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A Corpus-driven Analysis of the Early Modern English Recipe Manuscripts at the Folger Shakespeare Library: Zooming in on Morphosyntax and Pragmatic Interfaces

Abstract

This article analyses a corpus of early modern English manuscript recipe books, denoted here as FEMER (Folger Early Modern English Recipes), digitised by volunteers working in the digital resources section at the Folger Shakespeare Library. Chronological and content-related criteria for the selection of the manuscripts analysed here will be provided, along with norms for the modernisation of the texts that was carried out with the aid of VARD2 software. Next, a detailed corpus-driven investigation through #Lancsbox will be presented and quantitative/qualitative data provided. Specific emphasis will be on the most recurring and peculiar morphosyntactic structures, e.g., initial purpose infinitive clauses, of the culinary recipe text-type in early modern English, and their interfaces with pragmatics.

1. *Synchronic and Diachronic/Historical Culinary Linguistics*

Food studies are one of the most multidisciplinary fields of research, encompassing such disciplines as anthropology, biology, chemistry, philosophy, semiology, and sociology, among others – and, last but not least, linguistics. Of course, this is not surprising: food being a basic human need, food discourse is pervasive. And since language can also be considered a basic human need – in this case for communication rather than nutrition – linguists have always found numerous connections between the two fields. Nevertheless, scholars lament the limited interest towards culinary linguistics, and especially towards what I would call diachronic/historical culinary linguistics. For instance, Buccini affirms that "[t]here is no established or well-defined field that brings to-

gether linguistics [...] and food studies" (2013, 147), especially from a historical perspective, where structuralism and historical linguistics could inform our understanding of past food discourses:[1]

[S]tructural linguistics can shed light on how cuisine is constructed as a semiotic or symbolic system and how such a system changes over time. [...] [H]istorical linguistics serves as a practical tool in the study of the history of specific foodstuffs, composed dishes, cooking utensils, etc., and thus of the social location and historical development of specific cuisines. [...] In addition, [...] one can [...] also make comparisons between different stages within the history of one and the same language and with that one enters into the field of diachronic lexical semantics. The degree to which this line of inquiry with a specific focus on the culinary has been followed by linguists is limited. (2013, 146-8)

Similarly, in what she defines as the first "attempt [...] to bring together research at the intersection of language and food in an overview", Gerhardt affirms that "when it comes to the relation between language and food, there does not seem to be any publication fathoming the work at this intersection" (2013, 12). Her concern is for culinary linguistics in general, not a diachronic/historical perspective exclusively. For the same reason, even very recently, Absalom and Anderson (2020) have envisaged the implementation of food studies in language curricula, to underline that culinary linguistics – concerned with either a synchronic or diachronic approach – remains an underestimated field of research.[2]

Nevertheless, food discourse studies and culinary linguistics cannot be dismissed as being elitist or a solely academic prerogative. Suffice it to think of Jurafsky's *The Language of Food: A Linguist Reads the Menu* (2014), an attempt by a Stanford University linguist to popularise culinary linguistics that was shortlisted for the 2015 James Beard Book Award and translated into Chinese, Japanese, and Korean. This is only one example of a non-academic publication about culinary linguistics written by an academic.

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1 Buccini here is referring specifically to the intersections between lexical semantics and food studies, but the statement can be easily extended to other levels of linguistic analysis in general and other subfields of linguistics.
2 For an attempt at integrating food discourse (i.e., dish names in Italian-English-French trilingual restaurant menus) in the foreign language classroom, see, among others, Graziano's CLIL experiment with Italian secondary school teachers (2019).

Perhaps the first edited collection of essays on culinary linguistics is Lavric and Konzett's *Food and Language: Sprache und Essen* (2009), an interdisciplinary volume that highlights the many interconnections between food studies, (historical) linguistics, and some of the disciplines mentioned above.[3] Another characteristic of culinary linguistics that emerges from Lavric and Konzett's collection is the fact that most of the studies concerning food adopt a comparative linguistic (Gerhardt 2013) or cross-linguistic (Buccini 2013) approach, thus illustrating similarities and differences between languages when dealing with lexical families and semantic classes (see, for instance, Adami 2019 for an interdisciplinary cross-linguistic analysis of Indian cuisine).

Focusing on the levels of linguistic analysis investigated by (diachronic/historical) culinary linguists, it is evident that philology, lexicography, and etymology are "the three traditional language-related fields that have had the most sustained impact on food studies" (Buccini 2013, 148). Gerhardt affirms that morphology has also been studied, especially in relation to word formation (2013, 16-9). Regarding syntax – which will be one of the main foci of this article – Gerhardt appears to complain about the fact that dealing with it in an overview of culinary linguistics will involve "a rather short section" (2013, 20). As a matter of fact, with the exception of Culy's exploration of null objects (1996, revisited by Bender in 1999) and Sylwanowicz's investigation of complex noun phrases modification in early modern English recipes (2017), very few studies have focused on syntax.[4] These studies have been carried out using such approaches as "construction grammar, cognitive linguistics,[5] pattern grammar

3 Unfortunately, most of the articles in this collection are in German; hence, the dissemination and resonance of this study has been limited.

4 See also Arendholz et al. 2013 and Diemer 2013, who deal with syntax from a diachronic intralingual perspective from Middle and Old English, respectively, to the twentieth and twenty-first century. In particular, Arendholz et al., drawing on Görlach's seminal studies of culinary textual typologies (1992; revisited and expanded in 2004), analyses syntactic structures in recipes for beef stew from Middle English to Jamie Oliver's version. Diemer, on the other hand, considers some case studies of recipes and their evolution from Old English to the twentieth century, with emphasis on readers, the syntactic-related procedural matters, and lexical complexity.

