

MARTA SYLWANOWICZ
(UNIVERSITY OF SOCIAL SCIENCES, WARSAW)

WAYS OF INTRODUCING SPECIALISED TERMINOLOGY IN MIDDLE ENGLISH MEDICAL RECIPES¹

The aim of the proposed paper is to examine ways of representing medical terminology, in particular names of pharmaceutical preparations, in Middle English medical recipes. The study will attempt to show that formal features of recipes, in particular headings, might be helpful in the identification and classification of the terms in question.

The data for the paper come from the *Middle English Dictionary (MED)*, *Oxford English Dictionary (OED)*, and the *Middle English Medical Texts (MEMT)*, a computerised collection of medical treatises written between 1330 and 1500.

KEYWORDS: Middle English, medical terminology, medical recipe

MIDDLE ENGLISH MEDICAL RECIPES

Earlier studies on Middle English recipes, devoted mainly to genre characteristics and text-type features (e.g. Carroll (1999), Görlach (1992, 2004), Jones (1998) or Taavitsainen (2001a and b)), revealed that medieval recipes were characterised by a fairly regular textual structure, cf. Table 1 below.

Table 1. The structure of a Middle English recipe.²

Stannard (1982: 60-65)	Hunt (1990: 16-24)	Taavitsainen (2001a: 86)
–	rubric	title
purpose	indication	indication of use
ingredients and equipment	composition	ingredients
procedure	preparation	preparation and dosage
application and administration	application	application
rationale	statement of efficacy	efficacy
incidental data		

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² Stannard's classification after Mäkinen 2006: 87.

As seen in Table 1 the recipe texts were composed of smaller parts, which played different functions. Although these *recipe elements*, as Mäkinen 2006: 87 calls them, are identified with different names, and their number varies from author to author, the proposed lists indicate that what made a recipe is the heading (statement of the *purpose* and/or *rubric/title*), list of *ingredients*, advice on *preparation* and *application* of medicinal substances and additional comments, usually focusing on the effectiveness of the recipe. Of these, according to Stannard (1982, after Carroll 2004: 179), only the *procedure/preparation* was obligatory.

The heading had a fairly conventionalised form, hence the recipes could be easily singled out from the text. The typical formulas of headings were:

- (1) (evaluative adjective) + NP + PP (*An ointment for...*, *A gude emplaster for...*, *A profitable medicine for...*);
- (2) For (pro) + NP/VP (*For Emplome, ffor ye mygrane and swymyng in the hede; For to hele seynt loyes evyll, For to cure þe frenesy and woodnes...*);
- (3) a clause (*To cleryfye a mannys sy3the...*, *To make popylyan...*, *To make a man fore to hold hys water...*, *3if man for-letes his speche for seknesse, 3if þer is yren or tre or þorne y-lope into any stede of mannys body*).

And such headings were most common in remedy books, i.e. handbooks for consultation (Taavitsainen 2001a), where recipes were given in a sequence. Hence, anyone looking for medical help could easily find cures for various ailments.

In more learned writings (surgical books or specialised texts) recipes were part of large treatises and often lacked headings. One way to discern them in the context was to look for such words or phrases as, *Recipe...*, *Take...*, *Another for the same...*. Sometimes, within the text, the author only mentioned the name of a medicinal specific and described the way of application. In other cases, the author informed the reader that more detailed information on preparation and application was to be found in a separate section or chapter, often referred to as *þe antidotarie*, e.g.:

- (1)
þow schalt fynde a ful techinge of þese medicyns in þe antidotarie of þis book, þou schalt haue a ful techinge in þe antidotarie of mundificatiuis & cicatri3atiuis
(Lanfranc's *Chirurgia Magna*, MEMT)

In þe þridde partie I haue putt an antidotarie of sirurgie wiþ watris, emplastris, poudris, oilis & oynementis, & opere dyuers medicyns in general
(*Chirurgie de 1392*, MEMT)

These sections, i.e. antidotaria, were often preceded by some introductory remarks and later followed by the recipes listed in a sequence and marked by a heading, cf.:

- (2)
Now I wole bigynne þe .v. tretis þat schal be clepid þe antidotarie of this book. In the fifþe tretis clepid þe antidotarie of þis book, I þinke to putte medicyns boþe symple & compound/þat falliþ for cirurgie & þeþ necessarie þerfore/ But I ne mai not sette alle, for

þer is no man þat can telle alle þe noubre of medicyns but onli god/ Neþeles I wole sette medicyns in þis antidotarie þat I haue longe vsid, & lernede hem of wise doctouris & of philosophoris, & alle þe ben aproued.

