Palatalized/affricated plosives in Paris French.
A sociophonetic production-perception study of a dynamic working-class and/or language contact phenomenon among middle-class speakers

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Abstract: A long tradition of attracting work forces to Paris from outside countries has produced a high proportion of inhabitants using other languages than French (Gadet 2008). Geographically, most of the immigrants and their descendants are housed in cheap residential areas in the northern and eastern parts of the capital and its surrounding suburbs – zones that were historically the home of working-class Parisians. Recently, sociolinguists have observed that a specific way of speaking French in these areas has emerged (Fagyal 2010; Gadet 2017), and might be spreading. There is agreement that part of the lexical phenomena in this "multiethnolectal French" is due to language contact between French and the immigrant languages, but as for phonetic features, diverging claims exist. Are the palatalized and affricated plosives (*qui* [kji]), *voiture* [vwatʃyr]), the strongly articulated /r/'s, and the frequent drops of phonetic material an effect of contact with Arabic or are they features of working-class Parisian French that have been boosted through an identity-based process of reallocation? Regardless of the answer to this complex question, we seek here to grasp the potential of the palatalized/affricated plosives to spread socially upwards to non-multicultural, middle-class speakers outside the area in question. On the basis of our recordings with upper- and lower-middle-class Parisians (Hansen ms.) and of the attitudinal data we have gathered from a listening experiment among 235 predominantly middle-class French speakers (Hansen 2015, Hansen ms.), we conclude that the phenomenon in question does show signs of active adoption and social spread upwards, while being intriguingly little salient for our participants according to the perception results, as compared to other phonetic phenomena. Only when occurring with other features (*in casu* strongly articulated /r/'s, with which it shares the ambiguity of being both a popular French and a possible French-Arabic language contact feature), a few listeners comment overtly on its presence and associate its users to Maghreb and/or poor suburban descent.

1. Introduction

In recent decades, the linguistic dynamics of combined working-class and multilingual urban milieus have been pointed to for several European capitals, like for instance Berlin (Jannedy & Weirich 2014) and Copenhagen (Quist 2008).[1] Paris, the capital of France, is no exception, with its large belt of poor housing and high proportion of immigrant descendants in the north-eastern suburbs, but empirical sociolinguistic explorations are still, to a large extent, restricted to these milieus themselves and have only very recently begun to include possible effects on speakers from non-multicultural, middle-class layers outside these areas. We intend here to contribute to the study of dynamic pronunciation tendencies with roots in popular and/or multilingual environments in Paris, by focusing on a characteristic phonetic feature termed "palatalization/affrication" of plosives [henceforth pal/aff], cf. *qui* [kji], *voiture* [vwatʃyr]. Our specific interest is in middle-class speakers' production and perception of this phenomenon, since little is known about its possible spread upwards and its salience or connotations among this social segment. Do we have evidence in production of "change from below"? Are participants aware of the feature, and if so, do they seem to link it to low social background or to persons from language mixed areas? Perceptual studies of French in France are relatively rare to date, and in adopting a double production-perception approach we wish, at the same time, to reinforce language change studies of European French along the lines originally proposed by Weinreich, Labov & Herzog (1968).

In the following sections, we shall first – via a brief view on immigration history – present the multilingual suburbs of Paris and their social characteristics (section 2), and then give a broad portrait

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[1] For more examples, also outside Europe, see Nortier & Svendsen (2015) (éds). *Language, Youth and Identity in the 21st Century. Linguistic Practices across Urban Spaces.* Cambridge, Cambridge University Press.

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of the linguistic features (lexical, syntactic and phonetic) often said to be typical of the zones in question (section 3). Section 4 narrows in on the pronunciation features, the claims about their origin as being either clearly contact-induced, clearly *français populaire* or ambiguous in this respect, as well as on their alleged sociolinguistic dynamics. Our empirical approach then follows two axes of investigation: In section 5, we will explore longitudinal production data from upper- and lower-middle-class Parisians *not* based in the disfavored multilingual area, in order to find out to what extent the feature we have singled out for study displays a distributional pattern that confirms an origin in lower-class French pronunciation and a tendency of spreading upwards. In section 6, we will explore attitudinal (by some researchers called perceptual) data showing reactions to French from Paris among 235 French speakers, in order to find out to what extent the listeners seem aware of the feature in question and, if they do, what the feature connotes spontaneously to them (does it make them think of lower-class persons? Of immigrants?). The last section sums up the results and our interpretation of them, while acknowledging the methodological limits of our study and the need for continued exploration of the explanatory factors in adoption of features from "below".