5 See, for instance, Bagli 2021, a thorough exploration of the 'words of taste' (as the author defines the lexico-semantic fields he investigates) in contemporary English through the lenses of cognitive linguistics and conceptual metaphors in particular.

or research in corpus linguistics,"[6] and all of them "stress the inseparable nature of syntax and lexis"[7] (Gerhardt 2013, 20).

The focus of this article is not on linguistic interfaces between morphosyntax and lexicon; rather, resorting to corpus-based methods, I investigate interconnections between morphosyntax and pragmatics in a series of digitised early modern English recipe MSS[8] at the Folger Shakespeare Library in Washington, D.C.

Gerhardt provides no overview of pragmatic analyses of recipes but offers a comprehensive state of the art of critical discourse analysis in food studies (2013, 26-39), a field of research that shares many similarities with pragmatics, especially when dealing with spoken interaction and food talk. Although some pragmatic explorations of food discourse have been carried out quite recently, most of them focus on contemporary English and/or other languages (see, among others, Brdar-Szabó and Brdar 2009; Fortunati 2015; Adami 2017; Cavanaugh and Riley 2017; Al-Azzawi and Abdulameer 2020).

Therefore, with its primary focus on matters of etymology and philology, diachronic/historical culinary linguistics has been a much neglected field of research, whose contribution to food discourse studies has been limited to – with sporadic exceptions – interlinguistic analyses of the origin of words belonging to the culinary lexico-semantic field, and of so many intersections with other disciplines that sometimes the focus on language becomes an excuse to deal with more culture-related issues.[9]

2. *Writing about cookery in early modern England: Cure and/or pleasant nutrition?*

Food historians agree[10] that writing recipes in the Middle Ages and the Renaissance meant both passing on family traditions about how to prepare food

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6 This latter approach constitutes the main methodological framework adopted in this article.

7 See, for instance, Graziano and Mocini's 2015 article about a Hallidayan reading of menus as semantic units characterised by scanty narrative syntax.

8 *Manuscript* will be abbreviated as MS and *manuscripts* as MSS.

9 See, for instance, Zycherman's cultural domain analysis of free lists and pile sorts, or Albala's historical anthropological investigation of primary sources, both included in the "Linguistics and Food Talk" section of Chrzan and Brett's edited collection *Food Culture*, vol. 2: *Anthropology, Linguistics, and Food Studies* (2017).

10 See, among others, Thirsk 2006; Gentilcore 2015; Werrett 2021; Holmes 2022.

and drinks,[11] and providing future generations with useful medical treatments for a plethora of diseases and illnesses.[12] According to Leong, "[t]he collecting together of veritable medicine chests of recipes to cure or ward off particular (and at the time, usually incurable) conditions, from plague to rabies, might serve a talismanic, prophylactic purpose, as well as targeting specific experienced illnesses" (2018, 14). Therefore, cuisine and medicine went hand in hand, since the "household was the primary (and yet already seldom, the exclusive) site for both food preparation and medical care" (Pennel and DiMeo 2013, 11).

This cuisine-medicine binomial is also evident in the collection of MSS that will be investigated in this article, where compilers alternated between such recipes as pudding or stew, and homemade remedies, e.g., drinks to cure the plague, smallpox, or various body parts' aches. Görlach also pointed out that from a text-type perspective, culinary and medical recipes were identical in the Middle Ages and the Renaissance (1992, 745). The following examples, written one after another in the same MS of the corpus investigated in this article, clearly demonstrate Görlach's statement, being one a remedy against bone problems in children, and the other a recipe to make cream with gooseberries:

To cure the rickets, take the livers of rooks and dry them well and beat them into fine powder and give a little of it to the child in milk, or beer, or broth, or minced meat, and do it for three times a day for some time.
To make a very fine cream with gooseberries, take your gooseberries and skald them and strain them into your crème, so that it may be thick, and season it with rosewater and sugar, and so serve it up. (V.a.7)[13]

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11 Speaking of which, Leong lists three main reasons for recipe book writing (and reading) in the Middle Ages and the early modern period: 1) "making recipe knowledge was very much part of household management and largescale planning for provisions", 2) "recipes also played a key role in economies of patronage and gift exchange. Thus household recipe books not only were active maps of a family's social network but were in effect ledgers or account books recording its social obligations and credits", and 3) "recipe collections took on yet another role – as records of family activities and archives of family histories" (2018, 10-1).
12 Actually, the idea of food as medicine dates back to the Greek civilisation. Suffice it to think of Hippocrates's famous motto, "Let food be thy medicine and medicine be thy food".
13 In this article, MSS will be indicated by the call number given by the Folger Shakespeare Library itself.

After all, from an etymological point of view, the English terms to refer to cooking instructions and medical prescriptions overlapped for a long time and only began to be distinguished at the end of the period under scrutiny here. Certainly, this linguistic development, as explained below, took its impetus from the great scientific advances of the early modern English period, and in particular in the fact that

while still informed by Galenic precepts and humour theory, medicine was increasingly seen as something more than a practical craft, thanks also to the development of a more pronounced professional awareness among the surgeons within the barber and surgeon guild association; the same impulse was fuelling the study of human anatomy. (Plescia 2019)

Similarly, it was during the English Renaissance that cookery became a fashionable craft (Leong 2018, 2). Therefore, medical advances, on the one hand, along with the keen interest in making recipes a household fashionable craft, on the other, resulted in a general semantic specialisation of the words used to indicate the preparation of food.