(*Lanfrank's "Sciencia of Cirurgie"*, after von Fleischhacker (1894), l. 7-15/328)

The composition of a medicament would not have been possible without the ingredients and the description of their preparation and application, hence a recipe, whether preceded by a heading or not, usually included a list of ingredients and instructions on how to combine and apply them, cf.:

(3)

Recipe Antimony of ye goldsmyth dr. j and of Boras plastyr de parysch...

(*Wyse Book of Maystyr Peers of Salerne*, MEMT)

Take ye Rede cole worte, Tansey, hemepe, horsmynt, Rede nettyl, Brer croppyes, and as moche of madyr as of all these.

(*Wyse Book of Maystyr Peers of Salerne*, MEMT)

In many recipes the final statements included comments that aimed to assure the reader of the effectiveness of a cure, e.g. *probatum est* 'the medicine has been tried' or references to authorities (*and that sayd Galyen..., thus sayeth Auyceen...*). Sometimes, the purpose of the recipe was repeated in the end of a recipe.

MIDDLE ENGLISH PHARMACEUTICAL PREPARATIONS: PROBLEMS WITH IDENTIFICATION

Establishing the list of Middle English names of medicinal preparations is not an easy task, cf.: "(...) þer is no man þat can telle alle þe noubre of medicyns but oonli god" (*Lanfrank's "Sciencia of Cirurgie"*, after von Fleischhacker (1894), l. 12-13/328). Despite commonly known terms denoting dosage forms, e.g.: *ointment*, *unguent*, *plaster*, *sirup* or *suppository*, medieval medical texts could boast with less familiar names for medicinal preparations, e.g.: *antamaron*, *diacameron*, *iustinum*, *marciaton*, *mytleta* or *nerbone/noirbone*, etc., many of which are no longer in use and hence difficult to identify or define. The available historical dictionaries, e.g. *OED* and *MED*, are often not helpful as at places they vary in their content and definitions, which makes it difficult to decide on the spot whether a given item could be treated as a representative of a lexical field in question. Therefore, it is necessary to read the medical material thoroughly in order to find text samples that would eliminate any doubts concerning the meaning of the nouns. Also, it is possible that Middle English medical texts contain other nouns than those listed in dictionaries.

At this point the question of delimitation arises: which items should be included in the lexical field of medicines? Medieval medicines were often classified as simple

and compound medicines, where the first group included preparations of one herb only, whereas the latter were composed of several ingredients. The inclusion of herbs would greatly increase the size of the corpus and the discussion and analysis of these items would require a separate study. Therefore, the present study is restricted to the analysis of compound medicines understood here as 'compositions of at least two elements'. This allows for the inclusion of those medicinal substances, which according to medieval classification were often regarded as simples, e.g. oil of roses, water of violet, but at the same time excludes names of herbs and plants.

There are, however, other difficulties concerning the inclusion of particular lexical items. As observed by Norri (1992: 89, 2004: 106) in his analysis of the lexical fields of Middle English names of sicknesses and body parts, most discussions of lexical fields concentrate on single words and exclude compounds and phrases from their analysis. This understanding of a lexical field would restrict the analysis to general names, e.g., *medicine*, *remedy*, *antidote*, *ointment*, *plastre*, *sirup*, or selected names for specifics, e.g., *electuarie*, *poudre*, *apostolicon*, *marciaton*, *triacle*, etc., and exclude such combinations as, *unguentum album*, *unguentum viride*, *unguentum laxative*, *pillule auree*, *pillule stiptice*, *iera pigra* or *sirup of roses*, all of which are frequently found in various medical recipes. Therefore, for the purposes of this study, I have decided to adopt Lipka's (1990) understanding of the concept of the lexical field. Lipka (1990: 152) proposes a distinction between a *word-field*, "exclusively including morphologically simple items", and a *lexical field*, "consisting of simple and complex lexemes". In this way, combinations listed above can also be included in the lexical field of medicines. However, determining which complex lexemes could be included in the lexical field of medicines is more complicated than it seemed at first sight (cf. also Norri 1992).

