PALATABLE PALATALIZATION

Warsaw Studies in English Historical Linguistics
Edited by Jerzy Wełna
Vol. 6

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Agnieszka Kocel

PALATABLE PALATALIZATION
A Story of *Each*, *Much*, *Such* and *Which* in Middle English Dialects

Æ Academic Publishing
2016/2017

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Main Editor: Jerzy Wełna
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Typesetting: Ireneusz Świątkiewicz

Æ Academic Publishing
501 W. Broadway Ste A186
San Diego, CA 92101
USA

www.aeAcademicPublishing.com

The monograph published under the auspices of the Institute of English Studies, University of Warsaw, Poland.

1st edition: published by Æ Academic Publishing, 2016/2017

ISBN:	LCCN:	ISSN:
978-1-68346-116-6 (pbk)	2016961737	2373-2652 (print)
978-1-68346-118-0 (ePub)		2373-2733 (online)
978-1-68346-117-3 (mobi)		

Printed on acid-free paper.

10 9 8 7 6 5 4 3 2 1

To Mom and Dad,
who have always told me
that I can whenever I feel I can't,
that I have to whenever I feel I don't,
that I will whenever I feel I won't,
without whom *this* would have never been possible.

Thank you for being there for me. Love you loads.

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Preface

The present study examines the nature and scope of palatalization in the Middle English period with the purpose of determining the extent to which it operated in various dialects of that time. The main focus is on the palatalization of [k] to [ʧ], i.e. the process underlying the assumed theory of the existence of a [k]-dialect and, consequently, dialectal boundaries. Considering the expected inconsistency with respect to palatalization, the process is examined in light of the theory of lexical diffusion. The analysis concentrates on four high-frequency words, i.e. *EACH*, *MUCH*, *SUCH*, *WHICH*, whose forms are investigated in all texts from the Innsbruck Prose Corpus.

The study consists of eight chapters. Chapter One, which contains a definition of the terms "palatalization" and "lexical diffusion," also offers an overview of the Old English change of [k] to [ʧ], with a presentation of a few theories related to that process. This chapter describes the main aims of the study, the data and material used in the analysis, and the methodology of the research. Chapters Two through Six focus on the examination of the data with respect to particular dialects, while Chapter Seven offers the results of the investigation of non-localizable sources. Chapter Eight contains a summary of findings and provides general conclusions.

The completion of this study would not have been possible without much support and encouragement on the part of Professor Jerzy Wełna (University of Warsaw) who offered his help and valuable comments during my working on the study. My words of gratitude also go to my two reviewers, Professor Jacek Fisiak and Professor Piotr Ruszkiewicz, for their insightful remarks and recommendations, as well as to my colleagues and friends from the linguistic seminar at the University of Warsaw, whose suggestions also contributed to the final shape of the dissertation.

Last but not least, I want to thank all my Family, especially my Parents and Grandparents, and all my close friends who were all the time interested in the progress of the dissertation, encouraging me in difficult moments.

Agnieszka Kocel
Bielsko-Biała, April 2015

Abbreviations

(a) Language/ dialect abbreviations

Angl.	Anglian
EM	East Midland
EME	Early Middle English
K	Kentish
LOE	Late Old English
ME	Middle English
ModE	Modern English
N	North
NEM	North East Midland(s)
Nhb.	Northumbrian
NM	North Midland(s)
NWM	North West Midland(s)
OE	Old English
OIr.	Old Irish
ON	Old Norse
S	South
SW	South-Western
SWM	South-West Midland(s)
WM	West Midland(s)

(b) Reference abbreviations

CODEP	The Concise Oxford Dictionary of English Place-names
LAEME	A Linguistic Atlas of Early Medieval English
LALME	A Linguistic Atlas of Late Mediaeval English
MED	Middle English Dictionary

(c) Encoding techniques and symbols used by the authors of the Innsbruck Prose Corpus with respect to tokens:

(_)	the authors' intervention of linking two words separated at the end of the line
_	the authors' intervention of marking that a word has been split and syllabified at the end of the line
(x)	interventions of the editor(s)/author(s) of the Innsbruck Prose Corpus
[x]	interventions of the editor(s)
{x}	interventions of the author(s) of the Innsbruck Prose Corpus
=x=	a raised letter x
x′	x with an accent
x^	x with an accent
*	the authors' intervention of marking the place within the word where that word has been split by the change of folio or page

All symbols are preserved in the analysis as different tokens, reconstructed by the authors or editor(s), to show their original forms.

