

‘SO GREAT A DESIRE’: INVESTIGATING THE BIG MESS CONSTRUCTION IN EARLY MODERN ENGLISH

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ABSTRACT This paper investigates the BIG MESS construction (e.g. *how great a pleasure, too heavy a burden*) in Early Modern English (EModE). It presents a diachronic constructional analysis, zooming in on four subtypes, namely $[how\ ADJ_{qualitative}\ a\ N_{sg}]_{Cx}$, $[too\ ADJ_{qualitative}\ a\ N_{sg}]_{Cx}$, $[so\ ADJ_{qualitative}\ a\ N_{sg}]_{Cx}$ and $[as\ ADJ_{qualitative}\ a\ N_{sg}]_{Cx}$. Data from the EEBO corpus are analyzed in order to trace the diachronic development of those templates, focusing on their changing frequency and compositionality. Additionally, the paper investigates (changing) lexical biases and the feature of ‘discontinuous modification’ (DM) (e.g. *too ADJ_{qualitative} a N_{sg} to-CL*, *as ADJ_{qualitative} a N_{sg} as-CL*, *so ADJ_{qualitative} a N_{sg} that-CL*). The main theoretical aim is to sketch the constructional network of the various subtypes, discussing the possible form-meaning pairings with their parent and peer relations. Among other things, it is shown that the constructions are quite productive and that they had their heydays at the end of the Early Modern English period. As the constructional subtypes differ substantially in their formal and functional features, it will be argued that they are licensed by different constructions with weak or no horizontal connections, and that one should not conceptualize them as closely connected members of a ‘constructional family’.

1 INTRODUCTION

This paper investigates the so-called BIG MESS construction in Early Modern English (EModE) and discusses how it has changed from 1450–1750. It is especially interested in the diachronic development of 4 constructional subtypes, namely the semi-specific templates with *how*, *so*, *too* and *as* (example (1)–(4)):

- (1) **how great a pleasure** it would have been to you, if I had been taken by the Pirates (EEBO, 1700, Voiture, Monsieur de)
- (2) my misery is **so extream a sinne**, it can not meet your bounty

(EEBO, 1640, Glapthorne, Henry)

- (3) true and false religions, are like those that take **too big a grasp**
(EEBO, 1630, Preston, John)
- (4) and you know am not usually very ill provided for the entertainment
of **as good a company**
(EEBO, 1642, NA: A Letter sent from a countrey ...)

The BIG MESS construction is a rather peculiar type of noun phrase.¹ It does not adhere to canonical NP structure in the sense that there is a degree adverb adjective sequence (e.g. *how great, so extreame, too big*), which is unusually positioned before the indefinite determiner *a* and a singular noun or ‘noun group/nominal’ (e.g. *pleasure, sinne, grasp*). This constitutes an interesting type of ‘fronting’ or ‘early expression’. In the literature it has been argued that the Adjective Phrase is dislocated (moved) to the left periphery functioning as a complex predeterminer (Payne & Huddleston 2002: 433–436). As a matter of fact, Kay & Sag (2012) even call it “the Complex Pre-determiner Construction”.

The construction has not only been investigated in different syntactic frameworks (e.g. Berman 1974, Seppänen 1978, Kennedy & Merchant 2000, Van Eynde 2007, 2018, Kay & Sag 2009, 2012, Kim & Sells 2011, Arnold & Sadler 2014), but it has also been investigated diachronically and comparatively (e.g. Christophersen 1974, Van der Horst & de Velde 2003, Van de Velde 2019). For example, it has been claimed that the construction has been declining in the languages which have it, and that in English it is used in an elevated register (Van de Velde 2019: 146). However, to the author’s knowledge, no thorough quantitative investigation exists which empirically corroborates these claims, and which analyzes:

- a) the construction’s diachronic development focusing on the changing frequency of the various subtypes
- b) any lexical biases or
- c) the in/decrease in what has been called ‘discontinuous modification’ (henceforth DM).²

To fill this empirical gap, data from the EEBO corpus have been extracted

¹ The term BIG MESS was introduced by Berman (1974) to reflect its ‘messy’ in-between status between lexical/idiosyncratic and grammatical/regular.

² See section 2 for details on the feature of ‘discontinuous modification’.

(Lancaster Interface, CQP Web)³ to analyze the constructions' changing frequency, their productivity, potential lexical preferences, and the feature of DM. Note that this paper is a diachronic parallel paper to a synchronic paper which analyzes the BIG MESS in Present Day English conducting genre analyses, and which investigates the 'of'-variant and DM in the *Corpus of Contemporary American English* (COCA) (Sommerer, submitted). At various points in the paper, the Early Modern English situation (EModE) will be compared to Present Day English (PDE) and how the BIG MESS is used today (COCA/BNC). What this paper will not discuss is how and why this construction came into being (something that clearly happened before the EModE period) and how it behaves in other languages, like Dutch (see Van der Horst & de Velde 2003, Van de Velde 2019).

In terms of theoretical approach, this paper subscribes to a diachronic, usage-based, cognitive constructional approach which unites aspects of Cognitive Construction Grammar (CCxG) with Diachronic Construction Grammar (DCxG) (Traugott & Trousdale 2013, Diessel 2015, 2019, Goldberg 2006, 2019, Hilpert 2013, 2014, 2021, Barðdal, Smirnova, Sommerer & Gildea 2015, Ellis, Römer & O'Donnell 2016, Divjak 2019, Smirnova & Sommerer 2020). The main aim is to sketch the constructional network of the BIG MESS subtypes in EModE, discussing the possible form-meaning pairings with their differences in usage and their parent and peer relations. Sketching the network of the BIG MESS types can improve our understanding of constructional modeling in general and shed light on some open questions related to the assumed architecture of the construction and changes within. The primary RQs are the following:

- Which constructional templates should be postulated in the EModE construction?
- Which "constructional changes" (Hilpert 2013) have taken place from 1450–1750?
- Do the various subtypes really form a constructional family?

Ultimately, it will be argued that several different constructional templates need to be postulated on different levels of specificity (e.g. [*how* ADJ_{qualitative} *a* N_{sg}]_{Cx} or [*how great* *a* N_{sg}]_{Cx}). At the same time, more complex templates also need to be postulated to account for some of the constructs' complexity, especially the fact that some types can be modified or complemented by a clause (e.g. [*so* ADJ_{qualitative} *a* N_{sg} ... (*that-CL*)]_{Cx}).

³ *Early English Books Online* (V3) (<https://cqpweb.lancs.ac.uk>).

In general, it will be shown that the various BIG MESS templates are quite productive and compositional in all diachronic periods and not very restricted when it comes to their lexical biases. The lowest, fully specified (idiosyncratic) level seems less important with these constructions; most constructs seem to be successfully licensed by semi-specified mid-level constructions. Moreover, the constructional subtypes differ substantially in their formal and functional features, which is why it will be argued that some of them are licensed by different constructions with weak or no horizontal connections. Last but not least, it will be discussed why the postulation of an abstract mother node $[\text{ADV}_{\text{degree}} \text{ ADJ}_{\text{qualitative}} a \text{ N}_{\text{sg}}]_{\text{Cx}}$ is possible but at the same time problematic. This ultimately begs the question if the different templates should be considered tight family members in the first place.

The paper is structured as follows: Section 2 briefly revisits some basic tenets of DCxG which are relevant for the line of argumentation to come. In section 3, characteristic features of the BIG MESS will be discussed. Afterwards, I will present the empirical findings (section 4) and the repercussions they should have for a constructional sketch of the BIG MESS (section 5). The paper concludes with an outlook on necessary future research (section 6).

