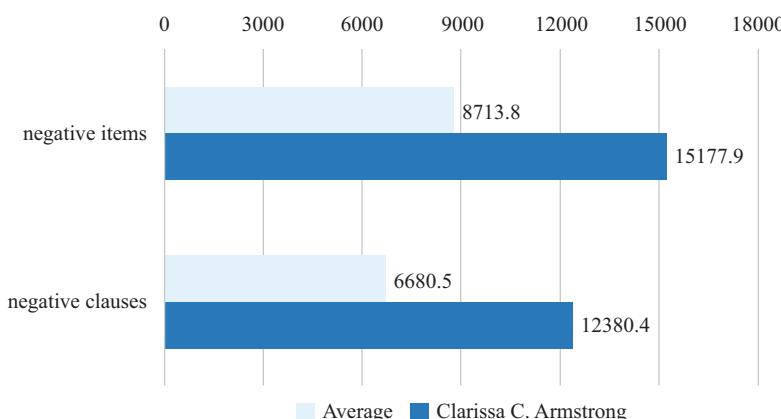


Fig. 3: Negation in Clarissa Armstrong's writings as against the trend in the entire dataset of the Hawaii Corpus (per million words (hereafter pmw)).

Clarissa's negation is almost twice as frequent as the average in the entire dataset both in terms of negative items and of negative clauses, suggesting the relative informality of her style. Obviously, there are other authors that also yield clearly larger figures than the average – Lorrin Andrews, for example, uses negation fairly commonly (14,190.9 for negative items and 9,419.1 for negative clauses) –, but Clarissa's figures are the largest.

14 Negative items in this study are so-called *n*-words only, namely words beginning with *n* such as *not*, *never*, *no*, *nothing*, etc. Hence, negatively-coloured items such as *scarcely* and *barely* are not considered. Likewise, negative clauses are clauses with negative items thus defined. Partial negation is excluded from the latter.

5.2 Negative Clauses with *Not*

The second feature to be investigated is whether negation is expressed by the simple negative adverb *not*, as in (15), or other negative items such as *never* and *nothing*, as in (16):

(15) I would *not* desire to change my course. (Clarissa Armstrong, 1832)

(16) Mr. Stewart's departure casts a cloud over the station which *nothing* will dispel until another as good as he joins it. (Levi Chamberlain, 1825)

The common use of *not* instead of other negative items such as *never*, *nothing*, etc. is considered to characterize relatively informal style, and this has been confirmed both in contemporary and historical data (cf. Iyeiri/Yaguchi/Baba 2015; Iyeiri 2018). This is similar to, though not exactly the same as, Tottie's (1988) distinction between *not*-negation and *no*-negation, of which the former increases when the style becomes less formal.¹⁵ The proportion of negative clauses with *not* to the total of all negative clauses in Clarissa's writings counts 74.1%, whereas the corresponding rate in the entire dataset of the Hawaii Corpus is 68.9%. Again, there are obviously other authors whose corresponding proportions are above the average, e.g., Levi Chamberlain (72.6%) and Dwight Baldwin (72.7%), but Clarissa gives the largest rate among the eight authors. This again confirms the relative informality of Clarissa's writings.

5.3 *No Doubt*

Thirdly, the relatively fixed form *no doubt* is to be examined.¹⁶ It can occur normally as a clausal constituent as in (17) or as a disjunctive adverbial in a parenthetical way as in (18):

¹⁵ Tottie's concept of *not*-negation is more complex than the simple use of *not*: it has to be accompanied by non-assertive forms such as *any* and *ever* to make a perfect contrast to *no* and *never* in *no*-negation. The stylistic direction is, however, the same whichever scale is used, though of course the comparison of detailed figures between the two different scales is not recommended. In the historical data in which non-assertive forms themselves develop as time passes, it may in some cases be easier or even desirable to go for the simpler scale.

¹⁶ One of the anonymous reviewers has pointed out that *no doubt* does not convey negative sense. This is a reasonable comment indeed, but we would still like to examine its use in this section, as it contains the negative item *no*, an *n*-word defined under Note 14. The discussion

- (17) That he did this, there can be *no doubt*. (Elisha Loomis, 1824)
- (18) The author as well as his uncles, & aunts, was *no doubt*, a polished scholar; [. . .] (Peter Johnson Gulick, 1877)

In some cases, *I have no doubt* as a whole is disjunctive or parenthetical, qualifying the entire clause:

- (19) The surface has now become hard, and *I have no doubt* would have supported my weight could I have descended to it. (Elisha Loomis, 1824)

As these disjunctive uses convey a comment of the author to the whole clause, they are known to be attested commonly in involved style, which is a characteristic feature of spoken English generally (cf. Quirk et al. 1985; Biber et al. 1999). Supposing that the contrast between spoken and written English is comparable to the scale of informal and formal styles, they are probably more frequent in texts written in relatively informal style in the Hawaii Corpus. In other words, *no doubt*, at least as far as its disjunctive use is concerned, is expected to be comparatively frequent in Clarissa's texts.

Indeed, *no doubt* is the most frequent in Clarissa's writings as Tab. 2 shows, and that by a long margin. More relevant is the fact that ten of the eleven examples of *no doubt* in her texts are of the disjunctive or parenthetical type Table 2 gives a total of 20 examples of disjunctive *no doubt* – seventeen *no doubt* alone and three *I have no doubt* –, of which as many as ten are found in Clarissa's documents. Obviously, the text length matters in statistics of this kind, but Tab. 2 indicates that the normalized frequency of *no doubt* is also the highest in Clarissa's texts. Her examples of disjunctive *no doubt* are attested initially, medially, and finally, showing that the use is fully established in her English:¹⁷

in this section predicts that the present research is extendable in various other directions, including disjunctive adverbials in general in our future studies.