2. Parisian suburbs and multilingualism
Lodge (2004: 195-197) makes an historical account of successive waves of migrants to the area of the French capital up to World War II that detects three main periods of arrival in post-revolutionary times: One first wave, from 1800 to 1850, which brought a massive influx from the nearby provinces; a second wave, from 1850 to 1900, which saw migrants arrive from provinces further away; and a third wave, from 1900 to 1950, which brought newcomers from other European countries (especially Poland and Italy). Pinçon & Pinçon-Charlot (2008) confirm these phases of immigration, but point to the fact, as do Gadet (2008) and Calvet (1993), that after 1950, the origins of immigrants to Paris (and to France in general) have been increasingly diverse. While decolonization of Maghreb countries Tunisia, Morocco, and Algeria caused an extensive Arabic and Berber speaking immigration, that of sub-Saharan west- and central Africa added speakers of several African languages. Moreover, war, famine and political persecution in other parts of the world have further added to the influx including Asian, Afghan, Turkish, Yugoslav and other populations with their respective linguistic and cultural backgrounds. As for the scope of this whole immigration phenomenon, Gadet (2008: 459) estimates that "between a quarter and a third of the 60 million French living in France have at least one immigrant ancestor within three generations". The Paris region is above average in this respect compared to other urban conglomerations in France. Not only does it show higher percentages of residents of immigrant descent than does the rest of the country (around 18.5% vs. 9%),[2] but it also features a large number of speakers with a bilingual daily life. According to Gadet (2007: 128), one out of four children in Ile-de-France encounter a language other than French at home.

Pinçon & Pinçon-Charlot (2008) state that the residential areas of Ile-de-France mostly touched by these newly arrived populations (the northern, north-eastern, and eastern parts) correspond to the parts that historically contained the poorest segments of the inhabitants in the region (with cheap housing, low wages, and high unemployment). The geographical overlap between the main settlement of immigrants and their descendants, on the one hand, with the traditional residential zones of lower-class Parisian population to whom linguists have attributed the variety called *français populaire*, on the other (Guiraud 1978; Gadet 1992; Pinçon & Pinçon-Charlot 2008) is thus tangible. The geographic zone in question is known for relative poverty and social problems to the extent that it has been called the "poor croissant" with a metaphor alluding to its curvilinear form (Pinçon & Pinçon-Charlot 2008: 18). The map of the Paris region in Figure 1 illustrating the average annual income in

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[2] Source (comparison from 2013) https://www.insee.fr/fr/statistiques/3136640 (Retrieved on August 16, 2023). In 2022, the percentage of immigrants in France was 10.3% (https://www.insee.fr/fr/statistiques/2381757) (Retrieved on August 16, 2023).

euros in different administrative entities (*arrondissements* and *communes*) gives visual credit to this designation.

Fig. 1: Map of the Paris region. Average annual income in euros.
(https://fr.wikipedia.org/wiki/Banlieue - retrieved on August 16, 2023).

Language contact between French and – especially – Arabic is particularly frequent in these geographical sections, and sociolinguistic research has uncovered many special features in the French spoken in the area in question. While some call it "multicultural French" (Gadet 2017), others prefer to characterize it in more linguistic terms; for instance, as an "interethnic" form of speech (*parler véhiculaire interethnique*, cf. Billiez 1993). The role of language contact in the formation of its specific elements has been analysed in several studies, and this factor seems a reasonable explanation of the occurrence of certain lexical items and expressions. As regards pronunciation, however, the situation seems less clear-cut. Since the immigrant presence overlaps with zones that were historically the home of ethnically French working-class Parisians, and since parts of the French sound profile in the area recalls elements of *français populaire,* a certain question recurs in the debates: Are the characteristic phonetic features observed the effects of language contact or are they working-class variants that have been boosted through an identity-based process of reallocation? (Fagyal 2010; Gadet 2016; Jamin et al. 2006). Though our own approach does not address this question directly, it seems important to have in mind, since the social value of the linguistic forms from the area might affect their potential to tempt users from higher social layers.

3. Linguistic characteristics of multicultural suburban Parisian French
A long series of empirical studies have pointed to an emerging way of speaking French in the above-mentioned areas. We have already mentioned the term "interethnic" speech (Billiez 1993) as a way of designating this variety, but the terms are numerous, some stressing the social challenges of its speakers (*le langage des cités/des ghettos, le parler banlieue*), others the plurality of the linguistic elements that it contains (*multi-ethnolecte*) cf. the overview in Gadet (2017: 32). In order to signify its potential to spread to other speaker segments, via its large population basis and its exposure in media and music, some speak of it as a "contemporary urban vernacular" (*vernaculaire urbain contemporain*, Gadet 2017: 45-49), using a concept forged by Rampton (2015) for comparable multilingual areas in London.[3]

