Finite Complementation in Early English Medical Writing: A Case Study of Syntactic Constructions in Competition

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Introduction (*i*)

- Object infinitive constructions: the most frequent type of non-finite complement clauses, in which the object infinitive occurs as the complement of the verb.

1a) Peter helped **to do** the washing up
1b) Peter helped us **to do** the washing up

2a) Peter helped **do** the washing up
2b) Peter helped us **do** the washing up

Introduction (*ii*)

- Historical overview:
  - Old English: both constructions were felt to be perfectly synonymous, even though the *bare* infinitive is observed to be the preferred form (Van der Gaaf 1904; Mitchell 1985; Visser 1963).
  - Middle English: in late Middle English, bare infinitive is found to decrease drastically. According to Fischer, this can be explained from a twofold perspective (1997):
    1. The on-going diffusion of *to* as an infinitive marker after the disappearance of the nominal case.
    2. The substitution of *that*-clauses by infinitival complements.
  - Early Modern English: progressive diffusion of *bare* infinitive, thus coexisting with *to*-infinitive with the same verb typology. In this period, *bare* infinitive is also found to occur with a higher number of matrix verbs.
  - Present-day English: *bare* infinitive is more widely used in both British and American English, spoken English in particular.

Introduction (*iii*)

- Zero/To variation - Still a gap from a scholarly perspective because the phenomenon has been mostly discussed in:
    1. Old English and Middle English.
    2. Particularly in registers such as fiction, poetry and correspondence.

- The present paper investigates the construction *makes to* vs. *makes ø* in late Middle English and early modern English scientific prose with the following objectives:
    - To analyze the distribution of marked and unmarked infinitives in scientific prose in the period 1350-1700.
    - To classify the phenomenon across the different text-types.
    - To evaluate the contribution of the following factors in the choice of one particular construction:
        - The presence of intervening elements between the matrix verb and the object infinitive.
        - The size of the object phrase.
        - The inflection of the matrix verb.

Methodology (*i*)

- Source: *The Corpus of Early English Medical Writing*:

  - MEMT: *Middle English Medical Texts* (1350-1700).
  - EMEMT: *Early Modern English Medical texts* (1500-1700).

- The study is based on the 3 main parts of the corpus, i.e. theoretical treatises, surgical and anatomical treatises and recipes.
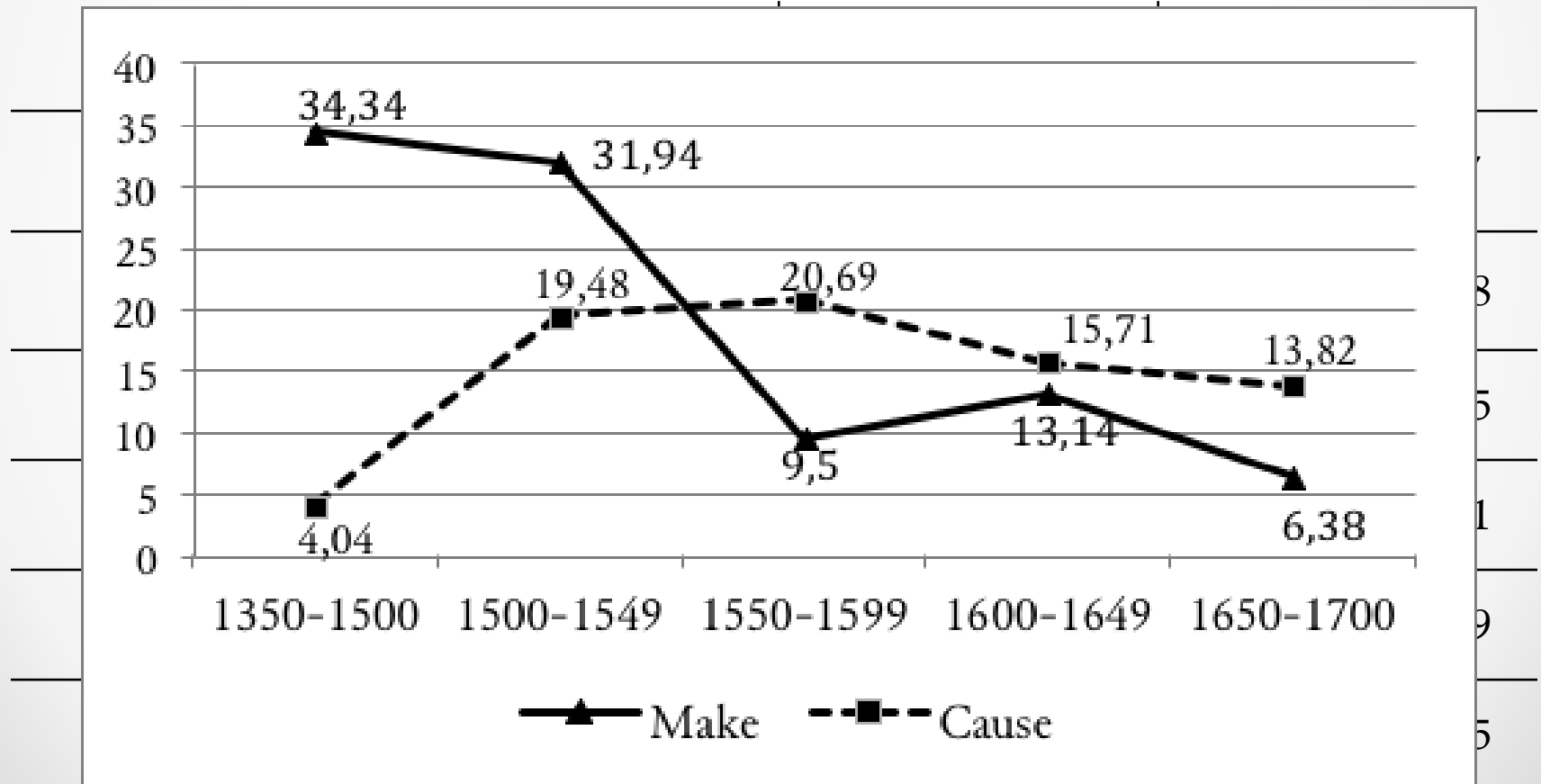
Methodology (*ii*)