While reading through the medical material one is not always sure what is meant by a given term. Is it an ointment or a plaster? Is it a simple or compound medicine? Or is it a medicine at all or maybe some instrument for application of medicinal substances or a name of some treatment? It seems that the authors/compiler of these texts often assumed that the reader was familiar with medical practice, and hence, there are many references to various medicinal preparations without further explanations concerning their form or preparation. This is especially true of texts representing learned tradition of medical writing, i.e. surgical or specialised texts. Fortunately, apart from longer treatises on anatomy, on various ailments and ways of curing them, a large collection of medical writings constitute recipes, i.e. instructions on how to cure various illnesses and how to prepare medicaments.

The study of the structure of recipes, in particular their headings, might be helpful in identifying, defining and classifying medical terms. What follows is an examination of the distribution of names for pharmaceutical preparations in the structure of Middle English medical recipes.

NAMES OF PHARMACEUTICAL PREPARATIONS IN MIDDLE ENGLISH MEDICAL RECIPES: DISTRIBUTION AND USE

When trying to establish a complete list of names for pharmaceuticals a thorough examination of the recipe headings was a starting point. The analysis was based on 1487 recipes included in the *MEMT* corpus³. Most of these recipes (77%, i.e. 1144 instances) start with the headings. The remaining 23% are additional instructions for optional preparations which are listed under the same heading, cf. examples under (4), where the heading⁴ is followed by three recipes:

(4)

[For colica passio and ilica passio]⁵

Take salte and hete it in a cherd and put it al hote
in a bagge and plaister it þer as þe ache ys, and ofte tymes
renewyt.

Or elys take otys and parche hem and do hem in a
bagge and a[{} hote ley hem þer as þe ache ys.

Or take louache and sede off caraway and sede of anyse
and vse moch to ete yt, for [{} voydyth wyndis principally.

(John of Burgundy: *Practica Phisicalia*, MEMT)

The headings identified in the analysed material can be divided into 4 types, depending on the information included within this part of the recipe (cf. also the studies by Hunt (1990) and Taavitsainen (2001a)):

- (1) the statement of purpose that specifies the ailment or the medicament for which a given recipe is written: *For harness of þe splene*, *For to delyuer wynde and for þe colyk*, *For streytynesse off þe brest*, *For to make a drynk of antyoche*, *For to make vnguentum album*, *ffor blakke entrete*, etc.;
- (2) the name of the medicament: *Medritatum*, *Nefrocatarrum*, *Opopira*, *Oximel*, *Pillule Aurere*, *Unguentum Populyoun*, *Yerapigra Galieni*;
- (3) the name of the medicament and the statement of its purpose (i.e. Type 2 + Type 1): *Syrop for þe feuer tercyane*, *A gude oyntment for alle feuers*, *Emplaster for þe gout*;
- (4) expressions such as, *Item*, *Another*, *Another for the same*, *For the same*, all of which were probably incorporated in order to avoid repetitions.

³ The analysis is based only on the material included in: (1) Remedies and *materia medica* and (2) Appendix to MEMT. Both collections represent the earliest phase of vernacular medicine, and consist mostly of remedies, i.e. books for consultation (Taavitsainen 2001a), where recipes are given in a sequence. In surgical and specialised collections, recipes are usually part of longer treatises and often lack the typical structure of a recipe, which makes it difficult to discern them from the main body of the text. Hence they were excluded from this study.

⁴ The headings in quoted examples will be given in square brackets.

⁵ *Collica passio* is “a sickness thought to originate in the colon and characterised by pain, constipation and flatulence”, and *illica passio* is “a condition more severe and dangerous than *collica passio*; pain in region of kidneys” (cf. Norri 1992: 313, 342).

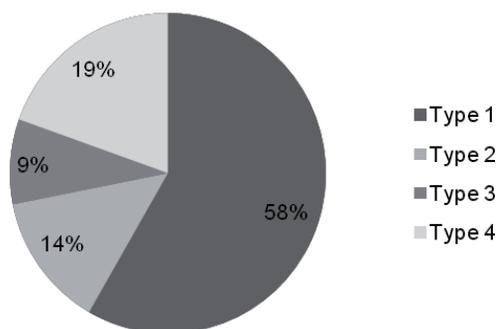


Figure 1. Four types of the headings in Middle English medical recipes.