Let us begin with the lemma *recipe*, used today to indicate the list of ingredients and the procedure to prepare food. According to the *Oxford English Dictionary*, the lemma indicates "[a] formula for the composition or use of a medicine, a prescription; a medicine prepared according to such a formula; a remedy. [...] Now historical or archaic" (*OED*, n. 1).[14] Moreover, it designates "[a] statement of the ingredients and procedure required for making something, (now) esp. a dish in cookery" (*OED*, n. 2). The *Oxford Dictionary of English Etymology* specifies that in the sixteenth century the lemma still designated a "formula for a medical prescription" and in the 1700s it began to be used "for a dish in cookery". The Online Etymology Dictionary (or Etymonline) is even more specific:

recipe (n.) 1580s, "medical prescription, a formula for the composing of a remedy written by a physician", from French *récipé* (15c.), from Latin *recipe* "take!" (this or that ingredient), second person imperative singular of *recipere* "to hold, contain" (see *receive*). It was the word written by physicians at the head of prescriptions. [...] Meaning "instructions for preparing a particular food" is recorded by 1716.[15] The older sense in English survives chiefly in the pharmacist's abbreviation.

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14 This meaning has now been replaced by such terms as 'prescription'.
15 Most scholars agree that it was much earlier, in the first half of the seventeenth century (see, for instance, Bator and Sylwanowicz 2015, 2, quoted below).

Therefore, most of the MSS analysed below do not use the term *recipe* to indicate any cooking procedures,[16] nor should we describe the MSS themselves as recipe books, since "[t]he compound noun recipe book, referring to a printed compendium of cooking instructions, is a term occurring hardly earlier than 1803" (Arendholz 2013, 120). Nevertheless, for practical reasons, I will adopt the current meanings of *recipe* and *recipe books* to indicate food preparation and a collection of instructions to prepare food, respectively.

However, which was the term used to refer to the ingredients and procedures in food preparation? During the early modern English period it was *receipt*, a lexeme which, not surprisingly, has a common origin with *recipe*, i.e., the Latin verb *recipere*, meaning 'to take' or 'to receive'.

Bator and Sylwanowicz summarise the historical evolution of the two terms as follows:

Nowadays, the term *recipe* is immediately associated with the kitchen, various spice cupboards and cookbooks. Very few people realize that the word (with relation to cookery) appeared only in 1631 (OED: s.v. *recipe*). Earlier, since 1400s, *recipe* was a common term used by physicians and apothecaries. Hence, it was recorded mainly in medical writings as the heading of medical formulas. In the field of cookery, it was the term *receipt* which was used on everyday basis to denote the culinary instruction. Nowadays, the terms *recipe* and *receipt* have distinctive meanings and no one uses them interchangeably. [...] Additionally, the term *prescription* appeared in English with reference to medicine in the late sixteenth century and was slowly replacing the term *recipe* in the context of medical instruction. [...] In the early Modern English period we can observe how the multi-meaningful lexemes became arranged within the semantic field. Thus, the term *recipe* gained dominance with the culinary reference, *prescription* became the medical term, and *receipt* was rejected from either of these, denoting "a statement confirming the reception of something". (2015, 2; 4; 20)

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16 Actually, the situation is much more complex and would require a much more detailed historical and etymological corpus-based account. As a matter of fact, very briefly, due to the poor conditions of some of the MSS – and hence of their transcriptions – and the high level of spelling fluctuation in the texts themselves, it is sometimes difficult to understand whether the term used to indicate food preparation was *recipe* or *receipt*. Nevertheless, since this article explores other linguistic issues with the MSS, the spelling modernisation carried out through the VARD2 software (see next section) has ruled out the possibility of investigating spelling-related issues. An old-spelling version of the texts would certainly help scholars interested in this topic.

In linguistic terms, *recipe* underwent a semantic change or shift, with *recipe* and *receipt* overlapping for some time in the Renaissance. More complicatedly, *receipt* was already a polysemous word indicating both "the act of receiving something or someone" (Arendholz et al. 2013, 120) and food preparation. Over time, the primary meaning of the lemma underwent a semantic narrowing, thus "refer[ring] to money" (*OED*, n. I.1.a) in particular,[17] while the meaning associated with food became obsolete.

Having clarified these terminological questions, it is worth noting what kind of texts recipes are from a text-type and typological point of view, bearing in mind that in the case of recipes, "text-types are […] defined by linguistic characteristics" (Carroll 1999, 38). In this sense, although "time did not pass the recipes' formal aspects without leaving its marks, [and] […] also left its imprints on the functional ones" (Arendholz et al. 2013, 131),[18] I would argue that early modern English culinary recipes do not differ too much from today's cooking instructions, since their "basic function has not changed over the centuries" (Görlach 1992, 745) and thus "the text type 'cooking recipe' has seen less development than many other types have" (2004, 140). In particular, from a formal, technical perspective, what Görlach defines as the "standardization of arrangement (e.g. subsections 'title', 'ingredients', 'procedure', 'how to serve up')" (2004, 125) still constitutes the basic features of a recipe today. What is more, from a functional point of view, we are living in times deeply concerned with issues regarding healthy food and wellness; hence, the idea of eating food as a kind of natural medicine is as widespread today as it was in the past.