17 Biber et al. (1999: 872–874) investigate the three positions of “stance adverbials” including *no doubt*—“stance adverbials” correspond to disjunctive adverbials in the present paper—and demonstrate that medial position is on the whole the most common. They also show that initial position is more favoured in written texts than in conversation while final position is more favoured in conversation. This is certainly an interesting finding from the stylistic perspective, though relevant examples in the Hawaii Corpus are not numerous enough to allow this analysis.

Tab. 2: The raw frequencies of *no doubt* in the writings of the eight authors.

Authors	Disjunctive uses		Other uses	Totals (pmw)	
	no doubt	I doubt not			
Levi Chamberlain	1	0	3	4	(17.5)
Lorrin Andrews	0	0	0	0	
Peter Johnson Gulick	3	1	0	4	(71.7)
Dwight Baldwin	2	0	1	3	(21.4)
Elisha Loomis	0	1	1	2	(68.3)
Maria Chamberlain	2	0	1	3	(43.2)
Richard Armstrong	0	0	0	0	
Clarissa C. Armstrong	9	1	1	11	(135.0)
Totals	17	3	7	27	(41.3)

- (20) *No doubt*, my health would have been much better (Clarissa Armstrong, 1836)
- (21) You have *no doubt* heard of the religious interest at Punahou (Clarissa Armstrong, 1859)
- (22) They do not all see the importance of it, but will by & by, *no doubt*. (Clarissa Armstrong, 1835)

A total of 27 examples of *no doubt* may not necessarily form a strong piece of evidence, but the possibility of Clarissa's English being relatively informal has been largely supported, especially when combined with other features of negation also showing the relative informality of her text.

5.4 *Neither . . . Or*

Finally, the coordinate construction *neither . . . or* deserves a brief comment. As in Present-day English, it is customary to use *nor* instead of *or* in this structure in the Hawaii Corpus, as illustrated by:

- (23) but Providentially, *neither he nor I* was injured by the accident. (Peter Johnson Gulick, 1829)

On the other hand, the corpus provides six examples of *neither . . . or*, of which four are encountered in Clarissa's English.¹⁸ For example:

(24) Strange as it may seem, yet true, I have *neither* time *or* place to pray. (Clarissa Armstrong, 1836)

As her text is relatively voluminous, it will probably be fairer to state that her English gives four examples of *neither . . . or* as opposed to one example of *neither . . . nor*, still confirming that *neither . . . or* characterizes her English.

This is once again relevant to the style of English: it is known that *neither . . . or* was one of the linguistic forms ruled out by normative grammarians in the 18th century (Nevalainen 2014). Although the construction has a long history in English (cf. Iyeiri 2001), it was presumably indicative of relative informality within the context of the Late Modern English period. Thus, this is another feature that highlights Clarissa's relatively informal style.

Incidentally, the remaining two examples of *neither . . . or* are found in the writings by Levi Chamberlain and Richard Armstrong, of which the example given by the former is worth mentioning in passing:

(25) Mr. Goodrich states that Koahou *neither* gives attention to the palapala *or* the pule himself *nor* enjoins attention to it upon his people: but on the contrary violates the Sabbath & encourages his people to do the same. (Levi Chamberlain, 1825)

In (25), *neither* is followed by *or*, but subsequently by *nor* when the new clause with *enjoins* is introduced. This may be due to the stretched distance from *neither*.

6 Conclusion

We have hitherto discussed various aspects of negation in the Hawaii Corpus, with some focus on *do*-less and *do* negation. In accordance with the general trend in 19th-century American English, *do* negation is fairly well-established in the Hawaii Corpus, though there still remain some verbs that lagged behind

¹⁸ The following example, where the second conjunction *or* appears in the subordinate clause, is not counted: *I can neither pray that he may live or die, for I know not what is best for him or me – only let the will of the Lord be done* (Clarissa Armstrong, 1834).

in this development. Lexical *have*, for example, still abides with *do*-less negation to a noticeable extent in the data. This is among the most important findings in this study, since *have* is often and immediately eliminated from analysis in studies on the development of *do*. Other verbs that deviate from the overall trend are *doubt* and *know*, both staying with *do*-less negation to a larger extent than other verbs. Although this is generally a shared feature among the eight authors involved, the analysis based on different authors has revealed that Baldwin and Clarissa are slightly more progressive in the use of *do*.

The second part of the analysis dealt with other aspects of negation, particularly those that highlight the difference of Clarissa's style from the general tendency in the Hawaii Corpus. Not only the use of *do* negation but also other features of negation indicate that her English, at least in the documents included in the Hawaii Corpus, is relatively informal. The use of negation itself is the most frequent in her English and it tends to rely on the use of *not*. She also employs *no doubt* fairly commonly, particularly in disjunctive ways. Her use of *neither . . . or* instead of *neither . . . nor* is also noticeable. The eight authors in the corpus were well-educated, and all belonged to the same generation and to the same community with shared missionary aims. Hence, individual deviations from the average tend to be quite subtle. Still, Clarissa's deviation from the average has turned out to be always marked and consistent. For the confirmation of the possible factors behind this, e.g., gender, the dates of her documents, or genres, further research is necessary. This is probably an area where corpora of a compact size like the Hawaii Corpus can make an interesting contribution, though of course this is possible only within the framework of the general trend of the history of English, for whose exploration the use of larger and perhaps more representative corpora would be desirable.

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