(d) Grammar codifiers

acc.	accusative
adj.	adjective
adv.	adverb
conj.	conjunction
dat.	dative
fem.	feminine
gen.	genitive
infl.	inflected
masc.	masculine
n.	noun
pl.	plural
prep.	preposition
pron.	pronoun

sg.	singular
s.v.	sub verbo ‘under the word’
suf.	suffix
v.	verb

Chapter One

Introduction

1.1 Introductory remarks

Palatalization is one of the most significant phonological processes which, although initiated in Old English, had far-reaching repercussions on the phonology of Middle English, reflected in various dialectal patterns. For years, it has provoked many questions concerning its application, extent and even a proper definition, thus giving rise to various hypotheses and, consequently, divergent conclusions and views. The previous analyses of a particular instance of the change, i.e. palatalization [k → ʧ], often yielded confusing and conflicting results as regards the nature of the process and the scope of its operation, which makes it necessary to verify some of the assumptions and its effects on the dialects of Middle English.

1.2 Terminology

The notion of "palatalization" has often posed many problems as it may refer to a variety of concepts. It is very frequently confused with other assimilatory processes, sometimes perceived as an assibilation process involving a change of a (coronal) stop into a sibilant affricate or fricative before high vocoids. Depending on the output, this may result in "spirantization," i.e. change into a sibilant fricative, like [s]; "affrication," i.e. change into a sibilant affricate, like [ts]; and "palatalization," i.e. change into an affricate, like [ʧ] (Hall — Hamann 2003: 112).

The misleading overuse of the term "palatalization" to describe all the processes involving "the interaction of consonants with front vowels, high vowels, and the palatal glide [j]" (Bateman 2007: 1) is also emphasized in other studies which present "palatalization" as a concept referring to such processes as "coronalization" (Hume 1994), or "fronting" and simultaneous "spirantization" (Bhat 1978), with both coronalization and fronting/ spirantization based on the change of a velar stop into a coronal affricate [k → ʧ], "assibilation," i.e. change of a dental stop into a sibilant affricate before a front vowel [t → ts/ _i] (Kim 2001, Telfer 2006); "raising," i.e. change of an apical consonant into an affricate [t → ʧ] (Bhat 1978); "spirantization," i.e. a consonant change in a palatalizing environment [r → s] (Bhat 1978); and, finally, "palatalization," i.e. acquiring secondary palatal articulation [t → tj] (Hume 1994). Bhat often treats spirantization as a type of palatalization, which for many reasons cannot be perceived as such.

Such understanding of palatalization has also been promoted in other studies, where both "coronalization" and "palatalization" are perceived as "assimilatory processes whereby a consonant takes on the place of the articulation of a neighbouring front vowel" (Rose 1993: 155–156). In light of the above, "coronalization" stands for the change to a palato-alveolar, whereas "palatalization" for the change to a secondary *i*-like articulation. Such a definition of palatalization is shared by Laver, who perceives palatalization as "the auditory effect ... to add 'coloring' to the perceptual quality of the primary articulation" (Laver 2001: 170).

The above differentiation between the ideas of "coronalization" and "palatalization" in Rose's understanding is also maintained by Kochetov, who, however, sees "palatalization" as a general term for both concepts, i.e. "a phonological process by which consonants acquire secondary palatal articulation or shift their primary place towards or close to the palatal region" (Kochetov 2011: 1666), which is usually triggered by an adjacent front vowel and/or a palatal glide. This definition of "palatalization" encompasses many types of alternations, such as "coronal palatalization," i.e. a change from alveolars [t d s z] to palato-alveolars [ʧ ʤ ʃ ʒ]; "velar softening," constituting

a change from velar stops [k g] to the coronal fricative [s] or the affricate [dʒ]; and "spirantization," involving a change from the alveolar stop [t] to the alveolar fricative [s]. These, in turn, correspond to Bhat's (1978) "coronal raising," "velar fronting" and "spirantization," respectively. Kochetov (Kochetov 2011) also mentions several other types of palatalization involving e.g. labials like [p], coronals like [t], and dorsals like [k], as well as secondary palatal articulation, in conjunction with allophonic palatalization; see Table 1:

Table 1. The targets and outputs of palatalization (alternations only) and corresponding processes with their relative frequency (Kochetov 2011: 1670)

Type	**Palatalization**		**Labial**	**Coronal**	**Dorsal**
I	Secondary		p → p^{j} common	t → t^{j} common	k → k^{j} common
II	To a posterior coronal	to a non-sibilant	p → c rare	t → c common	k → c common
		to a sibilant	p → ʧ rare	t → ʧ common	k → ʧ common
III	To an anterior coronal	to a non-sibilant	p → t absent	n/a	k → t absent
		to a sibilant	p → ts rare	t → ts common	k → ts rare

All the above divisions are based on the type of triggers, targets and outputs, and generally relate to either "secondary" or "place-changing palatalization" (Kochetov 2011: 1669–1671). Following this interpretation, the place-changing palatalization of non-coronals, e.g. velars, corresponds to "coronalization" (Hume 1994, Flemming 2002).