Structurally speaking, "[e]arly modern recipes replicate the medieval structural pattern where the text begins with a title specifying the purpose, the ingredients, followed by the preparation and application phases and a final efficacy phrase" (De la Cruz-Cabanillas 2020, 48). Although De la Cruz-Cabanillas is referring to early modern medical prescriptions, the culinary recipes analysed in this article have the same structure, given the numerous overlaps between culinary and medical discourses in the Middle Ages and the Renaissance, as noted

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17 The modern meaning of "[a] written or printed acknowledgement of receiving something, esp. of the payment of money" (*OED*, n. 3.b) began to appear in the sixteenth century.
18 Arendholz et al.'s comparison between the Middle English recipe for *beef y-stywyd* and Jamie Oliver's for stew and ale also focuses on the "medial point of view" (2013, 125). In this sense, it is obvious that the two recipes differ from a formal standpoint, with the English chef's recipe being a multimodal computed-mediated text.

earlier. The following example from the corpus at the Folger clearly shows the tripartite structure of the recipes described by De la Cruz Cabanillas:

<div align="center">The milk water</div>

Take six handfuls of carduus green, 3 handfuls of spearmint, 3 of balm, 2 of wormwood. Steep them all night in a gallon of new milk and distill it the next day in a common still. It is good in a fever or surfeit or any illness of the stomach. When you give it, put sugar to it. (V.b.366)

Some scholars define today's recipes as regulatory or prescriptive texts (Herbert 214, 116; Fortunati 2015) that provide instructions on how to prepare food resorting mainly to the imperative. Graziano and Mocini (2015, 124), meanwhile, prefer to interpret recipes as analytic implicit narrative texts, of which dish names are the synthetic version, an assertion that appears to be confirmed in part by Fortunati's survey of 137 Italian common people (2015, 34). This is also true, some scholars affirm, in the case of early modern – especially manuscript – recipes (DiMeo 2017, 175), where sometimes the regulatory function of the instructions alternated with personal accounts of the author/compiler who had tried the recipe[19] or given advice about the best way to serve a dish, when to consume it, etc. Sometimes the compiler tells how s/he obtained the recipe(s), and proper names abound. These are "the names of significant donors or authors of recipes – physicians, aristocrats, royalty – [that] imbued the texts with the cachet ascribed to such figures, and set the parameters for the trust one could invest in such recipes" (Pennel and DiMeo 2013, 14). This peculiarity of culinary narrations, which not only involves eminent personalities but also "team[s] of men and women who also possessed hands-on experience and expertise with a range of practical tasks" (Leong 2018, 175), functions as a kind of *auctoritas* principle and adds value to the recipe(s) presented.

The narrative tone of recipes had been partly hinted at by Görlach (1992, 749), who, although affirming that from a syntactic point of view they were very simple texts,[20] noted that temporal clauses represent a phrasal construction which contributes to the 'narrativisation' of recipes and add complexity to the sentence structure (2004, 125). I will argue also that purpose clauses

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19 In most cases, the MSS analysed contain interesting Latin expressions such as *probatum*, *probatissimum*, *probatum est*, etc., a clear intervention by the author/compiler who reported her/his positive experience with a certain recipe, thus appraising its success.

20 See also Carroll (1999, 31): "[t]he culinary recipes are made up largely of simple clauses".

had a high degree of occurrence in early modern English recipes and comprised a paramount morphosyntactic element for pragmatic reasons, as will be seen later.

3. *Describing the Digital Archive and Making It Ready for Corpus Analysis*

The dataset selected for the corpus-driven analysis is the "Recipe books at the Folger Shakespeare Library" digital archive (available at https://folgerpedia.folger.edu/Recipe_books_at_the_Folger_Shakespeare_Library), a collection of 144 manuscript recipe books dating from ca. 1550 to ca. 1870. Of these MSS, only 53 have been transcribed thus far at the Folger, two of which have copyright restrictions and cannot be consulted in open access.[21] Given my interest in early modern English, I have decided to consider the time span 1550-1700; hence, only the 45 MSS in the Folger archive dating up to 1700 have been considered.

Most of the MSS were digitised by volunteers of the EMROC (Early Modern Recipe Online Collective), a long-term project founded in 2012 by professors Rebecca Laroche (University of Colorado) and Amy L. Tigner (University of Texas), with the aim of making early modern English recipe manuscript books accessible and electronically searchable. Every year since 2019, the EMROC organises a transcription marathon called Transcribathons whose outcomes are uploaded to a specific section of LUNA, the Folger Digital Image Collection, called the Folger Manuscripts Transcriptions Collection, by Emily Wahl, metadata specialist, and Michael Poston, data architect, both at the Folger Shakespeare Library (for details about how to make transcriptions accessible online, see Tersigni 2019).

One of the main difficulties in creating the corpus is the poor conditions of MSS, as noted by Leong: "[o]ften created and used over generations, household recipe books were scribbled over, marked up, crossed out, written and rewritten [through] marginal notes, interlineal interjections, Xs, and other scribbles" (2018, 175). This certainly affected the corpus analysis presented in this paper, since lacunae and crossed-out repetitions or false starts, to give only

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21 These are V.a.621, compiled by Catherine Bacon, around 1680 and 1739 (approximately), and W.a.311, compiled by Mrs. Johnston, in 1700 (approximately). In this article, MSS are indicated by their Folger call number.

one example, may alter both the word count (and hence statistical data) and collocational patternings. For this reason, each decision I made during the process of systematisation and epuration of the corpus was in aid of machine readability and reliability of the corpus analysis.