- 565 instances of the object-controlling verb *MAKE*.

  o MEMT: 217.
  o EMEMT: 348.

- Manual disambiguation was needed in order to weed out those instances in which *make* was not controlling an object infinitive:

  o (1) first of all and before he *make* any far procedynge, to defyne the thing, of the which he pourposeth to entreat (1547, Langton, *Uery Brefe Treatise*, f. 5r)
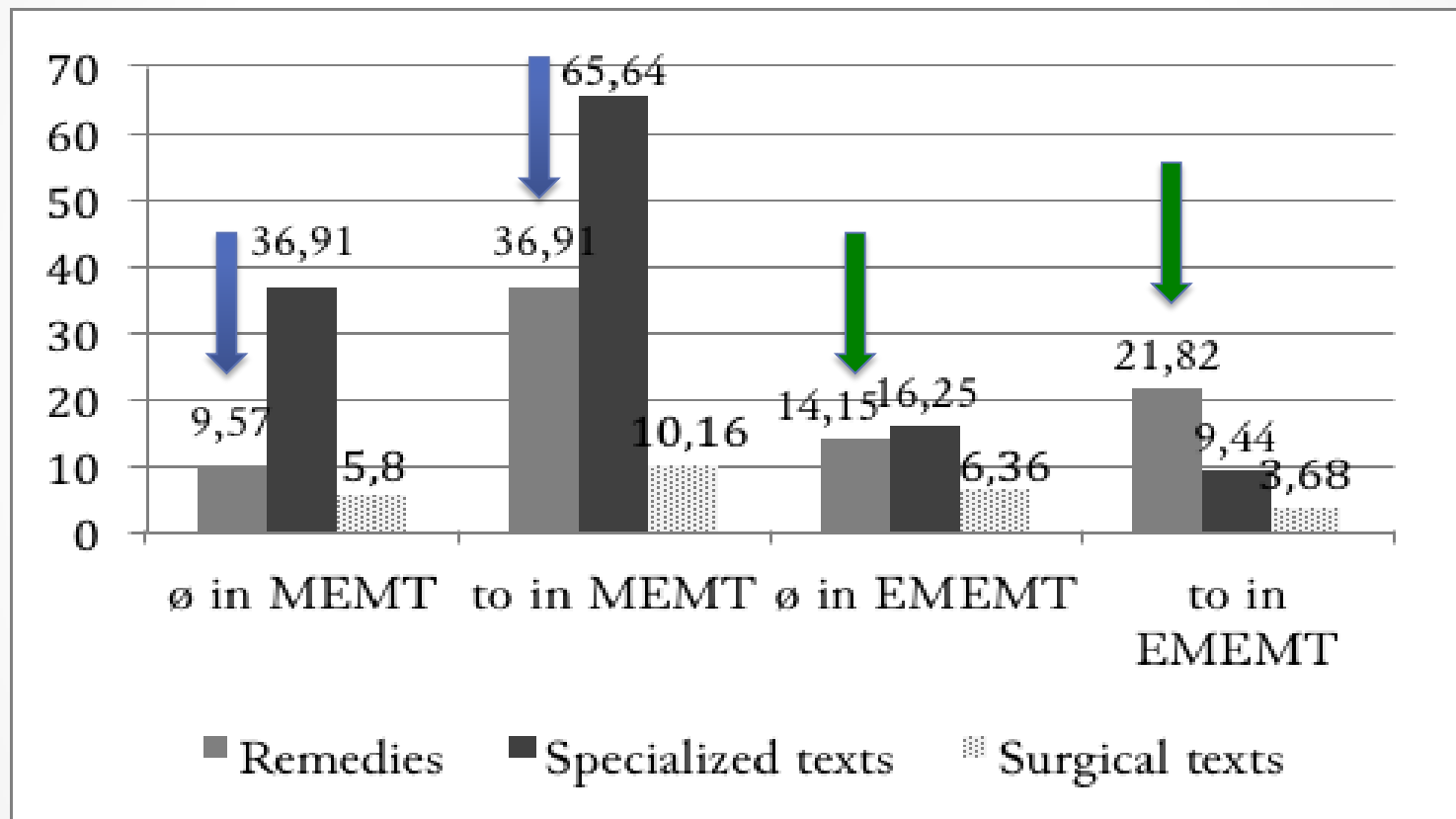
Methodology (*iii*)