2 DIACHRONIC, USAGE-BASED COGNITIVE CONSTRUCTION GRAMMAR

Before the empirical findings will be presented and discussed, some basic theoretical assumptions of Usage-based, Cognitive Construction Grammar (henceforth also UCCxG) shall be outlined briefly. Most of the issues will be discussed again in more detail in section 5. Currently, different versions of CxG exist, which differ from each other in various ways (see [Croft & Cruse 2004](#) or [Hoffmann & Trousdale 2013](#) for a useful introduction). However, most Construction Grammar models comply with the same underlying principles. UCCxG in particular subscribes to the following tenets:

It is assumed that most linguistic knowledge is mentally stored in the form of ‘constructions’. Constructions are conventionalized and cognitively entrenched symbolic signs; form-meaning pairings in the sense of de Saussure ([Goldberg 2006](#): 3, [Diessel 2011](#): 830). Not only lexical entries but also more complex phrasal constructions (e.g. the ditransitive construction) are conceptualized as signs which link a particular ‘meaning/function’ to a particular ‘form’ via a symbolic correspondence link. At the same time, syntactic ‘rules’ have conceptually been replaced by ‘schemas’ which are grammatical templates that have evolved over concrete tokens. These templates are abstract, but carry meaning themselves⁴ even if the meaning is procedural (i.e. ex-

⁴ Independent of any meaning which is contributed by the semantics of the individual words

pressing, for example, grammatical relations like tense, aspect etc.) (Traugott & Trousdale 2013). Opposing traditional formalist assumptions, grammatical structures and rules (in the traditional generative sense) are thus ‘resemanticized’ and ‘recontextualized’. In other words, no sharp distinction between the lexicon and grammar is made. Rather, a lexicon-grammar continuum is assumed. The constructions of a language only differ in their (syntactic and semantic) complexity, their schematicity, and their level of idiomatization (Croft & Cruse 2004: 258). Single words are termed constructions as well (e.g. *interesting*, *book*) and syntactic templates are conceptualized as abstract constructions, which have slots that can be filled by other elements and other constructions (e.g. [SUB V_{ditrans} OBJ_{ind} OBJ_{dir}]_{Cx}; [DET_{def} + CN]_{NP_{def-Cx}}).

The assumption that the linguistic knowledge of a speaker primarily corresponds to his/her knowledge of constructions directly leads to the fundamental question when exactly a linguistic string deserves constructional status in a particular language and how to sketch its form-function mapping. Here, the main argument for constructional status has always been idiomatic quirkiness. However, in UCCxG, postulating a separate construction can also be based on high type and token frequency, lexical attraction or formal peculiarity (see Croft & Cruse 2004 and Goldberg 2006, 2019 for definitions). This relates to the usage-based character of the model. It is assumed that acquiring any linguistic knowledge is entirely usage-based. Speakers derive all their mentally entrenched linguistic structures from their experience with language (actual usage events). High type- and token frequency as well as other statistical performance factors (e.g. preemption) influence the nature of the construction (Hilpert 2014, Diessel 2015). Any postulated linguistic categories or constructions are thus always emergent and language specific, and are strongly influenced by their usage frequency (Croft 2001).

Construction Grammar models also understand constructions to be interconnected as ‘nodes’ in a ‘network’ termed the ‘Constructicon’. The Constructicon is a structured inventory, which can be represented by multiple inheritance networks. Constructions are linked horizontally if they have the same level of complexity and if they are formally and/or semantically similar (i.e. ‘peer/sister constructions’). At the same time, so-called lower-level (more specific) constructions are said to ‘inherit’ features from higher-level (more abstract) constructions through vertical links. Lower-level constructions thus instantiate their higher level ‘parent/mother constructions’. Higher-level constructions emerge when speakers abstract similarities over more specific constructions. With regards to ontogeny, the acquisition process of linguistic knowledge is considered to be ‘bottom up’ in the sense that during first lan-

that are used in this construction.

guage acquisition, the construction of an individual ‘gets constructed’ in a bottom-up manner via the ability to schematize over concrete usage patterns (Tomasello 2003). All this interrelatedness creates so-called ‘constructional families’ of closely linked constructions which are related in form and/or function (Tomasello 2003, Diessel 2019). In this paper, a constructional family will be defined in a stricter sense as “as a network of closely related ‘sister’ nodes (connected via horizontal links) and their ‘mother’ nodes (connected via vertical links) which are similar in form AND [emphasis added] function” (Sommerer 2020: 91).

The mentioned network conceptualization begs the question which existing links to assume between constructions. One question related to vertical relations is if the model should allow for extremely abstract and even ‘meaningless’ templates. UCCxG strives for cognitive plausibility and only wants to postulate constructions which are cognitively (at least) plausible and for which empirical evidence can be found. Related to this is the belief that only templates should be postulated that carry some meaning or function. UCCxG refrains from postulating the existence of “purely formal generalizations, that is constructions without meaning” (Hilpert 2014: 57). Another question is when to assume horizontal connections.

Regarding diachronic developments, it is assumed that the construction is constantly changing via processes of “constructionalization” (Traugott & Trousdale 2013)⁵ and “constructional network reorganization” (Torrent 2015), i.e. reorganization of node-external horizontal and vertical links (Smirnova & Sommerer 2020: 3). What can also change over time is the frequency or the productivity of a certain construction or its level of schematicity and compositionality. Moreover, constructional slots can also experience host-class expansion (Hilpert 2013, Van Goethem, Norde, Coussé & Vanderbauwhede 2018, Perek 2020).

It would go beyond the scope of this paper to discuss all the mentioned tenets in depth and I have to refer to the literature for details (for more details about the approach see, for example, Croft 2001, Tomasello 2003, Croft & Cruse 2004, Hoffmann & Trousdale 2013, Traugott & Trousdale 2013, Goldberg 2019, Diessel 2019), but all the listed basic assumptions lead to many open questions which have not been answered sufficiently. Here I argue that the BIG MESS family is a useful hands-on example to put constructional modeling to the test and tackle some of these questions in an exemplary manner (see section 5 for details).

⁵ “Constructionalization” is defined as the “emergence of a new form-meaning pairing which previously did not exist in the construction and which is added to the network as a new node” (Sommerer 2018: 149).

3 SO BIG A MESS: CHARACTERISTIC FEATURES OF THE CONSTRUCTION

3.1 Subtypes and characteristic features

The literature on the BIG MESS construction in Present Day English argues for the existence of various subtypes with the degree adverbs *how*, *too*, *as*, *so*, *that*, *this*, *however* and *such* (e.g. Kennedy & Merchant 2000, Kay & Sag 2012, Kim & Sells 2011, 2015, Arnold & Sadler 2014, Van Eynde 2018). The empirical analysis reveals that all types are attested in Early Modern English as well:

- (5) But now if ignorance dooth not excuse, **how horrible a vengeance**
shall fail upon them (EEBO, 1584, Calvin, Jean)
- (6) for it is **too daungerous a matter to change**
(EEBO, 1577, Arthur Golding)
- (7) and behold **as miserable a spectacle** (EEBO, 1592, Harvey Gabriel)
- (8) **So bright a beauty** can not sure belong to humane kind.
(EEBO, 1670, Dryden, John)
- (9) Shall I **that young a saint** have seemed (EEBO, 1596, Colse, Peter)
- (10) And in **this dreadful a manner** he has set them out to them
(EEBO, 1666, Goodwin, Thomas)
- (11) And **however sinful a man** he had been
(EEBO, 1693, Payne, William)
- (12) then came Ags and Don Bruneo, being much vexed at **such strange
an adventure**, (EEBO, 1652, Lobeira, Vasco de)⁶

Of course, it remains to be seen how frequent the various types are.

Note that the group of adverbs mentioned so far is quite heterogenous. *How* and *however* are semantically rather different from intensifying/exclamative *so* and grading *too*, which again are different from the equative comparative *as* or the deictics *this/that*.

⁶ *Such* is a special case in the sense that it is not a degree modifier, but has been classified as a secondary or predeterminer, which is why scholars tend to exclude it from the 'core' BIG MESS family (but see Kim & Sells (2011) distinction between the 'so'- and 'such'- type). In the EEBO, only 44 examples with *such* can be found. Due to its low frequency and its exceptional character, *such* will not be investigated any further in this paper. The same goes for *however*; due to its extremely low frequency it will not be investigated here.

The adverbs *more*, *less* and *quite* are also discussed in the literature as potential fillers of the construction's adverb slot:

- (13) what can be thought **more sweet a thing**
(EEBO, 1582, Strigel, Victorinus)

However, this group is different from the first group. First, *more* and *less* semantically rather quantify than express degree. At the same time, the canonical order (*a sweeter thing, a more credible threat*) is clearly preferred by speakers. This is why most scholars distinguish the two groups in their discussions and do not consider the second group to be BIG MESS *per se*. A first glance at the EEBO data reveals that the 'more/less'-subtypes are extremely rare. Speakers indeed seem to prefer the canonical alternative. To limit the scope of the empirical investigation, only the first group (ex. 5–10) will be investigated in this paper. However, in future research, it will also be necessary to look at the 'more/less'-subtypes.