The first type of the heading (T1 in short) is the most common, constituting 58% of all the headings collected for the present study (cf. Figure 1). Within this group we can find two types of statements of purpose: (i) statements specifying the ailment and (ii) statements specifying the medicament, of which the latter is the least frequent (found in 32 out of 674 headings within this category of headings) and provides only few instances of the names of specifics that were used in Middle English medical writings. This implies that T1 headings might not be very helpful in the identification and classification of the names of medicaments, as we mostly learn about the ailment a given remedy is meant for. However, when we go through the remaining part of the recipe we often come across the information specifying the medicament (or at least the dosage form) that should be applied to cure the ailment indicated in the heading, cf.:

- (5)
 [For the fever lente]: qwha that has the fever agu, that men
 calles lente evell, if the sekeman heved werkes that he may
 noght slepp, tak everferne that waxes on the ake, with the rote,
 and seth hit wele, and tak mynt, of ayther y-lik mekell, and
 stamp tham wele, and mak ane **emplaster**, and lay on the forheyd,
 (*Recipes 1, MEMT*)

As seen in the example above, the reference to the medicament (here: *emplaster*) occurs right after a list of ingredients, i.e. in the so called application/administration part of a recipe. The name, however, is very general, and indicates a dosage form of a medicament (plaster). Thus, the information included in the heading of the recipe, i.e. the condition for which a given recipe is written, is very relevant as it specifies the pharmaceutical (here: a plaster for lent fever).

The next type of the heading (T2), constituting 14% of all the headings, gives names of medical specifics without indicating a dosage form and/or the type of ailment it is aimed for. In addition, these names are often of foreign origin, many of which are no longer used in medicine and not always explained in the available dictionaries. Hence, the difficulty one may encounter is the problem with correct

identification of the type of the pharmaceutical. Fortunately, in many cases such headings are followed by explanations of unfamiliar words and phrases (6a), or even comments on the origin of the name, cf.:

- (6)
- (a) [**CIMINATA ALEXANDRINA**] **pat ys to sey, poudre for saws**. Take comyn, II ounces; canelle, IIII ounces, (...) Confecte yt wyþ water of roses.
(*Antidotarium Nicholai*, MEMT)
- (b) [To make **vnguentum viridum**]. ffor to make a **grene oynment**.
(*Wyse Book of Maystyr Peers of Salerne*, MEMT)
- (c) [**Vnguentum salsum**]. Also for to make **thys oynment vnguentum Salsum**.
(*Wyse Book of Maystyr Peers of Salerne*, MEMT)

The examples above reveal a peculiar tendency in the presentation of terms. Sometimes a compiler uses Latin names of medicines in the headings of each recipe and then repeats the name by giving its equivalent in vernacular (6b) or Latin (6c). Does it mean that some compilers were inconsistent in the use of terms? Pahta (2004: 81) points out that the use of Latin in the headings of the recipes often played “a text-organising function, separating texts or parts of a text”. Thus, there might have been some hierarchy between terms, i.e. Latin terms may have been reserved for much learned readers. Hence, both groups of expressions (Latin and vernacular) must have been part of the lexical field of names for pharmaceuticals.

Many headings with the name of the medicament (whether T2 or T1 headings) are not directly followed by any explanations, cf.:

- (7)
- [**Gratia Dei**]
Medcyn þat is called **Gratia Dei**, þat is made on þis manere: Tak litarge iiij vnces, ceruse iij vnces, roste of a belle of bras ij vnces, of vertgres ij vnces, (...). All this bi-fore be graythede & boylled in a ponde of oyle de olyue till þay wax blake & sythen keped wele. This **emplaster** clenens wondis and sowdis þam to-gedir & dose owte dede flesche & newe flesche gars grewe.
(*Liber de diversis medicinis*, MEMT)

In example (7) the heading contains the name *Gratia Dei*, which is also a name of a herb (cf. example (8) below). Such examples imply that the information included in the heading, especially items that might be regarded as potential specialised terms in a given lexical field (here names of medicinal preparations), should be confronted with the remaining parts of the recipe text, either the *ingredients*, *preparation* or *application* parts. Otherwise, one might draw inaccurate conclusions concerning the examined terminology.

(8)

Gratia dei is an herbe þat men clepe, **gratia dei**. þis herbe ha3t lewys lyk to þe dendelyoun. but þe lewys of þis herbe arn sumdel scharpe and it ha3t a 3elw3 flour and it growyth in drye ground.