As for its lexical characteristics, the overall effect on French from contact with the immigrant languages is evident. Studies by Goudaillier (1997), Bertucci (2009), and Gadet (2007, 2017), for instance, show that foreign words integrated in French speech include instances of Arabic (*wesh* 'how are you'/'what's up'/'isn't it' (discourse marker)*, wallah* 'I swear to you'/'I swear to God'*, haram* 'sin'*, zaama* 'like' (discourse marker)*, ahchouma* 'shame'/'disgrace'), African languages (*go* 'girl'/'young woman'*, gorette* 'girl'/'woman'*, macoumé* 'homosexual'), and Gypsy (*bedo* 'joint'*, marave* 'beat'/'kill'*, bicrave* 'sell (illegally)'*, pourave* 'stink')[4] (but also English words inspired by American popular culture *(flow, clash, street, flipper)*, while speakers at the same time seem to be pulling on words and slang formation procedures known from popular French such as *daron/daronne* for 'father' and 'mother', backwards transformations like *téci* (for *cité* 'poor high-rise neighborhood'),[5] and reduplications (*leurleur* for *contrôleur* 'conductor').

The most striking syntactic features of this speech comprise verbs without conjugation (*passe-partout* forms), which are used as infinitives, past participles, present forms, etc. without changing their endings in the way standard French verbs would do. These can be either of foreign origin, like the Gypsy *marave* 'beat'/'kill' or the Arabic *zaaf* 'be mad (at somebody)' (*Voilà ils se font savater ils se font* marave; *j'attrape ta gueule et j'la* marave (Gadet 2017: 79, Goudaillier 1997: 125); *bien sûr je me* zaaf; *je me suis* zaaf *avec lui*, Gadet 2017: 80, 122), or based on backwards-formed words from French (*choper* 'steal'/'grab' → *pécho*: *tu sais quoi je l'ai* pécho*, mais vas-y va la* pécho, Gadet 2017: 79).[6] Verbs used without their standard complementary objects have also been commented on (*il assure* 'he ensures' (he is competent)*, ça craint* 'it fears' (it is bad/dangerous), Gadet 2007: 122), as well as the highly frequent punctuations of sentence structure by discourse markers, be they Arabic (*wesh* 'isn't it'/'you know'*, zaama* 'like') or French (*tu vois* 'you know'*, genre* 'like') (Gadet 2017: 35-36, 93-94, 120).[7]

The foreign language influence on French seems clear in the above-mentioned linguistic domains, but when it comes to pronunciation, a more complex picture arises. Studies by Paternostro (2012, 2017), Jamin et al. (2006), and Fagyal (2010) have resulted in a long list of characteristic phonetic realizations among young people in the poor suburban zones. These count segmental

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[3] We recall here that several other large European cities have comparable multiethnolects, some with a specific designation (*Kiezdeutsch, perkerdansk, Rinkebysvensk*, cf. the Introduction).

[4] Ways of spelling some of these foreign elements as well as ways of translating them may vary from source to source and some sociolinguists advise against trying to assign a unique meaning to them (see for instance Gadet 2017: 121).

[5] This is a slang formation procedure known as *verlan* − a name alluding to the backwards principle, since in itself it stems from the word *l'envers*, meaning "backwards" (Calvet 1994). Also foreign words can undergo this procedure, cf. *keubla* (for *Black*).

[6] My translation of the *passe-partout* examples in order of occurence: 'So, they get beaten up, they get beat up'; 'I catch your face and I beat it up'; 'Of course I'm angry', 'I have had a (verbal) fight with him'; 'You know what, I took it, come on, go take it'.

[7] The corpus "Multicultural Paris French" (MPF), accessible at https://www.ortolang.fr/market/corpora/mpf (Retrieved on August 16, 2023), consists of recordings and transcriptions with more than a hundred young people from Ile-de-France of mainly Maghreb descent, cf. Gadet (2017: 18). The empirical basis of these phenomena is thus very solid.

phenomena, both consonantal and vocalic (plosives /t/, /d/, /k/, /g/ with a palatal or fricative release; strongly articulated /r/'s; back /A/'s, yielding [ɑ] rather than [a] in a word like *pas* (negative particle) for instance; suppression of vowels as in *partir* 'leave' realized [p't'r]), but also the frequent drop of phonetic material in general such as schwas in *petit* [pti], post-obstruent liquids (like in *aut(re)* 'other'), or /l/ in pronouns (*i(l)* 'he', *e(lle)* 'she'), and prosodic features like glottal stops and a chopped or staccato rhythm.