Some MSS also contained other miscellaneous texts which had nothing to do with recipes. For example, V.a.260 included long lists of ships belonging to the English fleet in the seventeenth century, and V.a.347 had several sermons in both Latin and English. For the same reason as above, matter unrelated to culinary recipes in the MSS has not been uploaded to the software. Even paratexts – e.g., frontispieces, tables of contents, etc., except for marginalia and interlinear glosses – were not included in the word count and corpus analysis.[22]

Once the texts (or portions of them) were ready to be analysed using corpus linguistics software, the last step was to modernise early modern English spelling, since for obvious reasons the analysis would benefit significantly from modern spelling versions of the MSS. As a matter of fact, the purpose of my investigation was neither philological nor etymological; hence, an old spelling version of the texts would prevent statistical considerations about keyword analysis, collocations, annotations, etc. To this end, I used VARiant Detector (VARD2) software, a semi-automatic tool developed by Alistair Baron at the University of Lancaster. Texts were then checked manually and uploaded to both #Lancsbox and The Voyant Tools, since the functions they offer are user friendly and sometimes differ from each other; thus a combined analysis of their respective functionalities was desirable.

4. *Discussion of Results: Initial Purpose Infinitive Clauses (IPICs) and Their Pragmatic Function(s)*

As hinted at above, recipes are characterised by "a particular syntax" (Arendholz 2013, 120). This "particularity" derives from the fact that, according to some scholars, even in the past "[r]ecipes were more than a set of instructions.

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22 Here I follow the example of the Visualizing English Print (VEP) project and its adoption of the SimpleText format, specifically designed to support statistical analysis of historical corpora (see https://graphics.cs.wisc.edu/WP/vep/simpletext/ for further details about preparing a text to be formatted according to SimpleText criteria).

They were forms of narration" (Smith 2016) and hence combined the nature of procedural and narrative texts (Pomata 2013; Graziano and Mocini 2015, 123-4). As Cognard-Black observes, "[a] recipe is a story. It sets a scene, forms a plot, arrives at a climax, and ends with a denouement" (2015).

Below are a few prototypical examples of recipes from the FEMER, which illustrate this combined nature of procedural and narrative text types (where, for instance, the temporal clauses emphasised by Görlach are evident):

To hash a calf's head, there must be some bacon boiled with the head. When it is cold slice it thin and mince the bacon small. Put to them some strong broth, claret wine and vinegar anchovy, cloves mace and a little pepper and a little butter and an onion. Fry some sausage meat, some larks roasted a little. When it's stewed enough, then put to it some very thin pieces of bacon fried crisp, serve it up with sippets and lemon. (V.a.347)

A receipt to make curran wine

Take 24 pounds of good ripe red currans, bruise them in your hands and strain them. When they are all broken, add to the juice 4 Scots pints of spring water, then put in 8 pounds of powdered sugar, and have of the same liquor by you to fill up the barrel always as it works over. Take away the thick scum every morning for 10 or 12 days and fill up the barrel, which must hold but 8 pints, then stop the barrel and set it in a closed place for a quarter of a year. Then draw it of in bottles and stop them closed for your use. (X.d.745)

In addition to illustrating instances of both instructional and narrative text types, the examples above also demonstrate that "[s]yntax in food discourse is restricted" and that "[p]revailing syntactic constructions are parallel, mostly by repeated imperatives and item lists. These features remain essentially universal until the end of the Early Modern English period" (Diemer 2013, 156).

It is with these premises in mind that I conducted a morphosyntactic corpus-based analysis of early modern English recipes in order to understand what kind of clauses and phrases account for the narrative and procedural features of the texts, respectively. I began by arranging the corpus[23] in the chronological order of the MSS, in order to analyse possible diachronic developments, changes, shifts, etc., of the linguistic features looked for. I called the corpus FEMER (Folger Early Modern English Recipes) and analysed it using #Lancsbox, first with particular reference to morphosyntactic structures. To this end, the

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23 In terms of word count, the corpus comprises 1,152,331 tokens and 48,640 types.