With regards to lexical biases and restrictions, it must be said that only the indefinite article can be used (**as good the company*) and the 'noun-ish' part (i.e. the count noun, compound noun or (bi)nominal) has to be singular. Moreover, only a limited set of degree words gets recruited into the adverb slot. For example, *very* and *somewhat* and most other degree adverbs yield ungrammatical or non-idiomatic results, e.g. **very great a desire, ?somewhat great a desire*.

Other than this singular restriction and the unusual fronting of the adjective phrase the construction behaves rather 'normal' (i.e. following default NP structure) in the sense that its elements can be pre- or post-modified in the usual ways. For instance, we find examples with an additional adverb in front of the adjective (ex.14):

- (14) This may suffice to show **how very frivolous a collection** they make
from justification or faith to prove baptism
(EEBO, 1621, Crakanthorpe, Richard)

This type of pre-head modification is not special or unexpected as adjectives can generally be modified by adverbs in this position. Similarly, also the head noun sometimes gets modified by an adjective (ex.15):

- (15) lying upon the sea, is **as sweet an open room**, as ever I saw
(EEBO, 1617, Moryson, Fynes)

Using such additional adverbs and adjectives obviously increases the complexity of the sequence and shows that the construction is not as flat, frozen

and structurally simplistic as it may seem at first sight.

3.2 *of-insertion and discontinuous modification*

These constructions really deserve to be called a ‘mess’, as things are even more complex than discussed so far. Language users sometimes insert an ‘of’ in front of the nominal, e.g. *How destitute OF a place* instead of *how destitute a place*.

- (16) **how destitute of a place** to lay his head in
(EEBO, 1659, Burgess, Anthony)

The ‘of’ seems to contribute no additional meaning whatsoever. It remains to be seen how frequent this variation is and if the two alternatives are in free variation in EModE.

Finally, examples (17)–(19) show that some subtypes allow for rather complex additional modification. Often, the noun can be followed by a clause (e.g. an infinitival VP (ex.17), an *as*-clause (ex. 18), or a finite *that*-clause (ex.19)) which modifies the dislocated adjective. In other words, the adjective and the dependent are interrupted by the head nominal. In the literature, this phenomenon has been termed ‘Discontinuous Modification’ (Kay & Sag 2009). Note that the ‘how’-, ‘this’- and ‘that’-type do not take this kind of additional modification, but the ones with ‘too’, ‘so’ and ‘as’ do (Kay & Sag 2009).

- (17) I must confess I am *too young a man to have interrupted you*
(EEBO, 1620, Sylvester, Josuah)

- (18) and they shall tell you *as sad a story as any in England*
(EEBO, 1654, North, John)

- (19) And that of *so extraordinary a nature, that it must be confessed*
(EEBO, 1700, Burnet, Gilbert)

All the discussed characteristic features beg the question which constructional templates to postulate in Early Modern English. For example, with the six adverbs used, one could postulate a semi-specific template for each of them (20). After all, the different degree adverbs contribute different semantics to the construction (see Section 5 for details).

- (20) (a) [*how* ADJ_{qualitative} *a* N_{sg}]_{Cx}

- (b) [*that* ADJ_{qualitative} *a* N_{sg}]_{Cx}
- (c) [*this* ADJ_{qualitative} *a* N_{sg}]_{Cx}
- (d) [*too* ADJ_{qualitative} *a* N_{sg}]_{Cx}
- (e) [*so* ADJ_{qualitative} *a* N_{sg}]_{Cx}
- (f) [*as* ADJ_{qualitative} *a* N_{sg}]_{Cx}

One question is if this sixfold distinction is warranted or if all examples are rather licensed by a more abstract template, e.g. [ADV_{degree} ADJ_{qualitative} *a* N_{sg}]_{Cx}, which speakers would entrench after recognizing similarities over the lower levels. At the same time, the modified cases (with DM) and the inserted *of* might force us to opt for much more complex templates like in (21):

- (21) (a) [*as* ADJ_{qualitative} (*of*) *a* N_{sg} (*as-CL*)]_{Cx}
- (b) [*too* ADJ_{qualitative} (*of*) *a* N_{sg} (*to-CL*)]_{Cx}
- (c) [*so* ADJ_{qualitative} (*of*) *a* N_{sg} (*that-CL*)]_{Cx}

Simple templates like in (20) are not able to successfully license the DM strings. Related to this is a much more fundamental question, namely if it makes sense to consider all the discussed templates members of the same constructional family in the first place or if they rather belong to different families altogether due to their formal and functional differences.

A related diachronic question is if the listed BIG MESS templates have always shown stable DM frequencies or if DM structures have increased or decreased in time. A reduction of DM would hint at a decrease of compositionality whereas an increase of DM would speak for an increase in complexity and perhaps some network reorganization towards other constructional families. At the same time, it is interesting to zoom in on the adjective slot and its changing productivity. One question is which adjectives are primarily attracted to the adjective slot; another question is if the slot has diachronically become more or less restricted with regards to the chosen adjectives' semantics. An increase in adjective types suggests that the construction has become more widely used in different contexts. Any detectable decrease would suggest that the construction has developed into a stylistically marked niche construction. Ultimately, the answers to these questions should – in a usage-based approach – be based on our empirical findings, which brings me to the empirical part of this paper.

4 EMPIRICAL ANALYSIS

4.1 Data and methodology

To investigate the construction empirically and diachronically, the *Early English Books Online* database was used. It consists of 44,422 texts spanning roughly from 1450–1750, which corresponds to 1,202,214,511 word tokens, which have been tagged with UCREL CLAWS6. EEBO was accessed via the Lancaster Interface and searched with CQPweb.⁷ Table 1 shows which queries were run and the respective raw/per mil frequencies.⁸

EEBO Query	EEBO/ raw freq	EEBO/ per mil	COCA/ per mil	BNC/ per mil
"so" [pos="JJ"] "a an" [pos="NN1"]	166,480 hits	138.478	2.80	5.92
"as" [pos="JJ"] "a an" [pos="NN1"]	26,081 hits	21.70	7.69	9.06
"too to" [pos="JJ"] "a an" [pos="NN1"]	13,973 hits	11.63	4.26	7.92
"how" [pos="JJ"] "a an" [pos="NN1"]	12,414 hits	10.33	4.27	2.79
"that" [pos="JJ"] "a an" [pos="NN1"]	21 hits (74)	0.02	1.48	0.32
"this" [pos="JJ"] "a an" [pos="NN1"]	13 hits (50)	0.01	0.16	0.03

Table 1 Queries and Frequencies (EEBO vs. COCA/BNC)

The 'so'-type is by far the most frequent one in the EEBO. 'So' is followed by 'as', then lagging behind with an extremely low frequency we find the 'this'- and the 'that'-type. With a per million frequency of only 0.02 and 0.01 it is even questionable if one should argue for the existence of a 'that'- and 'this'-type in EModE (see Section 5 for further discussion on this issue).

The already mentioned COCA study revealed that query precision is overall very high. The used queries do not extract a lot of false positives or 'noise' that has to be excluded manually. The 'so', 'too' and 'as'-queries turned out to yield very high precision, which is why query reliability was only partially checked in the EEBO. The 'how' and the 'this'-query are the least precise queries, with approximately 29% of the 'how'-examples and 13% of the 'this'-cases being noise (at least in the COCA data; see Sommerer, submitted). I manually went through the 74 'that'- and the 50 'this'-examples. After ana-

⁷ <https://cqpweb.lancs.ac.uk>.

⁸ Note that such queries do not yield examples like in (14) or (15) with additional adverbs or adjectives (e.g. *how very frivolous a collection, as sweet an open room as...*). To limit the scope of the paper, the investigation is limited to the majority patterns where no additional modification can be found. Also note that the most typical spelling for the adverb <too> in the 15th century is <to>, which is why the query includes both forms. I have to thank one of the anonymous reviewers for pointing this fact out to me (cf. OED s.v.).

lyzing them in detail, only 21 ('that') and 13 ('this') examples remain that can be classified as BIG MESS constructions. The rest (22-23) had to be excluded for obvious reasons:

- (22) of whom that one was a male and *that other a female*
(EEBO, 1477, Caxton, William)
- (23) it is a wonder he should make what they say in *this particular an*
Article of his faith (EEBO, 1700, Smith, Mathew)

Given the high precision of the queries related to the other four high-frequency types, and given that a first glance at the EEBO data indicated high precision, query precision was not checked exhaustively in EEBO. Even if a certain number of hits might have to be excluded, it is assumed that the order regarding the most and least frequent template-type will not change.