      The authors mentioned above all discuss the extent to which these phonetic features can be seen as contact features, given the frequent bi- or multilingualism among the speakers of the variety in question. We will now turn to the delicate and more detailed discussion that has taken place among sociolinguists wanting to disentangle those that can properly be seen as results of such a contact (to mainly Arabic language), and those that are less easily categorized, calling for other explanations – mainly the idea that they originate in popular French.

4. Contradicting claims about the origins and dynamics of phonetic variants in multicultural suburban Parisian French

The following draws upon the analysis we have made in Hansen (ms.: chap. 3.3.1-3.3.3). According to Fagyal (2010), who has studied free speech from boys with ethnically European backgrounds and boys with Maghreb backgrounds, all living in a north-eastern Parisian suburb, at least two of the often-heard phonetic features must stem from language contact with Arabic. On the one hand, it is the case of the suppression of vowels, as in [p't'r] for *partir*, noted earlier, or [psn] for *piscine*, cf. also the notation *f't des mères* for *fêtes des mères* in Fagyal (2007: 130-131). While popular French does feature suppression of vowels, this phenomenon would only affect unstressed syllables (like in *c'est-à-dire* pronounced [stadir], cf. Gadet (1992: 45), or *tu sais* realized as *t'sais*, cf. Paternostro (2012: 38)), and never syllables susceptible of carrying stress, as in *partir, piscine or fêtes*. Maghreb dialects of Arabic, on the contrary, display consonantal skeletons of this type. On the other hand, it is the case of glottal stops, which can be described as a consonantal restriction in the larynx. Fagyal (2010: 136) gives examples like *il n'est jamais ʔarrivé ʔà l'école*. Whereas French as a native language might contain such stops, they would appear only for strongly emphatic purposes, often combined with an intonational underlining of the first syllable in a polysyllabic word (*C'est ʔadmirable*, cf. Malécot 1977: 27). Fagyal therefore sees examples like the above as influence from the phonological constraint of an obligatory consonantal attack in Arabic (2010: 141-142).

      By contrast, the posteriority of the /A/-quality among this type of speakers in Parisian suburbs (Jamin 2007) is not readily linked to Arabic features at all, and seems explainable only by a copy process of lower-class French, since [ɑ] has been known to persist at the bottom (and at the very top) of Parisian French society in the late stages of the merger of /a/ and /ɑ/ in standard French (Lyche & Østby 2009; Hansen 2014; Hansen & Østby 2016; Hansen ms.: chap. 7).

      As for the "noisy plosives" yielding, for instance, a palatalized or affricated /t/ in *voiture* ([vwatjyr]/[vwatʃyr]), the very audible /r/'s that stand out from the standard French non-vibrant uvular sound, and the frequent drop of phonetic material, there seem to be contradicting claims regarding their origin. It has been proved that they occur more often in the speech of people with North African immigrant descent than in speakers without (Jamin et al. 2006), and that they are associated with immigrants in perception studies (Candea 2014), but does this guarantee that they are caused by contact with Arabic?

      Some argue that this must be the case, because the phenomena seem inspired by Arabic consonant sounds and phonological structure, and because their hyperfrequency also concerns other suburban areas in France and francophone Europe where immigrants of Arabic-speaking descent use French. These places include Grenoble (Trimaille 2003), Marseille (Gasquet-Cyrus 2004; Spini &

Trimaille 2017), and Brussels (Audrit 2009).[8] Others insist on the fact that they are old features of *français populaire*, i.e., that they have been present in working-class Parisian French for a long time (Lennig 1978; Carton et al. 1983; Gadet 1992), and that their presence within these populations might be a sign that they have been adopted as identity markers to signal a counter-culture to mainstream society. A similar discussion has taken place for second generation immigrants in Berlin (Jannedy & Weirich 2014) and in London (Rampton 2015). The term "reallocation" has been proposed to coin such a process (Trudgill 1986: 126; Britain & Trudgill 1999).

The complexity of the question of the possible influence of other languages on the specific phonetic profile of the French frequently encountered in the Parisian multicultural suburbs thus remains, and deserves further investigation by contact linguists, in line with the study of Fagyal (2010). From a sociophonetic perspective, however, it seems relevant to study the potential of the above-mentioned features to spread to middle-class layers in the Paris region, and thus to affect more standard French in the long term. Trimaille (2010) and Gadet (2017), among others, articulate the idea that some features of suburban speech might actually exert an attraction on young people in general and thus represent a dynamic linguistic force. Such a scenario would represent a linguistic "change from below" (Labov 1972), and would fit in with observable scenarios of ongoing linguistic change elsewhere in Europe,[9] particularly since May 1968 (see Armstrong & Pooley 2010 for a synthesis of this trend that also touches address forms, respect for authorities – including parental, clothing, etc., – and which they term a *zeitgeist*, consisting of a movement of "informalization").