(*Agnus Castus*, MEMT)

In many cases, one has to carefully study the *ingredients* part of the recipe in order to identify the type of the medicine. From (9) below we learn about the origin of the name, the conditions this medicament is aimed for and even the way it should be administered (i.e. with hot water in the morning and with wine in the evening). The only information that seems to be lacking is what type of medicament it is. However, the answer is partly provided by the ingredients used in the preparation of the medicament, in particular the fragment: *hony or sucre as moche as sufffy3ep*. In medieval medicine, honey and sugar were key ingredients of syrups and/or electuaries. Hence, the list of medicaments is limited to these two preparations. However, in the fragment below we have the following statement: *Be yt 3ef (...) on þe maner of chasteyne*, where *chasteyne* ‘the nut of the chestnut tree’ is one of the measure terms used in medical recipes, identifying the size of the dosage form (cf. *MED*). Thus, this fragment implies that the medicament *benedicta* is an electuary ‘a semi-solid preparation’ and not a syrup.

(9)

[**BENEDICTA**] Yt ys clepud for alle
men þat ys reseuyed yt ys yblessed.
3ef yt be 3ef to hym þat haueþ enfyrmyte
a3eyn þe goute, artetyke, podagre,
3ef yt be of coldness; yt purget
þe reynes and þe bladder. Take turbit,
sucre, of eche X dragmes; (...),
hony or sucre as moche as sufffy3ep.
Be yt 3ef erlyche wyþ hote water on
þe maner of chasteyne, and an eue wyþ weyn.

(*Antidotarium Nicholai*, MEMT)

The headings identified as Type 3 (9% of all the headings) seem most helpful in discerning and collecting names of pharmaceuticals. They identify a medicament and the condition a given preparation is aimed for. However, as seen in (10), in these headings the nouns referring to the medicament are general terms for a dosage form and not a specific.

(10)

[**Syrop** for þe feuer terycane & duple terycane þat men calles omni rapacete.]
Tak a party spik & a party jubarbe & schafe þam in
ayselle (...). Gyf hym a sponfull or ij þer-of
with hate water at morn.

(*Liber de diversis medicinis*, MEMT)

[An **emplastre** for alle woundes to be made hele.]

Take malewen and seþe hem in water wiþ olde swynesgrece

and barly mele, and meng hem to gyder, and lege vpon
þe wounde, and alle sone it shalle be hole.

(*Medical charms*, MEMT)

[A **drynk** for bledynge inward.]

Tak ache, auance, gronswalle & spourge, of ilkan a
handfull, & sethe þam in a galon of water to appell.

(...). & gyf it hym at drynke, at euen warme & at morne calde.

(*Liber de diversis medicinis*, MEMT)

The examples in (10) suggest that Middle English medical lexicon might have lacked distinct names for medicinal preparations, which is partly evidenced by Type 4 headings (19% of all headings), usually consisting of the following general statements, e.g.: *Another medicine for the same*, *Another* or *For the same*. This assumption, however, should be taken with caution. The use and/or no use of names for specifics might have been conditioned by a text type. Thus, in remedy texts, whose main role was to serve as quick reference book for both specialist or lay readers, the compiler might have focused on the name of the ailment rather than pharmaceutical. For instance, the term *alcalcolon* ‘a compound medicine against tertian fever’ might have been unfamiliar for a reader and/or practitioner, not acquainted with medical terminology. Hence, starting a recipe with such statements as: *For/Against tertian fever* or *Medicine against fever*, seemed a better solution.

CONCLUSIONS

This study is another contribution to the studies of medieval lexicon which confirm that Middle English was not deficient in specialised terminology, at least in the domain of medicine.

The preliminary examination of the terms denoting medicinal substances has revealed that identifying and defining medieval specialised terms may pose certain difficulties. Many terms are not listed in the dictionaries or their definitions do not always overlap with the sense expressed in the context. Thus, one has to read the medical writings thoroughly in order to complete the list of medieval pharmaceutical preparations.

The knowledge of the structure of a recipe and its main components might turn helpful in discerning the terms in question. A large number of names of medicines was given in the headings of recipes. Some of these introductory parts of a recipe included also explanations of seemingly unfamiliar words or phrases, and commented on the origin of the name. However, as observed in the discussion of examples 7, 8 and 9, the headings might not always be a reliable source of information, e.g. do not explain the term or include terms whose sense is unclear. Therefore, the remaining parts of the recipe (especially *ingredients* and *preparation* parts) should be carefully examined.