The comparison with data from the COCA and the BNC⁹ (see Table 1) indicates that the PDE situation is different in various ways. First of all, today the 'as'-type is used most frequently and secondly, the constructional templates are far less frequent in general. As a matter of fact, the per million frequency of the 'as'-type is three times higher in EModE than in PDE, and the frequency of the 'so'-type exceeds all expectations with 138 cases per million in contrast to roughly 3 to 5 cases per million in PDE. Even if the three corpora cannot be compared in a straightforward manner (due to their different text types/genres etc.), it seems safe to say that the BIG MESS constructions really were much more frequent in the EModE period. Admittedly, more research needs to be conducted on that first impression.

Six additional queries with an inserted *of* were also run and manually checked to see how frequent the 'of'-variant was (e.g. *how destitute of a place*). As it turned out, the 'of'-variant (15) is basically non-existent in the EEBO. Altogether, only 21 examples (raw frequency) were identified (see Table 2). Among those 21 cases, several were ambiguous, which is why it is argued that the 'of' variant has not yet emerged in EModE.

so	how	as	too	that	this
8 (249)	4 (15)	7 (174)	2 (51)		

Table 2 Frequency 'of'-variant in the EEBO

Interestingly, the 'of'-variant seems to be on the rise in PDE. For the repercussions this should have on the assumed constructional templates and the

⁹ <https://www.english-corpora.org/>.

changing construction in contemporary English see [Sommerer](#) (submitted).

4.2 Diachronic developments

In order to trace changes in the frequency of the BIG MESS templates identified, the corpus was split up into six periods of half decades (Table 3). It turns out that all the constructional types are most frequent from 1700-1749, a fact visualized in Figure 1.

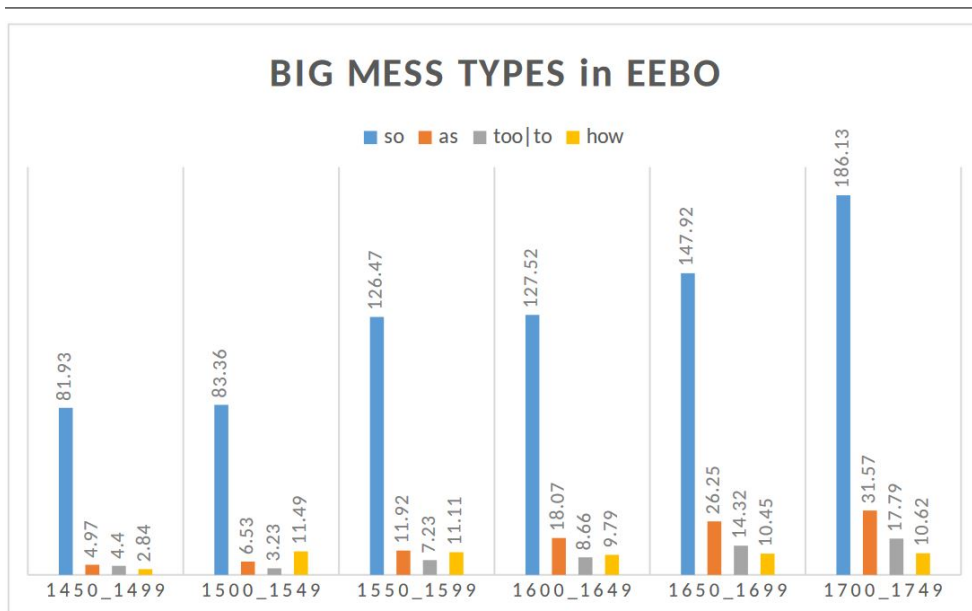


Figure 1 Diachronic development of the BIG MESS types in the EEBO (frequency per 1,000,000 words)

	1450– 1499	1500– 1549	1550– 1599	1600– 1649	1650– 1699	1700– 1749
so	81.93	83.36	126.47	127.52	147.92	186.13
as	4.97	6.53	11.92	18.07	26.25	31.57
too to	4.40	3.23	7.23	8.66	14.32	17.79
how	2.84	11.49	11.11	9.79	10.45	10.62

Table 3 Diachronic development of the BIG MESS types in the EEBO (frequency per 1,000,000 words)

The crucial point to take away from Fig. 1 is that the ‘so’-template (24) was by far the most frequent one, and its usage steadily increased in usage during the EModE period.

(24) But blushes for to see **so bright a face**

(EEBO, 1597, Middleton Thomas)

It is noteworthy that within 300 years, the usage of all templates more than quadruples (see Figure 1). They seem to develop in a parallel correlated way at least when it comes to their frequency increase. Fronting the adverb adjective sequence becomes ‘more popular’ among speakers. The observable increase in frequency might be linked to an increase in ‘slot productivity’ (Hilpert 2013, Perek 2020), something which will be investigated in the next section. Figure 1 does not include the results for the ‘this’- and ‘that’-type as their raw frequency is simply too low for visualization in the same graph (Table 4).

	1450– 1499	1500– 1549	1550– 1599	1600– 1649	1650– 1699	1700– 1749
that	-	2	4	7	7	-
this	-	-	3	7	3	-

Table 4 Distribution of ‘this’ and ‘that’ in EEBO (raw frequency)

As already mentioned, the low frequency of the ‘this’- and the ‘that’- type begs the question if these templates really deserve constructional status in EModE.

4.3 Lexical variation

It becomes clear that all the constructional templates are rather ‘productive’ in the sense that not only a handful of high frequency types exist which make up the whole set but many different adjectives and many different nouns are being recruited into the adjective and the noun slot in Early Modern English. Table 5 lists the Top 10 constructional types for the ‘so/as/too/how’- templates:

so				as			
1	so great a number	1510	0.91%	1	as great a sin	246	0.94%
2	so great a work	1015	0.61%	2	as good a man	208	0.80%
3	so great a multitude	998	0.60%	3	as great a difference	172	0.66%
4	so great a part	961	0.58%	4	as good a title	166	0.64%
5	so great a benefit	952	0.57%	5	as great a miracle	153	0.59%
6	so great a matter	752	0.45%	6	as great a distance	147	0.56%
7	so great a prince	745	0.45%	7	as great a share	142	0.54%
8	so great a distance	661	0.40%	8	as great an enemy	142	0.54%
9	so great a man	647	0.39%	9	as good an argument	115	0.44%
too				how			
1	too great a quantity	276	1.98%	1	how dangerous a thing	299	2.41%
2	too great a distance	252	1.80%	2	how great a part	156	1.26%
3	too great a number	126	0.90%	3	how great a sin	151	1.22%
4	too great an honour	97	0.69%	4	how vain a thing	122	0.98%
5	too great a burden	96	0.69%	5	how great a matter	119	0.96%
6	too heavy a burden	93	0.67%	6	how difficult a thing	97	0.78%
7	too great a bulk	85	0.61%	7	how great a thing	97	0.78%
8	too good an opinion	75	0.54%	8	how fearful a thing	91	0.73%
9	too great a part	74	0.53%	9	how necessary a thing	74	0.60%
10	too great a price	65	0.47%	10	how great a number	69	0.56%

Table 5 Top 20 constructional types (*so, as, too, how*)

As can be seen, *so great a number*, *as great a sin*, *too great a quantity* and *how dangerous a thing* are the most frequently used types but they all only make up for a rather small portion of the examples.

In general, the four templates show different type token ratios.

- *so*: 48,448 different types and 166,480 tokens = TTR 0.29
- *as*: 11,075 different types and 26,081 tokens = TTR 0.42
- *too*: 6,490 different types and 13,973 tokens = TTR 0.46
- *how*: 5,061 different types and 12,414 tokens = TTR 0.40

A high TTR (range between 0 and 1) indicates a high degree of lexical variation while a low TTR indicates the opposite. Among the four frequent types, the 'too'-type shows the highest TTR which indicates the highest degree of lexical variation. What Table 5 also hints at is that *great* seems to be the adjective which is most frequently recruited into the adjective slot.