In order to contribute to our knowledge of the broader social value of the multicultural suburban phonetic features of Parisian French, we have deliberately picked out one for study here for which contradicting claims of linguistic origin exist, i.e. the "noisy" plosives. This feature is judged too stigmatized to spread socially upwards by some researchers (Boughton 2007; Hornsby & Jones 2013), but has nevertheless shown several signs of acceptance recently. Carton (2000) includes it in a model for Reference French, Trimaille et al. (2012) observe in an experimental test that it does not prevent French listeners from judging a person apt for news reading, and Candea et al. (2013) see a – small but significant – rise in palatalized/affricated /t/'s within actual news reading on the French national radio from 1999 to 2009. These signs, though modest, would suggest that pal/aff variants either have very little salience in themselves, or might even be connoted positively for overt prestige.[10]

As for the spontaneous production among different layers of middle-class speakers from the Paris region, we have very little knowledge available about the use and dynamics of this feature over time, and as for the perceptual connotations of it amongst the middle-class segment of Hexagonal France, we also lack larger investigations. In the methodological design that we present below, we shall thus try to gain insight into its social embedding in Parisian production *outside* the "poor croissant" (section 5), as well as into the degree of salience and the specific connotations it might reveal more generally among French middle-class persons in different attitudinal test designs (section 6).

5. Analysis of longitudinal production within upper- and lower-middle-class Parisians
5.1. *Methodological characteristics of the production study*
Adhering to a fundamentally Labovian approach to the analysis of linguistic variation and change (Labov 1972, 1994), we have designed a longitudinal study in the Paris region that allows for

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[8] Palaltalized /t/ has also, by the way, been observed in Danish speakers in areas of multicultural populations in the capital of Copenhagen (Quist 2008).

[9] For the effect of a low variety of Copenhagen speech on the pronunciation of Danish among speakers in the rest of Denmark, see for instance Kristiansen (2009).

[10] We are aware – from the literature on indexical values of phonetic variants (eg. Eckert 2008) – that the impression produced by a variant on a listener of course depends on its clustering with other variants and on the prosodic matrix in which it occurs (cf. for instance Pharao et al. 2014; Levon 2014).

opposing comparable social segments of the population over time (see Hansen (ms.: chap. 6) for a fuller account of the entire dataset that comprises several generations of speakers). We shall draw here on a sub-corpus that allows for opposing young adult middle-class speakers at two points in time, in recordings of interview data collected by us in 1989-1993 (Hansen 1994, 1998) and in 2011-2015 (Hansen ms.), respectively.[11] The deliberate choice of dividing these speakers in an upper vs. a lower layer of the middle-class in our analysis, taps into our search for signs of adoption of a feature "from below": If pal/aff variants are more frequent in the lowest of the two middle-class layers, it will confirm the roots of this pronunciation in *français populaire*, and if they gain hold of the upper layer over time, it will confirm a movement progressing "from below".

   All 23 speakers in this material were between 16 and 25 years old at the time of the recordings (they are born around 1970 in the first dataset and around 1990 in the second), and were either pupils in secondary education, university students, or had obtained the *lycée*-diploma (*baccalauréat*) at age 17/18 and were employed. None of them could be considered "drop-outs" or persons integrated in a suburban street culture. They were all born in France, have French as their first language, and have grown up in the Paris region outside the poorest northern/north-eastern and eastern parts. As Figure 2 shows, they can be seen, at each of the two points in time, as representing either an upper-middle-class layer (UMC), in that both of their parents have accomplished long formal education (the minimum being the *baccalauréat* plus three years), or a lower-middle-class layer (LMC), in that neither of the parents had obtained the *baccalauréat*, or if they had, had not engaged in education afterwards that required this diploma.

Parisian corpus 1989-1993 (Hansen 1990, 1994)				Parisian corpus 2011-2015 (Hansen ms.)			
	Crypted initials	Age	Year of birth		Crypted initials	Age	Year of birth
UMC: Young (born between 1972 and 1974) 15 to 17 years old during the recordings				UMC: Young (born between 1989 and 1996) 16 to 23 years old during the recordings			
Average year of birth: 1973	HU-f	17/- y	1972	Average year of birth: 1992	LK-f	21/- y	1991
	QX-f	16/- y	1973		OM-f	23/- y	1989
	UG-f	16/- y	1973		QS1-f	16/- y	1996
	XJ-f	16/-y	1973		FS-h	19/- y	1993
	HA-h	17/- y	1972		OW-h	23/- y	1989
	OJ-h	15/- y	1974		TG-h	-/20 y	1995

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[11] This type of approach is called a "real-time" study, of the sub-type "a trend study". A "panel study" would be one that tried to recontact the same speakers after a certain time-lapse. The trend studies are those that inform us most convincingly of actual changes in language (Labov 1972: chap. 7, 1994: 84-85), cf. Hansen (ms.: chap. 1.2.1-1.2.2).