A very clear analysis of palatalization has been provided by Bateman, who differentiated between "full palatalization" and "secondary palatalization." In the former "the consonant shifts its primary place and often its manner of articulation while moving toward the palatal region of the vocal tract," while in the latter "it is co-articulated with a following palatal offglide" (Bateman

2007: 2–3). The first concept will, thus, correspond to "fronting" and "spirantization" promoted by Bhat (1978) and "coronalization" advocated by Hume (1994) with respect to velars, while the other will cover the idea of "palatalization" according to Hume (1994) and "tongue raising" according to Bhat (1978). For the sake of clarity and uniformity, the change [k → ʧ] analysed in this dissertation will be referred to as "palatalization," meaning, in fact, "coronalization" in the understanding of Hume and Rose, as well as "full palatalization," as understood by Bateman.

The legitimacy of such a choice is confirmed by Lahiri — Evers (1991: 80), who define three most common palatalization processes, i.e. (a) fronting of velars before front vowels, particularly [i] or [j], where "the prototypical shift involves velar consonants becoming palato-alveolars, with a concomitant change of stops to affricates," (b) changing the place of articulation of the coronal consonants, and (c) adding secondary palatal articulation. In this sense, the change [k → ʧ] is reflected in the process described in (a) above.

Another important differentiation concerns the application of the terms "palatalization," "affrication," and "assibilation," often confused or defined as almost the same processes, and thus used interchangeably with respect to the abovementioned change, which is reflected in the following definitions:

> Affrication: sound change by which affricates are created from original stops as e.g. OE [k] > Mod.Eng. [ʧ]. (Bussmann 1996: 10)
>
> Assibilation: formation of an epenthetic sibilant through palatalization between a dorsal stop and a following front vowel; change of [g] and [k] to sibilants before palatal sounds. (Bussman 1996: 40)
>
> Palatalization: change, conditioned through assimilation, in the place of articulation of consonants and vowels towards the hard palate. In consonants it usually involves dentals or velars with a neighboring front vowel (mostly i,y). (Bussmann 1996: 345)

The confusion stems from the fact that "palatalization" is considered as "the effect that front vowels and the palatal glide [j] typically

have on velar, alveolar, and dental stops, making their place of articulation more palatal" (O'Grady — Dobrovolsky — Katamba 1996: 319). In this sense, it is frequently the first stage in the process of affrication, involving a change of palatalized stops to affricates. This is confirmed by Liberman (2007: 23), who perceived palatalization of [k'] as "the first stage" of affrication, stating that:

> Palatalization did not endure in Germanic, except in peripheral dialects. In English, the phonemes /k'/ and /g'/ were unable to support the correlation and changed: /k'/ turned into the affricate /ʧ/…

While "palatalization" and "affrication" overlap at some point, the similarity between "palatalization" and "assibilation" may stem only from the same type of output, i.e. an affricate, and trigger, e.g., the palatal glide [j], since the target group in the latter involves only coronal stops (cf. Hogg 1992a: 265). Following the above differentiation, "palatalization" should be treated as the initial stage of affrication, and for the purpose of this study this term shall be used with reference to the whole process of change, including the final stages of affrication, differentiating between "palatalized" and "non-palatalized" forms, respectively. The use of such terminology is also advocated by Hogg (1992b: 106), who states that "the process by which the velar consonant is fronted is called palatalization." That process affected all the Germanic (including Old English) velar consonants.

1.2.1 Palatalization as a phonological process

The process of palatalization to be discussed in the present study embraces the place-changing full palatalization [k → ʧ] which requires a change in the primary place of articulation and thus a more intense effect of the trigger on the target. The target of [k], a voiceless velar plosive, is produced by compressing lung air behind the closure formed between the back of the tongue and the soft palate; with the soft palate raised, the nasal resonator shut off and the vocal cords kept wide apart. The position of the lips is determined by the lip

position of the adjacent sounds, particularly vowels or semi-vowels. The sound is made upon the abrupt release of the air following the separation of the linguo-velar closure (Cruttenden 2001: 165–167).