Ngrams tool was used, since it is the most appropriate one the software offers to investigate morphosyntax. After noun phrases, the most recurring morpho-syntactic structure was the *to*-infinitive phrase 'TO + VV', with VV indicating the base form of the verb, according to #Lancsbox POS tags. Of all the occurrences of *to* indicating an infinitive, 3301 (relative frequency: 28.64[24]) collocate with the base form *make*, with most of them indicating a purpose (infinitive) clause[25] which often appears in the initial position (henceforth IPIC, Initial Purpose Infinitive Clause). From a diachronic perspective, the IPIC *to make* shows an average regular distribution in the period under analysis (1550-1700), as seen in the figure below from The Voyant Tools (Fig. 1):
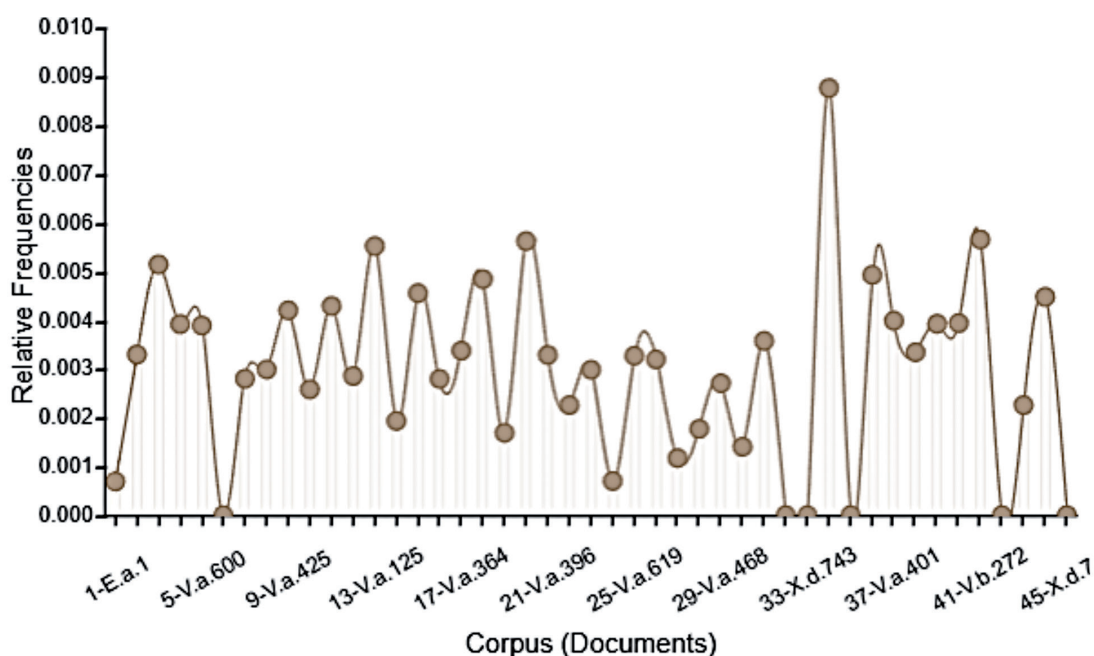

Fig. 1. The diachronic distribution of *to make* in the FEMER.

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24 #Lancsbox calculates the relative frequency per 10k words.

25 I here adopt Sandra Thompson's (1983) taxonomy as she focused specifically on initial/final purpose clauses and their pragmatic implications in sentences. Other definitions, such as Karlsen's (1954) idea of absolute infinitive of purpose, Quirk et al.'s (1985) notion of purpose adjuncts, or Los's (2005) concept of *to*-infinitive as GOAL have not been considered in this article, for no other reason than Thompson's greater relevance to the topics dealt with here.

The centrality of the verb *to make* would likely not surprise food discourse scholars, firmly convinced as they are that early modern culinary culture was characterized by the "knowledge of making", a "pan-European scheme of everyday tasks directed toward making things" (Leong 2018, 4). Nevertheless, the corpus-analysis reinforces their conjectures.

To study the collocational patterning of *to make*, I have decided to set a span of 0 words the left (0 L) and 15 words to the right (15 R), since no lexical item precedes IPICs in the recipes of the FEMER. The GraphColl tool[26] in #Lancsbox (see Fig. 2) shows that of the 3301 occurrences of *to make* as an IPIC, 2418 (73%) collocate with the imperative form *take*:
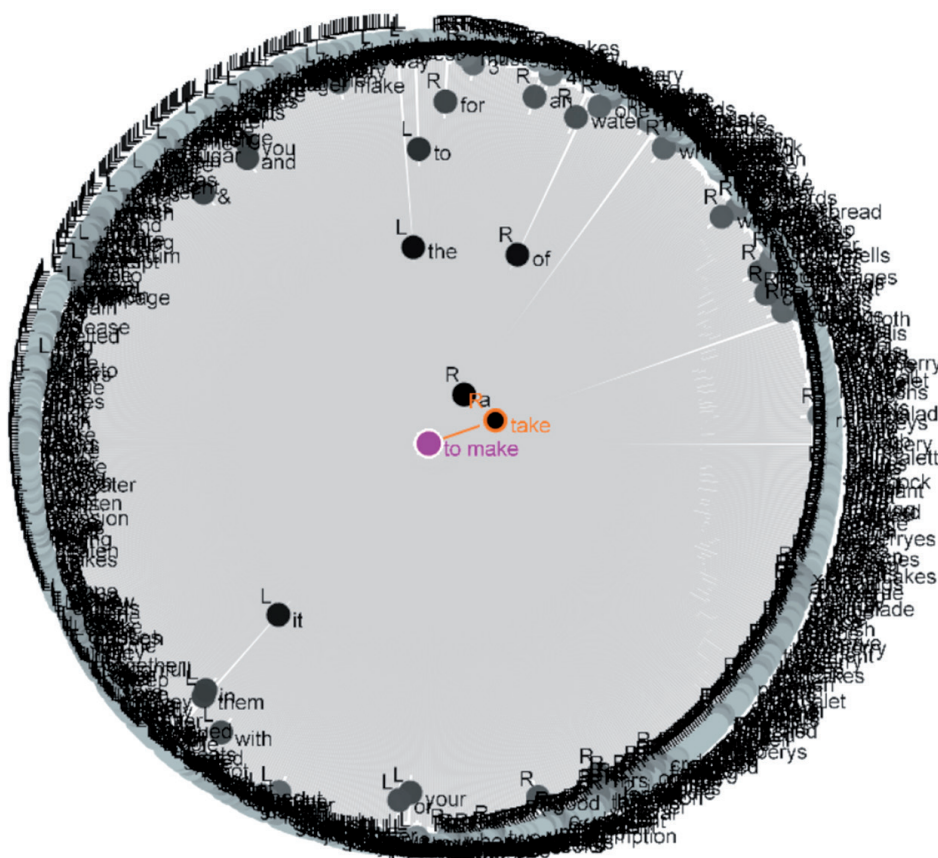

Fig. 2. Most recurring collocates of the node *to make* in the FEMER, with *take* highlighted in orange.