LMC: Young (born between 1970 and 1977) 16 to 23 years old during the recordings				LMC: Young (born between 1987 and 1992) 20 to 25 years old during the recordings			
Average year of birth: 1974	FR-f	-/23 y	1970	Average year of birth: 1989	FP-f	25/- y	1987
	JW-f	-/16 y	1977		IX-f	24/- y	1988
	QG-f	-/21 y	1972		OL-f	23/- y	1989
	OG-h	-/18 y	1975		RT-f	20/- y	1992
	QR-h	-/18 y	1975		GR-h	24/- y	1988
					YO-h	22/- y	1990

Fig. 2: Speakers analyzed in the production part of the study (age at time of recording, indicated to the left of slash if early in the field work periode, to the right of slash if late).

Our definition of middle-class and our distinction of "UMC" and "LMC" is based mainly on educational criteria, which – in French sociolinguistic studies – has proved to be a strong predictor for linguistic behavior and thus has often been preferred to that of occupation (*catégories socio-professionelles*) (cf. Hornsby & Pooley 2001; Lambert 2013).[12]

Speakers were interviewed according to a classic frame in sociolinguistics (Labov 1972, 1984), with a relatively loose structure, but containing roughly the same elements from speaker to speaker (biographical information about the link to the Paris region for the speaker and his or her parents, the level and nature of education and occupation of the speaker and his or her parents, the languages mastered by the person and spoken at home, leisure time activities, and a metalinguistic discussion). Around 10 to 12 minutes were transcribed, always excluding the first five minutes and the metalinguistic part, in order to avoid effects from nervousness or enhanced attention to linguistic matters, respectively (cf. Hansen ms.: chap. 6.2.3). Since none of the participants' answers were prepared in advance, we describe these data as spontaneous but still relatively guarded speech because the subjects were alone in front of an unknown university researcher. We conducted all of the conversations ourselves, which guarantees a "same" effect of interviewer personality on the speakers around 1990 and around 2015, but not a "same" effect of interviewer's age, of course. Other sociolinguists doing real-time studies of the trend type have discussed this methodological challenge (see, for instance, Trudgill 1988 and Ashby 2001). The psychological factor might, however, be more important than age, as shown by Sørensen (2014).

French has six plosives, three unvoiced /p, t, k/ and three voiced /b, d, g/. It is the dental and the palatal ones (/t/, /d/ and /k/, /g/) that have been shown to palatalize or affricate in the Paris region. Some studies emphasize that the dentals are heard in "noisy" versions more often than the palatals (Paternostro 2017: 60), or that these two kinds of plosives should be treated separately for other reasons (different contextual constraints on the phenomenon of pal/aff, according to Armstrong & Jamin 2002: 133). But apart from the general observation that pal/aff mainly happens when these consonants are in pre-vocalic position, we still need more fine-grained knowledge of the effects of linguistic factors (cf. Hansen ms.: chap. 9.4.1). We decided to delimit the variable under study to

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[12] Sociological studies have shown that in France exceptionally high importance is attached to education and that this factor plays an important role for linguistic variation (Forsé & Lemel 2002, cited by Lambert 2013: 27).

contain all instances of /t/ and /k/ – i.e. one dental and one palatal plosive – occurring in the transcribed speech passages, no matter what the following phonological context was (vowel, consonant, or pause). This decision made us include, for /t/, words like *t̠rois, t̠oujours, cont̠inue, sept̠*; for /k/, words like *c̠rois, q̠ui, cinq̠uante, avec̠*.

For each occurrence of the variable, we noted the phonetic realization, distinguishing the following variants:

- 0 No pal/aff (standard variants):   /t/ = [t]

                                                        /k/ = [k]
- 1 Pal/aff (non-standard variants):   /t/ = [tj], [tʃ], [ts], [tç]/[ç], [th]

                                                        /k/ = [kj], - , - , [kç],   [kh]
- 2 Indeterminable realization

The data base that resulted from the impressionistic analysis of the material contains a total of 3,513 occurrences (1,655 from the first corpus and 1,858 from the second).[13] When the indeterminable cases were excluded, the final dataset comprised 3,500 occurrences of /t/ or /k/ all in all.