4.3.1 *Lexical preferences in the adjective slot: EEBO vs. COCA*

To investigate any lexical biases and changing productivity of the adjective slot in more detail, I had a look at a smaller sample and analyzed it qualitatively and diachronically. The notion of ‘productivity’ has been defined in many different ways but the common denominator for morphological productivity is that it is based on a linguistic element’s readiness with which it enters into new combinations (e.g. [Bauer 2011](#), [Barðdal 2008](#)). To measure this readiness in empirical corpus work counting hapaxes has become the standard and an indirect measure of productivity ([Baayen 1989, 1991, 2009](#)). Still, Baayen’s widely adopted hapax-based measure of productivity depends on the sample size; hapax legomena are much harder to find in larger samples, which is why hapax counting has its limitations ([Gaeta & Ricca 2006](#), [Hartmann 2018](#)). To overcome this problem to a certain extent, I have decided to work with equally-sized samples (see below). Still, I would like to point out that in this paper, the notion of productivity will be understood and analyzed in a rather superficial way discussing TTRs and realized productivity. I am fully aware that at this point the paper does not offer sophisticated measures of productivity (see the outlook on possible future research in the conclusion section). However, this current methodological shortcoming is seen as unproblematic because the used methodology is sufficient to argue for or against constructional status on a meta-theoretical level.

Also note that in Construction Grammar the notion of productivity is sometimes interpreted in a slightly different albeit related way namely as ‘slot productivity’ (e.g. [Hilpert 2013](#), [Perek 2020](#)). [Clausner & Croft \(1997: 263\)](#) define productivity as the “proportion of a schema’s range that can be instantiated by expressions” and Perek states that “productivity can refer to the range of different lexical items that are attested in a particular slot of a construction” ([Perek 2020: 146](#)). In abstract constructions, we often find open slots that can be filled by different lexical elements. Here, it is interesting to investigate if a slot is very limited in its lexical choices, or if a slot is rather open and unconstrained when it comes to the lexical elements that it recruits. Diachronically, it can be investigated if such an open position becomes more or less constrained in time (allowing for more or fewer types to be used as a slot filler). This type increase can be understood as a kind of productivity increase.

To investigate lexical biases and productivity in this paper, a new sample of 800 examples from the timespan 1550-1750 was extracted for every type (i.e. ‘so’, ‘too’, ‘as’ and ‘how’). Each sample is stratified evenly into four periods (1550-1599; 1600-1649; 1650-1699; 1700-1750), represented by 200 examples. As the ‘how’- type only yielded 185 examples for the period 1700-1750,

so ADJ	800	too ADJ	800	as ADJ	800	how ADJ	785
great	250	great	318	great	254	great	239
good	35	large	39	good	102	dangerous	34
small	33	good	20	large	15	small	26
noble	16	narrow	17	true	14	good	19
large	13	small	16	small	12	fearful	12
excellent	10	heavy	15	bad	11	vain	11
worthy	10	common	12	full	11	poor	10
dangerous	8	weak	12	strange	8	sweet	10
strange	8	strong	11	strong	8	difficult	9
strong	8	gross	9	absolute	7	grievous	9
HAPAXES	136	HAPAXES	124	HAPAXES	148	HAPAXES	144
rest	273	rest	207	rest	210	rest	272

Table 6 Adjective distribution in the BIG MESS 1550–1750 (in the EEBO)

the following results are based on my analysis of 3,185 examples. Table 6 shows the adjective distribution for the four subtypes. The top 10 adjectives are listed, as well as the number of hapaxes (i.e. adjectives which are only used once).

As can be seen, *great* is the adjective most recruited into the adjective slot in all templates. At the same time, the adjectives used are not very restricted in their semantics. We find ‘evaluative’ (e.g. *good*, *great*, *excellent*, *strange*) as well as ‘descriptive’ (e.g. *heavy*, *true*) ones. Among the group of descriptive ones, dimensional adjectives (e.g. *small*, *large*) are well represented. Almost all the adjectives used in the slot are of a ‘qualitative’ nature.¹⁰ Furthermore, ‘classifying’ adjectives seem to be blocked as potential fillers. This is not surprising, as the overarching meaning of the constructional templates is ‘scalar’: all adjectives are coerced into a scalar reading. Finally, it is noteworthy that different adjectives make it into the top 10 ranks of the respective constructions. Only *great*, *good* and *small* are shared by all subschemas.

The results in Table 6 have been visualized in Figure 2.

¹⁰ Note that the classification of adjectives has been adopted from Dixon (1982), Tucker (1998), Downing (2015), Halliday & Matthiesesen (2014).

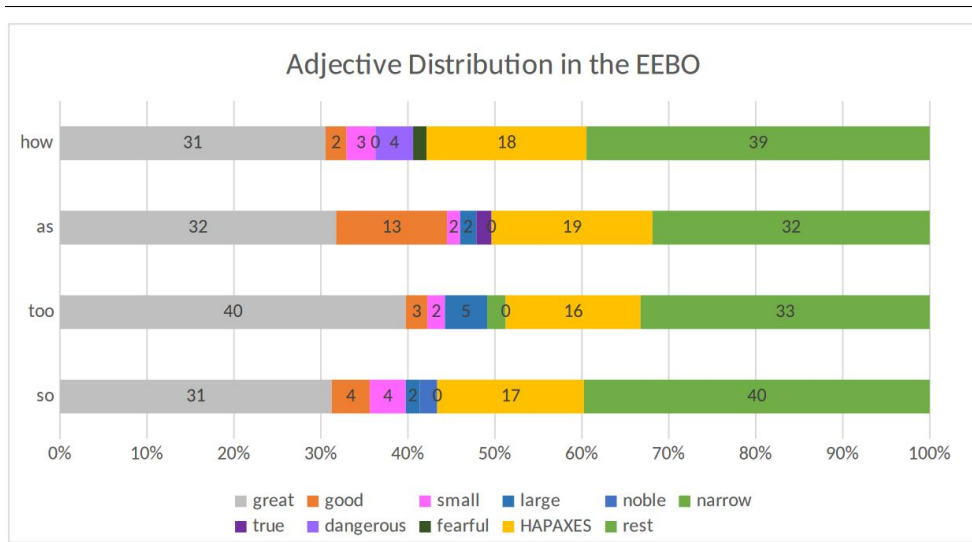


Figure 2 Adjective distribution in EEBO 1550–1750 (%)

There is a relatively high number of hapaxes (yellow) and most adjectives are only used a few times (green). This distribution is not surprising – following Zipf’s law – but it is nevertheless relevant for a constructional analysis because it highlights the important status of *great*, *good* and *small*.

Comparing this to a similar analysis for Present Day English data (Figure 3),¹¹ it can be observed that today other adjectives seem to have become more attracted to the adjective slot, especially *big*¹² or *important*, but *great* still is frequently used. On top of that, also the share of hapaxes seems to have increased in PDE.

¹¹ Figure 3 (Sommerer, submitted) is based on a sample of 500 examples for each type.

¹² According to the OED, *big* entered the English language much later than the adjective *great*. This might be the reason why *great* has such a high frequency in EModE. It is not only used evaluatively (e.g. *a great opera*) but it is also the preferred adjective to describe physical dimension (e.g. *a great continent/river/field*). At one point, however, the adjective *big* becomes a competitor and takes over the function of *great* to refer to dimensional quality (*big continent*).