In some writings mostly Latin terms are found, whereas in other compilations both Latin and vernacular expressions are recorded. Pahta (2004: 81) explains that foreign element was not used to fill in the gaps in the English lexicon. On the contrary, the use of terms of different origin served different purposes. For instance, vernacular expressions usually had explanatory function whereas switches to Latin “served as indexicals of group membership in the discourse community” (Pahta 2004: 81). The compilers often turned to foreign element for reasons of style or prestige. This suggests that both Latin and vernacular expressions were recognised as common terminological units.

REFERENCES

- CARROLL, R. (1999): “The Middle English recipe as a text type”, *Neuphilologische Mitteilungen*, 100, 27-42.
- CARROLL, R. (2004): “Middle English recipes: vernacularisation of a text-type”, in: TAAVITSAINEN, I./ PAHTA, P. (eds.): *Medical and scientific writing in late medieval English*, Cambridge, 174-196.
- EAMON, W. (ed.) (1982): *Studies on medieval Fachliteratur*, Brussels.
- VON FLEISCHHACKER, R. (ed.) (1894): *Lanfrank's “Sciencie of Chirurgie”*. (EETS, OS 102), London.
- GÖRLACH, M. (1992): “Text types and language history: the cookery recipe”, in: RISSANEN, M. et al. (eds.): *History of Englishes. New methods and interpretations in historical linguistics*, Berlin, 736-761.
- GÖRLACH, M. (2004): *Text types and the history of English*, Berlin.
- HUNT, T. (1990): *Popular medicine in thirteenth-century England: introduction and texts*, Cambridge.
- JONES, C. (1998): “Formula and formulation: “Efficacy phrases” in medieval English medical manuscripts”, *Neuphilologische Mitteilungen*, 99, 199-209.
- LIPKA, L. (1990): *An outline of English lexicology*, Tübingen.
- MÄKINEN, M. (2006): *Between Herbals et alia: Intertextuality in medieval English herbals*, University of Helsinki (Ph.D. thesis available online at <http://ethesis.helsinki.fi/julkaisut/hum/engla/vk/makinen>).
- MED: *Middle English dictionary online*. Available at: <http://quod.lib.umich.edu/m/med/> (date of access: July 2015).
- MEMT: TAAVITSAINEN, I./ PAHTA, P./ MÄKINEN, M. (eds.) (2005): *Middle English medical texts*. (CD-ROM with MEMT Presenter software by Raymond Hickey), Amsterdam/Philadelphia.
- NORRI, J. (1992): *Names of Sicknesses in English, 1400-1550. An Exploration of the Lexical Field*, (Annales Academiae Scientiarum Fennicae, Dissertationes Humanarum Litterarum 63.), Helsinki.
- NORRI, J. (2004): “Entrances and exits in English medical vocabulary, 1400-1550”, in: TAAVITSAINEN, I./ PAHTA, P. (eds.): *Medical and scientific writing in late medieval English*, Cambridge, 100-143.
- OED: *Oxford English Dictionary Online*. Available at: www.oed.com (date of access: July 2015).
- PAHTA, P. (2004): “Code-switching in medieval medical writing”, in: TAAVITSAINEN, I., PAHTA, P. (eds.): *Medical and scientific writing in late medieval English*, Cambridge, 73-99.
- RISSANEN, M. et al. (eds.): *History of Englishes. New methods and interpretations in historical linguistics*, Berlin.
- STANNARD, J. (1982): “Rezeptliteratur as Fachliteratur”, in: EAMON, W. (ed.): *Studies on medieval Fachliteratur*, Brussels, 59-73.
- TAAVITSAINEN, I. (2001a): “Middle English recipes. Genre characteristics, text type features and underlying traditions of writing”, *Journal of Historical Pragmatics*, 2/1, 85-113.
- TAAVITSAINEN, I. (2001b): “Changing conventions of writing: The dynamics of genres, text types, and text traditions”, *European Journal of English Studies*, 5/2, 139-150.
- TAAVITSAINEN, I./ PAHTA, P. (eds.) (2004): *Medical and scientific writing in late medieval English*, Cambridge.