A few comments should be made on the different pal/aff variants identified above. Whereas both /t/ and /k/ have been heard in the data followed by an intrusive [j] (*tu* pronounced [tjy] and *qui* pronounced [kji], for instance), the different kinds of added unvoiced friction to the plosive seem to have slightly different profiles for /t/ and /k/. On /t/, the fricative can be either a palato-alveolar [ʃ], a dental [s], or a palatal [ç] (which sounds close to a German *ich*-laut and which by some speakers actually replaces the plosive entirely, as in *pratiquer* realized [praçike]). On /k/, this latter sound appears in the data as an accompanying sound only, [kç]. Both /t/ and /k/ appear aspirated in the dataset, cf. [th] and [kh].[14] The majority of these variants of palatalization/affrication of /t/ and /k/ have been described traditionally for *français populaire* (cf. the accounts in Léon 1992: 22, 1993: 204; Gadet 1992: 35), but note that the assibilated /t/ – [ts] – has appeared more recently in sociolinguistic descriptions of young Parisian speech (Fónagy 1989: 236; Paternostro 2017: 60), and that the (added) palatal fricative [ç] has not yet, to our knowledge, been described for other comparable data materials from the region.

5.2. Results of the production study
When the effect of the moment of recording (1989-1993 vs. 2011-2015) on the appearance of pal/aff variants is first investigated – for all speakers regardless of parents' educational level – and for all kinds of following phonological environments (vowel, consonant, pause) together (see left side of Figure 3), it does not seem that the phenomenon demonstrates any development over time. Pal/aff touches 7-8% of the occurrences in both corpora (1989-1993: 6.9%; 2011-2015: 7.7%).

When speakers are divided into upper-middle-class (UMC) and lower-middle-class (LMC), however (see middle and right side of Figure 3), it becomes clear that there is an important effect from social background. While the percentages of pal/aff are 3-4% for the UMC groups, they are 11-12% for the LMC groups (this difference is statistically significant). This social effect seems stable over time. It is thus the group with closest affiliation to working class (the lower-middle-class) that displays the most frequent palatalizations/affrications of /t/ and /k/, which gives credit to the idea that this phenomenon is firmly rooted in the *français populaire*. Moreover, the fact that it is present in a

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[13] In a sample of about a tenth of these occurrences, a double listening by two researchers (ourselves and an assistant) resulted in an agreement of 95.1% as for judging whether the variant was standard (0) or palatalized/affricated (1).
[14] Aspiration on the plosives has been described by Léon (1992: 55) as a kind of friction.

middle-class population with French first language, from residential areas outside the "poor croissant", adds to the conclusion that its use is not conditioned by French-Arabic bilingualism.
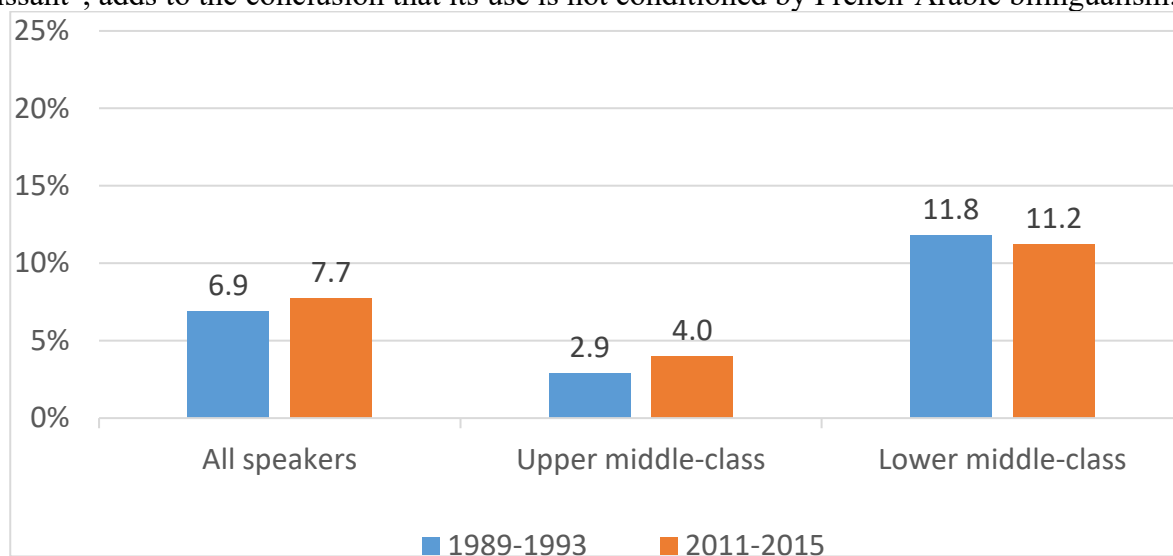

Fig. 3: Pal/aff variants of /t/ and /k/ – the factors of time and social background.