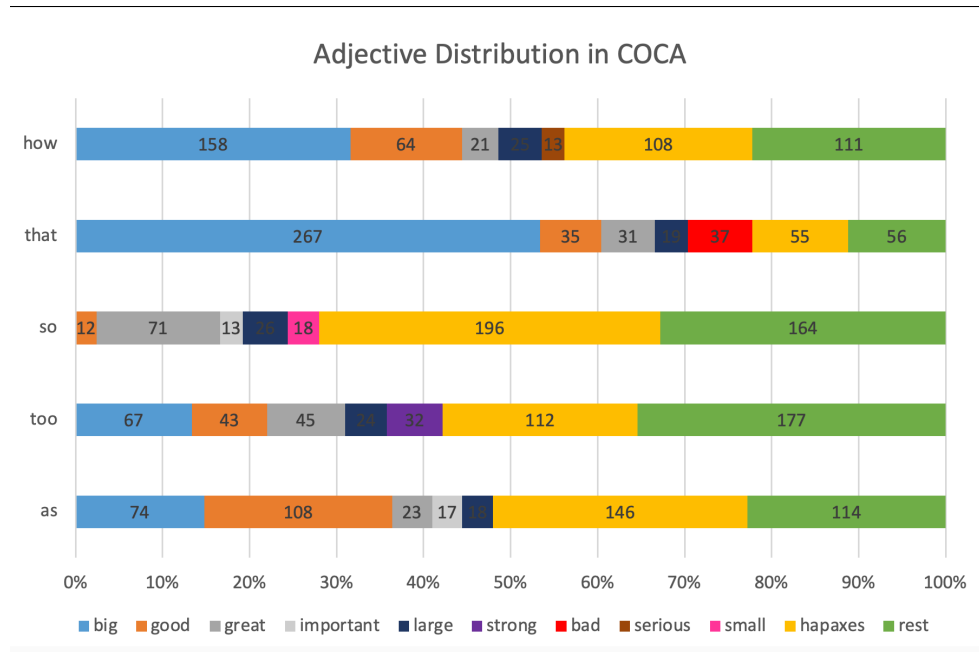


Figure 3 Adjective distribution in the COCA (%)

Admittedly, the comparison with the COCA data has to be taken with a grain of salt, as the apparent increase in productivity (here defined as an increase in hapaxes) is probably due to the smaller sample size, and might be a corpus artefact in the sense that the COCA in general covers more genres and (presumably) topics, which consequently might increase the semantic and lexical range of the adjectives used as well. Similarly, the increase in hapaxes can be based on the fact that the COCA texts (with a higher percentage of spoken and conversational language) stay less ‘on topic’ and thus do not repeat the same adjectives that much.¹³ Finally, British and American English cannot be compared that easily. The COCA is representative of American English whereas the EEBO covers British data. Thus, it will be necessary in the future to add an additional study of British English. Still, I suggest that the preliminary findings hint at a diachronic increase in productivity from EModE to PDE.

¹³ To make the findings more comparable, any future COCA analysis should exclude the genres which do not exist in the EEBO and also take care of other potentially distorting factors by a more sophisticated methodology.

	1450– 1499	1500– 1549	1550– 1599	1600– 1649	1650– 1699	1700– 1750
how	n.a.	200/79/ 0.39 60/70	200/87/ 0.43 58/57	200/95/ 0.47 69/47	200/81/ 0.40 62/82	185/86/ 0.46 65/53
as	n.a.	180/63/ 0.35 44/55	200/80/ 0.40 54/54	200/87/ 0.43 65/65	200/87/ 0.43 69/64	200/77/ 0.38 62/71
too	n.a.	n.a.	200/75/ 0.37 50/75	200/83/ 0.41 62/60	200/68/ 0.34 53/89	200/75/ 0.37 57/94
so	200/46/ 0.23 26/99	200/71/ 0.33 49/75	200/74/ 0.37 45/62	200/88/ 0.44 64/62	200/86/ 0.43 63/64	200/99/ 0.49 72/62

Table 7 Diachronic developments in the adjective slot in the EEBO (first line =a/b/c; second line= d/e; a=number of hits, b= number of types, c=Type-Token Ratio, d=number of hapaxes; e=occurrences of *great*; n.a. = period not investigated due to the lower number of hits which makes a comparison impossible)

4.3.2 Productivity increase of the adjective slot throughout EModE (1450-1750)

We can also ask if the productivity of the adjective slot remains stable during the EModE period or if the distribution of adjectives changes significantly. To investigate this issue, a sample of 200 examples was analyzed per half-century and the number of different adjectives types was counted. For this diachronic investigation the time span was extended ultimately investigating six periods from 1450–1750.

A look at Table 7 reveals that the TTR ratio of the adjective slot seems to have increased in most of the templates. I counted the changing number of adjective types (b position) and calculated the TTR (c position=in bold). Additionally, the number of hapaxes was counted in every sample (second row). Information is also given about how often the adjective *great* occurs in the sample (second row/last number provided).

For the ‘so’-type, we can observe an increase in different types of adjectives, and also the number of hapaxes increases in time. Similarly, the ‘how’-type increases its range of different adjectives. The results for the ‘as’- and the ‘too’-type are less conclusive. The ‘as’-type shows an increase of hapaxes but the TTR remains more or less stable. The ‘too’-type has stable results as well. Also, the frequency of the adjective *great* remains prominent in the sense that it always keeps the lion’s share in all sampling periods with all subtypes.

4.4 *Interim summary of findings*

The findings so far suggest the following diachronic developments in EModE and from EModE to PDE:

Changes in EModE:

- a) The usage of the four constructional templates increases tremendously in the EModE period;
- b) the 'so'-type is by far the most frequently used template in EModE;
- c) the 'this'- and the 'that'-type are extremely rare;
- d) the variant with an inserted 'of' is basically non-existent and seems to be developing only later;
- e) there are no predominant types (i.e. 'lexicalized' strings like PDE *that big a deal*) which speaks for the constructions' compositional nature and their non-frozen, non-lexicalized status;
- f) the adjective *great* is recruited extremely often into the adjective slot in all subperiods.

From EModE to PDE:

- a) the usage of the four main constructional types has significantly decreased from EModE to PDE;
- b) the constructions have changed their lexical biases to a certain extent (e.g. new attractor adjective *big*);
- c) the constructions have become even more productive (if productivity is defined via hapaxes).

As has been mentioned before, some of these conclusions can only be tentative (due to the small sample size) and have to be confirmed by future research. What repercussions these empirical results should have for our sketch of the BIG MESS network in EModE will be discussed in Section 5. Before that, the feature of discontinuous modification will be analyzed.

4.5 Discontinuous modification

One aim of this paper is to trace the diachronic development of ‘discontinuous modification’. That is why all the examples in the sample were tagged for the feature DM. The examples in (25)–(30) show that the following DM patterns can be found:

(25) *so ...that...*

And ye said our lord ascended again to heaven. compassed with *so great a bryghtnesse that no tongue might tell*

(EEBO, 1495, Caxton, Wiliam)

(26) *so... (zero)...*

Marcellus fearing to be a compassed in behind, being *so small a number (ZERO) he put out the wings of his horsemen as...*

(EEBO, 1579, North Thomas)

(27) *so...as...*

How to value *so precious a Metal as Gold*

(EEBO, 1651, Rowland Wiliam)

(28) *too ...for...*

But this is *too honorable a death for a Gentleman who has...*

(EEBO, 1635, Reynolds, John)

(29) *too ...to...*

Both Despair and Presumption have *too great an influence* both upon the Minds and Lives of Men, *to make them careless*

(EEBO, 1692, An exposition on the Lord’s prayer)

(30) *as ...as...*

You shall see *as mad a pasttime* this night *as you saw this seven years*

(EEBO, 1565, Plautus, Titus)

there being *as great a readiness in me* to submit unto you in all points of civility, *as there can be averseness in you*

(EEBO, 1659, Heylyn, Peter)

In example (26), *that* is omitted, resulting in an elliptical (ZERO) contact clause. This is considered to be a variant of the ‘so... that’- type. In Example (27), *so* combines with an ‘as’-clause. Note that in its function, ‘so...as’ is

clearly different from the ‘so ...that’-type; ‘so...that’ expresses a causal relation, whereas ‘so...as’ has a comparing function similar to ‘as...as’.

The examples in (29) and (30) also indicate that often the DM clause is postponed and the construction gets interrupted by additional information (e.g. *both upon the Minds and Lives of Men, this night*). In other words, the clause which modifies the adjective can get interrupted by all kinds of other phrasal constituents. It is possible to change the ordering of the constituents (and put the adjective in post-head position). For example, *a task too great for me, a nature so extraordinary that it must be confessed, or a metal as precious as gold*. This clearly shows that the clause is a modifier of the adjective not the noun. In contrast, with the ‘how’- and ‘this/’that’-type, the reordering is highly problematic: e.g. **a vengeance how horrible, ?a manner this/that dreadful*.