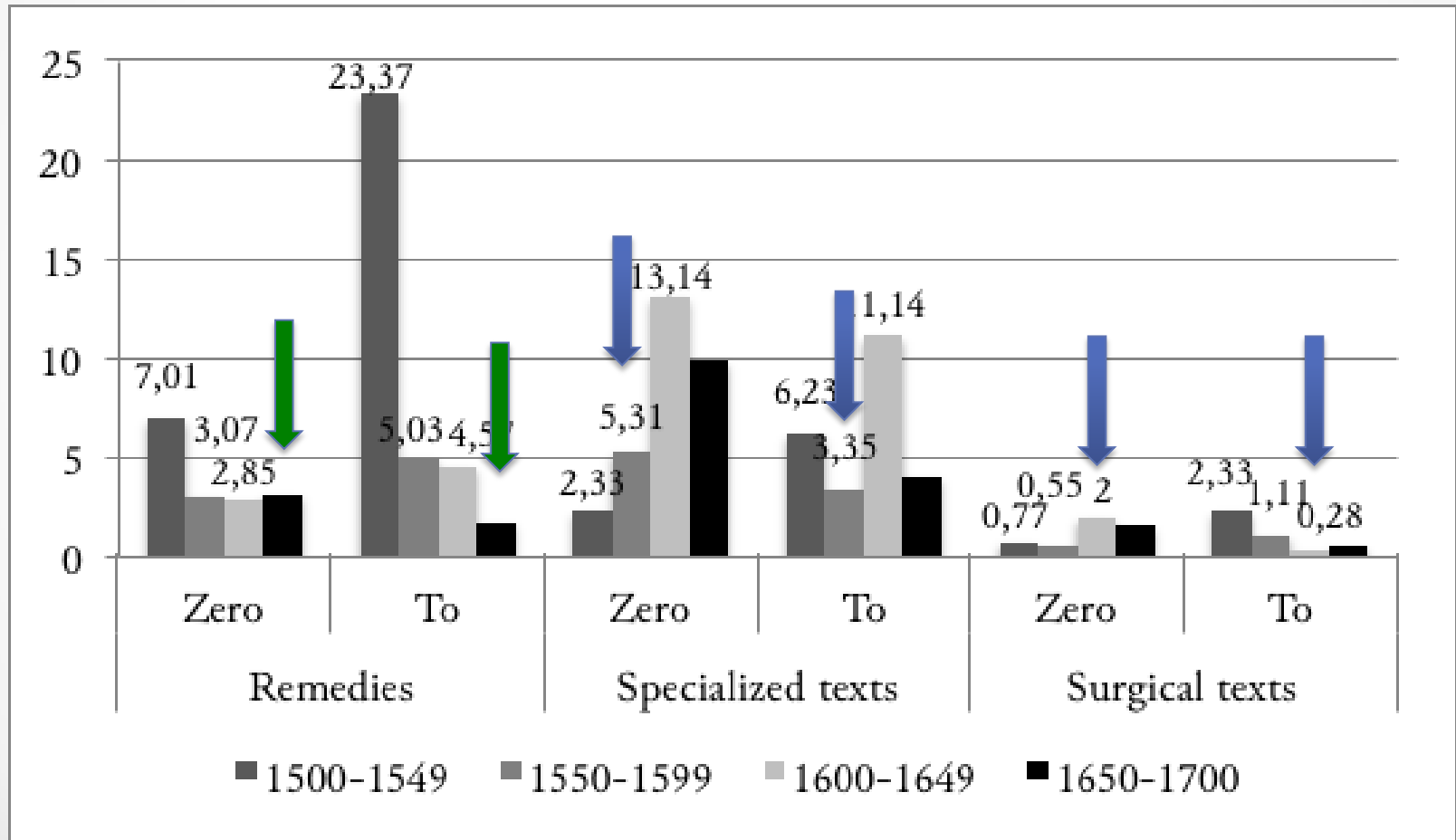|	Specialized Texts	Surgical Texts	Remedies	Total
MEMT	88,349	137,794	219,395	445,538
EMEMT	762,667	298,352	339,068	1,400,087
EMEMT1 1500-1549	59,602	21,910	46,814	128,326
EMEMT2 1550-1599	162,313	102,919	92,405	357,637
EMEMT3 1600-1649	228,135	50,771	71, 047	349,953
EMEMT4 1650-1700	312,617	122,752	128,802	564,171