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26 GraphColl is a tool that produces collocational graphs and allows users to visualise data as networks.

The reason for such a wide right span is that sometimes the object of the IPICs is so long, with all its pre- and post-modifying items (Sylwanowicz 2017), that the instructional part of the recipe, which usually begins with the imperative *take*,[27] is not in the immediate lexical neighbourhood of the node *to make*, as in the following examples:

MS	RECIPE	'TO MAKE...TAKE...' COLLOCATION	RIGHT SPAN
E.a.5	A balm	*To make* a balm presently that shall heal any green wound in 5 days, *take...*	13 R
V.a.125	Apple tart	*To make* jelly for whole oranges or the peels of them *take...*	10 R
V.a.364	A water	*To make* a water to wash the face used of a gentlewoman, *take...*	11 R

Table 1. Example of the 'To make...take...' collocation in the FEMER.

Even in this case, scholars are familiar with reflections on the textual structure of recipes. Carroll (1992) was probably one of the first to recognize the importance of the initial part of recipes in Middle English: "It can be seen then that the Middle English recipes usually begin with a heading, often containing an infinitive" (32). I would specify that the infinitive Carroll refers to is a purpose infinitive, as Stannard (1982), Mäkinen (2004), and De la Cruz-Cabanillas (2020, 48), among others, have noticed, in the case of early modern prescriptions and recipes. Scholars have variously defined the initial part of recipes, as summarised by Sylwanowicz: "[i]n various publications [the initial] part of the recipe is given different labels, e.g. purpose (Stannard 1982; Mäkinen 2004), rubric and indication (Hunt 1990), title (Görlach 1992;[28] Taavitsainen 2001; Alonso-Almeida 2013)".[29] Since "[s]ome [recipes] include a clear statement of

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27 Adopting a pragmatic perspective, this imperative should be referred to as a directive speech act, according to Searle's well-known taxonomy of speech acts. Nevertheless, as noted by Al-Azzawi and Abdulameer, "[t]he highest use of 'directive' is not a haphazard matter but rather for purpose" (2020, 15095). In other words, this imperative form can be interpreted as an instructional performative speech act, a sub-category of directives, as stated by Brdar-Szabó and Brdar (2009).

28 More precisely, Görlach also calls the initial part 'heading' (2004, 145).

29 To this list I would add De la Cruz-Cabanillas, who calls the initial part "a title specifying the purpose" (2020, 45), albeit referring to medical recipes.

purpose [...], whereas others include only the name of the medicament", Syl-wanowicz prefers calling the initial part "heading" (Ibid.), like Grund (2003) and Görlach (2004) before her.

Nevertheless, terminological matters aside, to my knowledge the pragmatic implications of this morphosyntactic organisation of recipes as texts have never been investigated. Initial purpose clauses, and IPICs in particular, have received scant attention. Drawing on Firbas's functionalist theories,[30] Golkova (1968), a member of the Second School of Prague, observed that IPICs have less communicative dynamism (CD)[31] than final purpose clauses. This is in line with Firbas's CD:

Entering into the flow of communication, the meaning conveyed by a linguistic element acquires the character of information and participates in the development of the communication and in the fulfilment of the communicative purpose. If unhampered by other factors, linear modification produces the following effect. The closer to the end of the sentence an element comes to stand, the greater the extent to which it contributes towards the development and completion of the communication. Whereas the element occurring finally contributes most to this development, the element occurring initially contributes least to it. (1996, 23-4)

Nevertheless, Halliday established that usually the initial element of a sentence is "the point of departure of the clauses as a message" (1967, 212), and it is well-known that he calls this point 'theme', thus alluding to discourse, instead of considering sentences in isolation as Golkova had done.[32]

Fries (1983) developed Halliday's discourse implications of the theme, affirming that themes provide important information about the organisation of a text. In particular, sentence-initial themes are called by Fries marked themes, since they

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30 In particular, Golkova here refers to the Functional Sentence Perspective or FSP by Firbas (1956; 1966).
31 First introduced by Jan Firbas in his seminal article "Poznámky k problematice anglického slovního pořádku s hlediska aktuálního členění větného" [Some notes on the problem of English word order from the point of view of functional sentence perspective] (1956), CD is defined as "a phenomenon constantly displayed by linguistic elements in the act of communication. It is an inherent quality of communication and manifests itself in constant development towards the attainment of a communicative goal; in other words, towards the fulfilment of a communicative purpose" (Firbas 1992, 7).
32 For an application of Hallidayan linguistics to food discourse, see Graziano and Mocini 2015; Graziano 2019.

are rarely the subject of the sentence, which is defined as the unmarked theme. This is evident in the examples from the FEMER, where the *to-make* IPIC, understood as a marked theme, is never the subject of the sentence, this latter syntactic element being a generic 'you' coinciding with the subject of the imperative *take*.