Let us investigate how often speakers add discontinued clauses. In the EEBO sample – very similar to the PDE situation – DM is quite frequent: the ‘so’-type takes DM in 27% of the cases, the ‘to’-type in 35% and the ‘as’-type has a discontinued *as*-clause in 80% of the cases.

EEBO (800) 1550–1750			COCA (500) 1990–2019		
	DM	No DM		DM	No DM
so	219 (27%)	581 (73%)	so	23%	77%
too	283 (35%)	517 (65%)	too	34%	66%
as	636 (80%)	164 (20%)	as	85%	15%

Table 8 Percentage of discontinuous modification in EEBO and COCA

At the same time, DM seems to be a rather stable phenomenon; no severe in- or decrease of the pattern can be detected diachronically in the sample; rather the results are fluctuating (see Table 9).¹⁴ When creating subsamples for the respective half-centuries and when adding available data for the earlier years, it can be seen that DM is there from the beginning and remains more or less stable. This corroborates the assumption that the need to produce these constructions communicatively does neither de- nor increase but remains stable and that speakers chose the BIG MESS templates regularly to express causal notions like *too...to* or *so... that*.

¹⁴ For the period 1450–1499, only 31 examples of the ‘too’-type and 35 examples of the ‘as’-type could be analyzed. For the period 1500–1549, only 89 examples of the ‘too’-type and 180 examples of the ‘as’-type could be analyzed.

(200 examples per HC)	<i>so</i>		<i>too</i>		<i>as</i>	
	DM	No DM	DM	No DM	DM	No DM
1450–1499	92	108	9	22	17	18
1500–1549	55	145	20	69	133	47
1550–1599	45	155	67	133	158	42
1600–1649	52	148	69	131	162	38
1650–1699	52	148	75	125	154	46
1700–1750	70	130	72	128	162	38

Table 9 Diachronic development of DM in EEBO

Besides diachronic stability, another aspect needs to be highlighted. In many cases where speakers do not add DM overtly, the semantic structure which is expressed by the discontinued clause can be easily inferred indirectly from the co- and context and world knowledge. In that sense the structure is elliptical. For instance, in example (31) and (32) the speaker can easily deduce the DM from world knowledge. The addressee is considered too weak a match “to be fought against” and Metaphrastes is too young a witness “to testify”.

- (31) Sure for those knights you be **too weak a match**
(EEBO, 1607, Ariosto, Lodovico)

- (32) But Metaphrastes is **too young a witness**
(EEBO, 1656, Bramhall, John)

The ability to infer the propositional part of the missing clause that easily shows that DM is an integral part of some of the constructions (see section 5 for details). All the results show that DM cannot be considered a rare phenomenon at all. Additionally, the hypothesis that diachronically DM has become more or less frequent does not bear out. Any change in frequency would have been interpreted as a change in compositionality and complexity.

5 THE BIG MESS GROUP: SKETCHING THE NETWORK

With regards to theoretical modeling, the question that remains is what the empirical results can tell us about the nature of the EModE construction. Section 5.1 discusses which templates should be postulated in EModE. Section 5.2 sheds light on the horizontal links between the various constructions.

5.1 Vertical relations: nodes on different levels of specificity

As has been discussed in Section 2, constructions are postulated when linguistic strings are either very ‘frequent’ or when they are salient/idiosyncratic due to their functional or formal peculiarity. In the case of the BIG MESS family, I argue that it is feasible to postulate the existence of the following four semi-specific templates at the end of the period:

- (33) (a) [*how* ADJ_{qualitative} *a* N_{sg}]_{Cx}
 (b) [*too* ADJ_{qualitative} *a* N_{sg}]_{Cx}
 (c) [*so* ADJ_{qualitative} *a* N_{sg}]_{Cx}
 (d) [*as* ADJ_{qualitative} *a* N_{sg}]_{Cx}

The empirical analysis has revealed that four subtypes are being used frequently in EModE and that the adverbs used differ in their semantics and function enough to be treated as separate constructions. In contrast, the extremely low frequency of the ‘that’- and the ‘this’- type makes me argue that these two types only play a marginal role in EModE. In contrast to the others, these templates might not be as strongly entrenched in the speaker population by that time. This can be considered a case of constructionalization or constructional emergence (Sommerer 2018) and also a case of host-class expansion¹⁵ (e.g. Traugott & Trousdale 2013).

- (34) (a) [*that* ADJ_{qualitative} *a* N_{sg}]_{Cx}
 (b) [*this* ADJ_{qualitative} *a* N_{sg}]_{Cx}

The empirical study has also revealed that ‘of’-insertion is basically not existent. Future and more detailed research will need to be conducted to check when the ‘of’-variant started to increase. Similar to the ‘that’-type and the ‘this’-type, it would be possible to argue that it is EModE when the ‘of’-variant constructionalizes. However, the small number of ambiguous examples (Table 2) makes it more likely that the ‘of’-variant was only added to the English constructicon as a construction in its own right at a later stage.¹⁶

The listed templates in (33) also specify that the adjective slot is limited to qualitative adjectives. The corpus analysis has revealed that classifying adjectives are usually not recruited into the adjective slot and if a classifying (e.g. *financial crisis*, *single mother*, *medical bill*, *closed case*, *Christian values*) or

¹⁵ The adverb slot increases its membership of potential slotfillers.

¹⁶ This begs the question how frequent a string has to be in order to deserve constructional status (Traugott & Trousdale 2013, Sommerer & Baumann 2021).

absolute/extreme adjective (e.g. *brilliant*, *forgiving*) is being used after all, it is coerced into a scalar reading in the end. Interestingly, certain adjectives are attracted to the construction in EModE (e.g. *great*, *good* or *small*; Figure 2). Consequently, it seems warranted to postulate $[so\ great\ a\ N_{sg}]_{Cx}$, $[too\ great\ a\ N_{sg}]_{Cx}$ or $[as\ good\ a\ N_{sg}]_{Cx}$. However, the postulation of semi-specified constructions in which *small* or *good* are specified is already debatable, after all they are clearly not as frequent as *great*. Strings with *small* and *good* could easily be licensed by the higher level where the adjective slot is open. This also limits the number of postulated nodes. Similarly, the fully-specified level seems to play a minor role in this family. Strings like *so great a number* or *how dangerous a thing* should not be given constructional status due to their low frequency (see Table 4). The vast majority of examples shows compositional semantics and does not have any idiomatic meanings which would also warrant separate node-status: these strings, and any hapaxes as well as all less frequent combinations in general, are licensed by the nodes higher up.

On the other end of the spectrum, the question remains if we should assume a more abstract level, namely: $[ADV_{degree}\ ADJ_{qualitative}\ a\ N_{sg}]_{Cx}$. I argue that to postulate such an abstract level is possible, but at the same time problematic for various reasons. First, such a template would overgeneralize and license many combinations which do not exist. Only a very limited number of degree adverbs is used in the ADV slot (see discussion in Section 3). Second, UCCxG only tries to postulate abstract schemas if they can be assigned to a particular function or meaning. The question is what function the speakers would assign to the abstract template just sketched. It could be argued that the fronting of the Adverb/Adjective sequence has a discourse pragmatic function of highlighting (similar to other information packaging constructions where elements are fronted). In that sense it could be seen as a stylistic feature/template which competes with the canonical order to express the speaker's interpersonal stance towards the proposition or helps the speaker rhetorically. Then one could postulate the abstract mother (as done in Figure 4). On the other hand, it is difficult to detect any other meaning, which is why the postulation of this abstract level is debatable. Another problem is that the lower templates might not be similar enough for speakers to detect similarities and abstract a schema over them. Depending on the co- and context, all these templates are polyfunctional (*how great a show!* = exclamative function vs. *how great a famine it was* = descriptive) and very different from each other. On the one hand, *so great*, *too great*, *that great* and *how great* semantically can all express an evaluation of degree (intensification); on the other hand, *as great*, *too great* and *how great* in other contexts are functionally very different after all. Finally, the DM results have shown that three of the six

types often take discontinuous modification and are formally and functionally very different from the ones which do not. This brings me to the aspect of horizontal sister links.