Analysis: Chronology (*i*)

- Chronology

Analysis: Genre variation (*i*)

Analysis: Genre variation (*ii*)

Factors (*i*)

- There are three main factors that have been found to contribute to the choice of bare or *to*-infinitive:

  - The presence of intervening elements between the matrix verb and the object infinitive.

  - The size of the object clause.

  - The morphology of the matrix verb:
    - Finite forms (*make, makes, made*).
    - Non-finite forms *(to make, making)*.

Factors (*ii*)

- The presence of intervening elements between the matrix verb and the object infinitive.

- Lind´s analysis of *help to/help ø* (1983):

  - Whenever a noun phrase is inserted between the matrix verb and the object infinitive, *ZERO* was preferred over *TO* infinitive (63,3% and 36,9%, respectively).

  - However, it is not known how many of those NPs were actually pronominals. It results impossible to detect the influence that a proper noun or a pronominal may have on the phenomenon.

Factors (*iii*)

- *Make to/Make ø*: typology of intervening elements:

MEMT	Zero		To		Total
Noun phrase	25	24,75	76	74,24	101
Pronominal	31	37,8	51	62,19	82
Adverbial	0	0	13	100	13
No interv. element	8	38,09	13	61,9	21

Factors (*iv*)

- *Make to/Make ø*: typology of intervening elements:

EMEMT	Zero		To		Total
Noun phrase	78	42,62	105	57,37	183
Pronominal	102	83,6	20	16,39	122
Adverbial	7	36,84	12	63,15	19
No interv. element	4	16,66	20	83,33	24

Factors (*v*)

- The size of the object phrase:

  o The choice of the marked and unmarked infinitive with the verb *make* has often been interpreted in terms of metrical needs, the unmarked form being often used in verse and poetic prose (Visser 1973: 2261).

  o In addition, Rohdenburg (1996) stated that object phrases followed by marked infinitives contained twice as many words as those associated with unmarked infinitives.

Factors (*vi*)

		Instances	*Average number of words*
MEMT	zero	64	1,39
	to	153	1,78
EMEMT	zero	191	1,42
	to	157	2,18

Factors (*vii*)

- The morphology of the matrix verb.

	MEMT						EMEMT					
	Zero		To		Total		Zero		To		Total	
To make	12	69	8	40	20		39	65	21	35	60	
Making	0	0	3	100	3		3	60	2	40	5	
Make	40	34,48	76	65,51	116		88	59,89	59	40,13	147	
Makes	9	14,06	55	85,93	64		39	39,8	59	60,2	98	
Made	3	21,42	11	78,57	14		21	57,89	16	42,1	38	

Conclusions (*i*)

- The early modern period marks off a transitional stage in the development of *make* in combination with an object infinitive clause, as the marked form is observed to decline towards the mid-sixteenth century, coinciding with a significant diffusion of zero.

- *Genre variation:*

  o *MEMT: an outstanding use of to across the different text-types.*

  o *EMEMT: Zero is preferred over to in Specialized and Surgical Texts, while Remedies show a higher distribution of the marked infinitive.*

Conclusions (*ii*)

- When an intervening element occurs:

  - MEMT:
    - To is preferred with all the typology of intervening elements.

  - EMEMT:
    - An intervening pronominal favours the choice of the *zero* alternative.
    - An intervening adverbial, in turn, seems to trigger the use of the marked infinitive.
    - When there is no intervening element, the *to* infinitive is overwhelmingly preferred over that of *zero*.

Conclusions (*iii*)

- Concerning the size of the object phrase, the results reveal that the greater the complexity of the phrase, the more likely the *to*-infinitive occurs.

- Morphological differences are not relevant in the choice of the infinitive, with the only exception of *to make*, which favours the use of the bare infinitive in order to avoid euphony. In addition, in EModE, the *to* alternative is preferred when *make* is inflected (*makes*).

Thank you

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