The apparent lack of dynamics shown by Figure 3 is, however, intriguing in the light of the hypothesis of a contagious trend, spreading socially upwards over time. In order to dig further into any signs of progress in the use of pal/aff among middle-class speakers, we therefore analyzed it at a closer linguistic level. We shall here zoom in on one part of this analysis (for a fuller picture, see Hansen ms.: chap. 9.4.2), i.e., the one that studies the exact phonetic realization of the pal/aff in prevocalic position.

Since some researchers talk of a scale or of degrees of pal/aff – going from added [j] to different kinds of added friction (more noisy than [j]) – we decided to follow any development in the actual realization of the phenomenon, in the two speaker groups, over time. Has it become "noisier" with time? Are the "noisiest" variants spreading from lower- to upper-middle-class? We know of only one real time study in France (Bajulaz (2007), cited by Devilla & Trimaille (2010: 103), who traced qualitative developments in the pal/aff variants in Grenoble's suburbs among immigrants of Algerian descent between 1988 and 2005) which has stated that the phenomenon has become more fricative (thus noisier) over time.

Going through the results for prevocalic /t/ first (see Figure 4), it appears that, around 1990, the LMC group disposed of three variants for its realization: [tj] (in blue), [ts] (in orange), and [tʃ] (in grey). At this moment, our UMC group mainly used [tj], but also sometimes [ts]. Some 20 years later, the most privileged group has started copying more extensively the variants used in the less privileged group (thus now including [tʃ]), while this latter group has added a new fricative variant to its repertoire ([tç], in yellow).
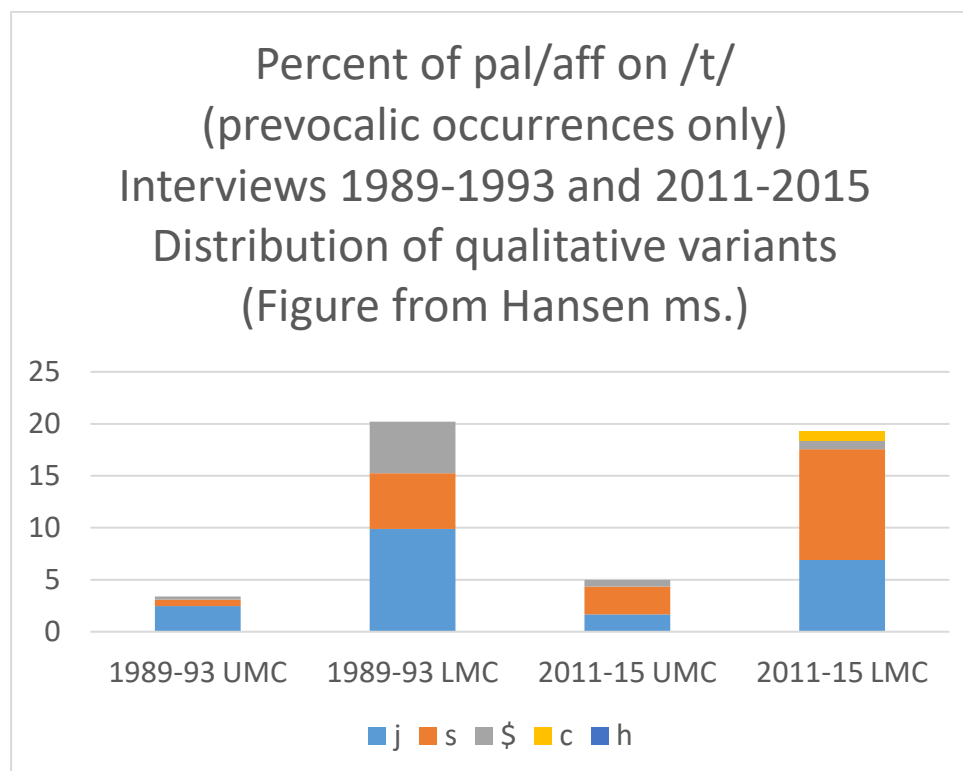
Fig. 4: Qualitative analysis of the realization of pal/aff on prevocalic /t/ across time and speaker groups.

For prevocalic /k/ (see Figure 5), a comparable phonetic enhancement and social imitation process seems to have taken place. In the old corpus, the LMC group used three variants: [kj] (in blue), [kç] (in yellow), and [kh] (in light blue), while the UMC speakers stuck exclusively to the least noisy variant [kj]. Around 2015, one fricative variant [kç] is present in the UMC group, and among our LMC speakers, the fricative variants [kç] and [kh] now constitute a greater proportion of the cases of pal/aff on prevocalic /k/ than in 1989-1993.

Percent of pal/aff on /k/ (prevocalic occurrences only) