The Norwegian Voiceless Palatal Fricative: A Demographical Study

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Back in 2014, I visited Norway for the first time. I didn't know the language proficiently back then, but my basic Norwegian was enough for me to visit different cities and make me suspicious about a number of linguistic changes striking me as personal pronunciation utterances rather than common, widespread dialectal differences.

The purpose of this article is to shed some light on those changes, which I later ascribed to two phonemes (voiceless palatal fricative /ç/ and voiceless retroflex fricative / ξ /), occasionally overlapping in the way the youngest strata of the Norwegian population talk, starting from the beginning of the Nineties onwards.

The coexistence of these two phonemes raises questions, that is to say, whether the speakers differentiate the two realizations and whether these differences cause misinterpretations among Norwegians.

The study of this phenomenon revolved around eight candidates from the four main dialectal macro-regions (which Venås & Skjekkeland, 2009, isolated as *nordnorsk, trøndnorsk, vestnorsk* and øst*norsk*), who were interviewed and asked to read aloud a list of words containing the voiceless palatal fricative sound, in order to highlight any peculiarity in their pronunciation. The candidates were a male and a female aged 15-30 from each area, the choice of whom was motivated by the need of preserving the Norwegian dialectal variety and to identify and isolate specific urban areas where this change is more recurring.

The recordings have been analysed from both a sociolinguistic (i.e. the age, the degree of education and the birthplace of the candidates) and from a phonological perspective.

This analysis is, thus, due to provide information on a linguistic change surprisingly still in motion, as well as one of the few transformations Norwegian linguists are fully aware of: however, when scholars start observing linguistic phenomena and many studies start to bloom, they often cover the most obvious aspects and reasons behind the changes, while leaving the backbone made of the actual speakers in the shadow.

In spite of generally low isolation rates, factors such as age, sex, geographical position, education and vowel alternance appeared to have some impact on the way the candidates read the list.

Before delving deeper, it is necessary to make a premise to rule out a factor that otherwise could be seen as crucial: Norwegian has two written norms, *bokmål* and *nynorsk*. Their sets of rules are taught in schools and each Norwegian citizen decides which one to adopt (often based on their geographical position). Nonetheless, none of those conventions is officially used as a spoken language as Norwegians employ their own native dialect, both in public and private situations, as it is a strong sign of identity not likely to be given up. Therefore, the diamesic variation in the written forms does not properly mirror the situation of living, everyday language.

In the light of the lack of a standard variety of Norwegian and out of respect for the different dialectal identities, it has been rather knotty to plan a line of work which would incorporate all the necessary varieties. The methodology that has been chosen is, however, fairly simple. Eight native speakers have been interviewed, divided in couples (a male and a female), each couple coming from four different dialectal districts – that is to say: Oslo for *ostnorsk*, Kristiansand and Ålesund for *vestnorsk*, Trondheim for *trondnorsk* and the Vesterålen archipelago for *nordnorsk*.

At the moment of their recording, the candidates were all between 15 and 30 years of age. This gap has been chosen for two reasons: 15 years old is good enough to consider that the sample has been living his/her school life for at least three years among males and females of the same age, thus developing peculiar post-adolescence language patterns. At the age of 30, on the other hand, most of the candidates would have finished their most advanced university studies (30 years of age is also the last deadline to obtain a student loan), therefore the language would lean towards the adjustment to a formal model of adult speech and the speakers would tend to pay more attention to the way they speak, limiting the amount of youthful slang in their everyday language. Thus, we can obtain the full spectrum of existing changes in a given amount of time.

The candidates were asked to read aloud a list of words containing the /c/sound, in order to verify whether they pronounced those terms in the proper, formal way – or if they adopted the /s/sound as part of their everyday language, thus planting the seeds for a permanent change. A string of bisyllabic words has been favoured and, to preserve the internal apophony (i.e. alternance of vowels - a, e, i, o, u, y, a, θ , d), the terms were carefully picked so that the -kj- sound could be found both at the beginning of the word and in intervocalic position. It has not been possible to find all the combinations needed because some clusters (kju, kjå, akj, ekj, okj, ykj, akj, åkj) simply do not exist.

However, in addition to this string, a secondary list has been collected including all the minimal pairs that have been found to provide a direct comparison between two words that, according to the young speakers' pronunciation, could potentially result as homophones.

The candidates have also been asked to pronounce the words both as single elements of a list and in the context of a static frame sentence, developed with the help of Professor Antonio Romano (Università degli Studi di Torino) in order to observe any variance of the words when placed in two fixed positions: at the end of a phrase and in the middle of it. This frame sentence is: *«Jeg sa [ord]. Jeg sa [ord] to ganger»* («I said [word]. I said [word] two times»).

The list of the words that have been used is as follows:

BEGINNING OF THE WORD KJA: kjake (*jaw*), kjapp (*quickly*) KJE: kjenne (*to know sb.*), kjekk (*handsome*) KI: kirke (*church*), kiste (*chest*) KJO: kjole (*dress*) KJU: -KY: kysse (*to kiss*), kylling (*chicken*) KJÆ: kjære (*dear*), kjæle (*to pet*) KJØ: kjøkken (*kitchen*), kjølig (*chilly*) KJÅ: -

INTERVOCALIC POSITION AKJ: -EKJ: -

IKJ: ikkje (not) [dialectal] OKJ: -

UKJ: ukjent (unknown), ukjær (not dear, not welcome), ukyndig (incompetent), ukysk (indecent) [those words are nothing but negative compounds, using the u- prefix to negate the attached adjective]

YKJ: -ÆKJ: -ØKJ: søkje (to seek) [dialectal] ÅKJ: -

MINIMAL PAIRS

A: kjapp/sjapp (quickly/parlour) E: kjenne/skjenne (to know sb./to scold), kjekk/sjekk (handsome/check) Y: kylling/skylling (chicken/rinsing) Æ: kjære/skjære (dear/to cut)

Disclaimer: every data henceforth reported only refers to the moment the recordings were taken. The names of the volunteers have been omitted out of respect for their privacy and replaced by «candidate», «speaker» or «sample».

A thorough scrutiny would not have been possible without establishing the categories used to investigate the single superstructural aspects of the samples and their speakers. Those categories are: geographical position, age and degree of education. With the exception of one unreliable sample (the male speaker from the *trondnorsk* area), the results have highlighted a vast array of variance. The following list will take into account all the aforementioned categories to give a comprehensive overview of the distribution of the /c/ and /g/ overlapping phenomenon.

- Geographical positioning: the first striking fact is that, according to the samples, there is no trace of variance in the city of Oslo (from which the two ostnorsk speakers come from). This is by all means not surprising; the Norwegian language taught to foreigners avoids dialectalisms and is nothing but a close approximation of the Oslo dialect. This language is called bokmålsnær, and the name itself reflects the lack of dialectal inflections in favour of a standardised, formally correct spoken bokmål approximant. Those who live in Oslo (namely, the female sample from the nordnorsk area) might have been influenced by the capital city's language as well, as no variance could be found in them either. The situation outside Oslo is more difficult to analyse, though.

In the *vestnorsk* macro-region, only the female speaker slips into a [§] pronunciation – and only in one single case – whereas both the male sample and she employ the [ʃ] allophone as a secondary outcome of either /ç/ or /§/ more extensively (it has not been possible to determine which one, even though the male speaker adopts a more regular pattern, i.e. two cases of variance each when conjoined with /ø/ and /y/). In spite of this, there is no correspondence between the two of them, since this outcome happens for different

words employing different consonantvowel clusters.

Moving to nordnorsk, the male sample shows signs of overlapping in some cases, sometimes the same circumstances his vestnorsk counterpart, that is to say the negative *u*-prefixed words. Apart from this, it was not possible to pinpoint a pattern. In the trondnorsk region, the female speaker is the most interesting of all, because she is the only sample to show a recurring, systematic use of /s/ instead of /c/. The reason behind this might be her dialectal background: unfortunately, this hypothesis could not not be proved because the only other candidate from Trondheim is to be considered unreliable. In fact, sometimes the male speaker stutters when asked to pronounce a single word: this is clearly not a congenital flaw, rather the effect of pressure. All candidates were asked to read the list as if in a familiar environment, but since the recordings were taken from the subjects themselves and then sent via e-mail, there has been little to zero control over the influence of stress on these recordings. Hence it can be guessed that he got hold of himself and his familiar pronunciation.

- Age: the ideal age gap would have been between 15 and 30. Despite this initial idea, the only candidates that volunteered for this study were aged 18-30. It is to be assumed that, even though the youngest sample is 18 years old, the peculiar postadolescence speech patterns of the three missing years (15-18) are to be considered lost. With that said, it has not been possible to trace a pattern in age when analysing the samples. The exchange simply happens in a completely unpredictable way. This study could not rule out a correspondence between the phenomenon and the age of the subjects, but rather point out that it might be found and better isolated in different age segments.

- Degree of education: candidates have, by age or by choice, different levels of education that cannot be analysed in a univocal way. To better understand this last category, the best course of action would be to divide it into three segments: undergraduate students, Bachelor's owners and Master's owners. Starting from the top to the bottom, the only candidate in possession of a Master's degree is the female speaker from Oslo: she does systematically distinguish the /ç/ and /s/. The male candidate from the vestnorsk area falls in between: he is the owner of two Bachelor's degrees and knew what this study was about. However, he frequently employs [ʃ] as the allophonic outcome of /c/. The female samples from the nordnorsk and the trondnorsk macro-regions are the only ones in possession of a single Bachelor's degree, although they use completely different sounds: whereas the former systematically employs the voiceless palatal fricative /c/, the latter uses the voiceless retroflex fricative /s/ as the one and only outcome of her pronunciation.

The male candidate from Trondheim belongs to the same category as the previous two, but he cannot be considered reliable for the aforementioned stress reasons.

The male candidate from Oslo is halfway between an undergraduate student and a Bachelor's owner, since he is still attending his academic courses, and shows no sign of overlapping. The only undergraduate students are the female speaker from the *vestnorsk* area and the male sample from the *nordnorsk* isles who, despite the age gap, both show a fair degree of variance, even though in different contexts.

In general, the picture that emerged from the samples and the analysis of the subjects was very uneven. It is especially noteworthy that differences in pronunciation related to age, geographical positioning and degree of education were not strikingly significant, because no univocal pattern could be found.

Besides the two reference phonemes $/\varsigma/$ and $/\varsigma/$, it has been interesting to witness the substitution of either of them with a third [ʃ] allophonic sound – even though under very unclear circumstances.

Although the purpose of this research was to isolate a demographical pattern within this linguistic change, it can be hypothesised that the enormous base variance among different Norwegian dialects might be an element of disruption.

It should also be noted that, since this phenomenon is fairly new, it might be more common among the next generations, upheld by the children of those who first showed signs of overlapping after their linguistic formation years, as an adolescence/post-adolescence variation. As a confirmation, Theil (2006), also states that: «mainly, it takes time to learn all the sounds of a language. Within different Norwegian varieties we can find between 15 and 30 different consonant phonemes, and a quarter of these phonemes have that many variants - allophones - so that children are bound to learn between 100 and 200 different consonant variants before acquiring an «adult» pronunciation» (my translation).

This article is the summary of a work of research, and research itself does not fail if the results are not the ones expected. Even though it was not possible to get a clear picture of the correlation between phonology and demographics in Norway, it was still possible to question whether this correlation actually exists.

In fact, there are a few guidelines to be listed for the sake of the future of this research. The results underline a slightly higher concentration of variance in the area between Ålesund and the Vesterålen archipelago.

Furthermore, in the light of the novelty of this phenomenon, the age gap must be narrowed between 6 and 12 years old. These seem reasonable boundaries, since they cover the first years of elementary school, when the Norwegian language is taught from the basics. There might be the chance to isolate some subjects that push back against the teaching of the formal /ç/ and, from an early age, adopt / ξ / instead.

Fieldwork would also be of paramount importance. Instead of relying on external samples, it is suggested to gather at least 20 samples (10 females and 10 males) to guarantee a higher degree of variance amongst individuals.

Also, the Venås-Skjekkeland division into four dialectal macro-regions is a simplification in good faith of what the linguistic realities of Norway actually are.

It would be better to visit different big and medium-sized urban areas and collect samples not based on the macroregional system, but rather on different townships.

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