5.2 Horizontal relations: sister relations

In UCCxG constructions are linked horizontally if they are similar in some way. Horizontal links are still an under-researched topic and so far, horizontal connections have been used to express various kinds of relations between constructions (e.g. paradigmatic or syntagmatic relationships; see [Cappelle 2006](#), [Perek 2015](#), [Van de Velde 2014](#), [Zehentner 2019](#), [Diessel 2019](#), [Smirnova & Sommerer 2020](#)). There is no space to elaborate on the different types of horizontal links, but whether or not to relate the BIG MESS types horizontally definitely depends on how one defines horizontal links in the first place. If semantic and functional similarity are seen as a precondition for horizontal links, then I argue that not all of the templates should be connected to each other horizontally. The empirical results clearly show that the members of the BIG MESS group are primarily formally related.

The templates must be divided into three main groups: The first group consists of the ‘this’-, ‘that’-, ‘how’-, and ‘so’-type and these four templates should be connected on a horizontal level. The second group includes the two DM sisters ‘so...that’ and ‘too...to’, and in a third group the ‘as...as’- and the ‘so...as’-type are connected horizontally. The motivation for this threefold grouping primarily relates to the issue of discontinuous modification. It was shown that DM is a frequent characteristic feature of some of the subtypes, which is why I suggest that the simplistic templates above need to be extended in the following way:

- (35) (a) [*too* ADJ_{qualitative} *a* N_{sg...} (*to/for*-CL)]_{Cx}
 (b) [*so* ADJ_{qualitative} *a* CN_{sg...} (*that/zero*-CL)]_{Cx}
 (c) [*so* ADJ_{qualitative} *a* CN_{sg...} (*as*-CL)]_{Cx}
 (d) [*as* ADJ_{qualitative} *a* N_{sg...} (*as*-CL)]_{Cx}

The three dots [...] represent the fact that the DM can be syntactically postponed quite a bit in the utterance (see Section 4.4). This finally leads to the following constructional network sketch:

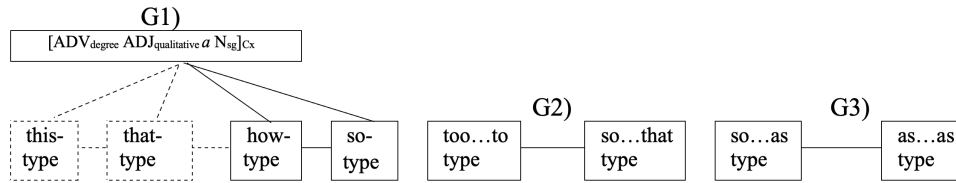


Figure 4 Sister relations between the BIG MESS types

As a first group (G1), four templates keep the less complex templates from above (with no modification) and are considered to be connected as sisters. As the ‘this’- and the ‘that’- type are only emerging, their links are also only developing. This group includes the 77% of ‘so’-cases without DM (e.g. *so extreme a sinne*). In these examples, *so* functions as an intensifier in the sense of *very* or similar to that. Besides that, three templates were extended, and one additional template was added (‘so...as’). All the ‘as’- and ‘too’-constructs we find in the data (including the ones without DM) are conceptualized as elliptical versions of the comparative or more causal templates just listed. The modified ‘too’- and the ‘so’-type form a second group (G2). They share the feature of DM and both semantically express causality. In contrast, the ‘as...as’-type and its variant ‘so...as’ are semantically and functionally complete outliers (G3). They are structures which are used to compare and rarely are used without DM. Thus, I argue that these templates should rather be connected to the family of other discontinuous dependent constructions like *same...as*, *rather...than*, *enough...that*. Note that these links to other families are not depicted in Figure 4 and still need to be worked out in future research.

The main points to take away from Figure 4 are that not all subtypes are seen as sisters to each other, and that speakers do not abstract an overarching mother node which subsumes all types. It is much more likely that, if speakers schematize and entrench more abstract templates, they do so over the individual groups, and entrench a template like $[ADV_{degree} ADJ_{qualitative} a N_{sg}]_{Cx}$ only for the first group. The other groups will have other, more complex schemas, or the observable constructs may be cases of ‘multiple inheritance’ (see Sommerer, submitted). Finally, all nodes above will be connected to many other constructions as well: for example, the ‘too’- template will be linked to the $[too ADJ]_{Cx}$.

Reflecting on Figure 4, one of the anonymous reviewers has pointed out that all the constructions might be related via so-called subpart links (Goldberg 1995) based on their partial (formal) similarity; this formal similarity

(i.e. fronting the adverb sequence) could be argued to warrant the horizontal linking between the constructions. Indeed, such an analysis is possible if one allows for sister links to be established due to formal similarity only, and/or if one argues for a process of shallow parsing/analogization. Shallow parsing can explain why links might be established between strings that are only vaguely related. Although I am not *per se* against the notion of ‘links due to formal similarity’ or analogical reasoning being based on vague functional relations, this paper refrains from postulating such links in this case, because the investigated constructions are considered being too different on too many levels. At the same time, Figure 4 does argue for horizontal links within the respective groups.

6 CONCLUSION

This paper has investigated BIG MESS constructions in Early Modern English from a usage-based, constructional point of view. Data from the EEBO corpus were analyzed to investigate the frequency, distribution and productivity of several subtypes of this constructional family. The study revealed that most of the types are quite compositional and that the constructions in general are not very restricted lexically. The sub-constructions recruit many semantically different adjectives and nouns into the respective open slots. It was shown that four constructional subtypes were all much more frequent in EModE than in PDE. Their usage increased tremendously from 1450–1750. While the ‘so’-type used to be the most frequent one in EModE, it is outnumbered by the ‘as’-type in PDE. The ‘this’- and the ‘that’-type must be seen as marginal types in EModE, and are argued to only emerge during this period.

The analysis has also shown that the adjective *great* is highly attracted to the investigated constructions. This has led to the argumentation that separate, semi-specified templates with *great* are very likely. At the same time, it was shown that the lowest (fully-specified) constructional level seems to be less important. The empirical analysis does not suggest that speakers store a lot of (idiosyncratic/idiomatic) high-frequency chunks. Most constructs seem to be licensed by constructions on the semi-specific level with an open adjective and an open noun slot. This level is also responsible for any hapax formation (productivity). In general, it was shown that the types differ in overall frequency, and prefer different adjectives in the adjective slot, only three of the top 10 adjectives are present in all four subtypes. Additionally, it was pointed out that any postulated network has to cater for the fact that discontinuous modification is a characteristic feature of some subtypes. This issue was solved by the postulation of extended templates.

As a reaction to the empirical findings, it was argued that some subtypes

are syntactically and semantically more related to each other than others. This leads to the postulation of fewer horizontal links and the question if the respective subtypes really form a constructional family. Especially the ‘as...as’-type and its variant ‘so...as’ are considered to be outliers. Three main groups were identified, which should not be connected as sisters. From this point of view, it is better not to speak of ONE BIG MESS construction under which all types are subsumed – as is often the case in the literature – but to interpret the situation as a case of formally similar constructions that are not necessarily all closely related to each other.

What needs to be discussed in the future is the discourse-pragmatic function of why speakers front the adverb group instead of opting for the canonical alternative. Moreover, it will be necessary to discuss how and if the types are related to templates like [*more* ADJ *a* N_{sg}]_{Cx} or [*quite* ADJ *a* N_{sg}]_{Cx} and how they are connected to their canonical counterparts (e.g. *a desire so great that...*) or related to other constructions like [*too* ADJ]_{Cx} or [*how* ADJ]_{Cx}. Finally, further diachronic studies need to be conducted (e.g. in the PPCME2 or the ARCHER corpus) to investigate not only earlier linguistic stages and the potential birth of the construction, but also the timespan between Late Modern English and PDE (1750-1950). At the same time, some robust collocational analyses (e.g. distinctive collexeme analysis) are needed to statistically confirm lexical biases and to measure the degree of collocational overlap between the constructions (see [Stefanowitsch & Gries 2003](#)). Finally, a more sophisticated methodology to measure productivity should be employed (see, e.g., [Perek 2018](#), [Flach 2021](#)).

In any case, this paper was able to empirically confirm some of the claims that have been made in the literature about distribution and frequency and also close some of the research gaps by investigating lexical biases or the feature of discontinuous modification. Even if several questions could not be answered fully in this paper, it is argued that the BIG MESS construction is described best in a usage-based constructional model of grammar, which does not separate grammar and the lexicon, and which knows how to integrate semi-specificity.

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