Thompson, on the other hand, "suggest[s] that an initial purpose clause provides a framework within which the main clause can be interpreted, and that it does this by means of its role as a link in an expectation chain" (1985, 61). In this expectation chain, "initial purpose clauses [...] guide the reader's attention in a very specific way, by naming a problem which arises from expectations created by the text or inferences from it, to which the following material, often consisting of many sentences, provides the solution" (67). This is exactly the case of the recipes of the FEMER and, not by chance, Thompson's analysis focuses on narrative and procedural texts (57), the two text types to which culinary recipes belong. In early modern English recipes, the *to-make* IPIC directs the reader's attention to the problem of 'how to make something' (the 'something' part generally being a noun phrase) and creates expectations (often thanks to a series of pre- and post-modifying items of the NP). The rest of the text provides the solution to the problem.

Below are some prototypical examples from the corpus (the POS tags have been provided by #Lancsbox with the KWIC tool, using the 'Text with POS' function):[33]

MS	IPIC	MAIN CLAUSE
V.a.20	*To*_TO *make*_VV a_DT very_RB good_JJ cake_NN	*take*_VV a_DT quarter_NN of_IN a_DT peck_NN of_IN flower_NN...
V.a.562	*To*_TO *make*_VV an_DT excellent_JJ good_JJ jelly_NN	*take*_VV three_CD gallons_NN of_IN fair_JJ water_NN...
V.b.13	*To*_TO *make*_VV an_DT oil_NN good_JJ for_IN the_DT sight_NN	*take*_VV the_DT flowers_NN of_IN rosemary_NN...

Table 2. Examples of IPICs and main clauses from the FEMER, analysed through #LancsBox.

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33 The POS tags automatically assigned by #Lancsbox, which are present in the examples above, are as follows: CD = cardinal number; DT = determiner; IN = Preposition or subordinating conjunction; JJ = adjective; NN = noun, singular or mass; RB = adverb; TO = to; VV = verb base form (unfortunately, #Lancsbox does not recognise *take* as imperative, since this tag is not present in the software).

Moreover, the initial position of final clauses plays an important role in terms of Information Structure (IS); in particular, in the distribution of topic and focus[34] in the texts considered. Generally – and over-simplistically – speaking, "the focus is that part of the utterance that realises the utterance's informative purpose and conveys its illocutionary force. The topic is the rest of the utterance, whose function is that of providing accessory information that facilitates the comprehension of the topic" (Lombardi Valluri 2009, 88. Translation mine).

In general, "[p]urpose clauses do not [...] set an interpretative frame or thematic ground for the ensuing main clause, but tend instead to provide new information. Their discourse-pragmatic function, then, should favour purpose clauses in rhematic (focus) position rather than thematic (topic) position [...]: purpose clauses are overwhelmingly frequently postposed, even if they contain a clause-final subordinator and hence require a comparatively high processing effort" (Schmidtke-Bode 2009, 123). This is not the case of the FEMER. As a matter of fact, here purpose clauses are anticipated, or "preposed" (Ibid.: 124), and Schmidtke-Bode agrees with Thompson in saying that "[w]hen the purpose clause is moved to the beginning of the complex sentence [...] it loses the [...] rhematic characteristics and adopts the discourse-organizing function of other initial adverbial clauses" (Ibid.). Therefore, we can conclude that *to-make* IPICs in the FEMER function as organising topical clauses, a title-/heading-like given piece of information which introduces the new information conveyed by the recipe procedure.

5. *Conclusion*

The corpus-based analysis of the FEMER presented above has highlighted the morphosyntactic features of the digitised MSS that seem to confirm the double nature of recipes as text types. On the one hand, *to-make* IPICs contribute to the 'narrativisation' of early modern English recipes – something that has been

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34 The overlapping and/or differences between such labels as topic, theme, ground, on the one hand, and focus, rheme, comment, on the other, will not be discussed in this article, given the topic's complexity. For further information, see Masia 2017, among others. I decided here to adopt the topic-comment dichotomy, following Emanuela Cresti (cit. in Lombardi Valluri 2009, 88), since it is focused specifically on the communicative scope of utterances, and less bound to the form of the topical and focal units.

lost in contemporary recipes – thus making syntax less scanty and more hypotactic. In this way, purpose clauses are added to the temporal clauses studied by Görlach (2004, 125). On the other hand, the collocational pattern '*to make* + object[35] + *take* + object' clearly demonstrates the procedural nature of recipes.

The recurrence of certain syntactic structures also has important implications at the level of pragmatics. As a matter of fact, IPICs have proved to be marked structures which have statistical significance only in early modern recipes, where they become an unmarked feature. This affects the topic-focus alternation, as seen above, and creates an expectation in the readers, as noted by Thompson (1985). The topic presents a piece of information as if it were already known to the reader, and thus its function is to outline a context to better interpret the focus. IPICs are a sort of 'stage-setting' of the main event. The reader, focusing on that string of text, knows that s/he must treat it with less attention, because it is already shared information, but which s/he needs to use to decode the main event, the one most often introduced by 'take'. This aspect corroborates the text-based peculiarity of this phenomenon.

Further corpus-based investigation could shed more light on the narrative nuances of early modern English recipes, even examining comments and pieces of advice inserted by the MSS compilers and authors. Such explorations, I argue, would benefit from corpus software and from interfaces between morphosyntax and pragmatics, although lexis still represent an important field of research in terms of scrutinising food discourse.[36]

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35 As observed in the analysis, most of the time the object is made up of a NP and its projections in terms of pre- and post-modifying elements.

36 See, among others, Graziano 2017; 2019 for an analysis of food discourse as ESP.

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