The production of the output [ʧ], a voiceless palato-alveolar affricate, involves the stages of a stop and a fricative. It is produced upon a slow release of the closure formed between the tongue (its tip, blade and rims), the upper alveolar ridge and side teeth, with the soft palate raised, the nasal resonator shut-off, the tongue front raised towards the hard palate and the vocal cords kept wide apart. The air is released over the tongue surface with friction between the tongue (its blade/front area) and the alveolar/front palatal region of the mouth. Again, the position of the lips is determined by the lip position of the adjacent sounds, particularly vowels (Cruttenden 2001: 174–176). Due to its complex nature, the palato-alveolar affricate [ʧ] may be perceived either as a single "unit phoneme," /č/, or as "a sequence of plosive + fricative," i.e. a cluster of two phonemes, /ʧ/, which are "phonetically composite but phonemically single units" (Hedevind 1967: 72).

The process of palatalization of [k] to [ʧ] involves the articulatory gesture of [k], with its velar closure between the tongue and the velar section of the vocal tract, followed by the articulatory gesture of a vowel, e.g. [i] with its narrowing between the tongue and the palatal section of the vocal tract, which causes raising of the tongue towards the palatal region and the consequent production of [ʧ]. Such a process is perceived as "a natural outcome arising out of the interaction of the articulatory gestures of the consonant and the vowel" (Bateman 2007: 7); see Figure 1.

This sort of palatalization is quite common as, according to Kochetov, it is attested in four language families (Kochetov 2011: 1670). Since it involves a change into a palatalized segment being more marked and thus "stronger," one may perceive palatalization as "strengthening." At the same time, since palatalization "increases the vocalic nature of a consonant," it may also be treated as "weakening" (Lavoie 2001: 46, 169–170). Depending on its application, palatalization may be phonologically or morphophonologically conditioned (Bateman 2007: 10–12) and may be perceived as re-

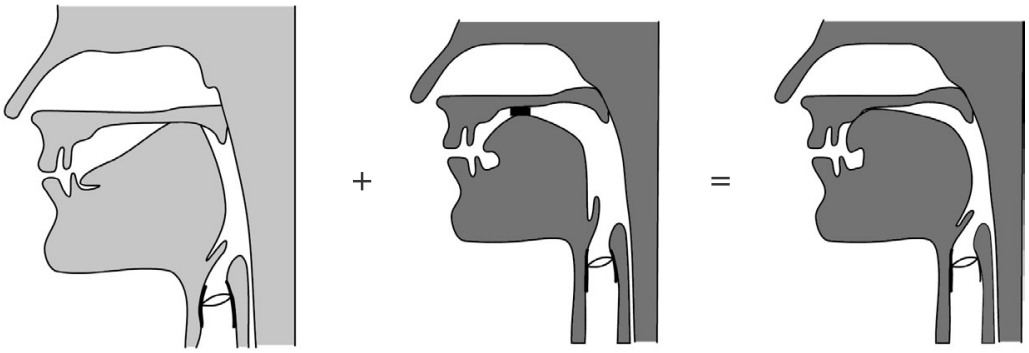

Figure 1. Articulator positions for velar palatalization (Cipollone — Keiser — Vasishth 1998 and the Language Samples Project, Bateman 2007: 8)

gressive or progressive (Kochetov 2011: 1673). The discussion of the process in the present study will, however, focus only on the phonologically-conditioned, regressive/progressive, place-changing full patatalization [k > ʧ].

1.2.2 Palatalization in Middle English

Palatalization in English began in the continental period, when the Germanic voiceless stop [k] changed into the affricate [kç], developing further into the dental affricate [tç] and, during Late Old English, into the palato-alveolar affricate [ʧ] (Jordan 1974: 163). The same process also took place with respect to geminate consonants, such as [kk] (Hogg 1992a: 252).

The change occurred in the neighbourhood of front vowels, sometimes following a liquid or a nasal, in the following contexts:

(a) initially, when [k] preceded a front vowel (OE *čiriče* 'church'),
(b) medially, when [k] was between front vowels (OE *mičel* 'much'),
(c) finally, when [k] followed an original/primary front vowel (OE *ælč* 'each,' *hwelč* 'which,' *swylč* 'such'; Wełna 1978: 53).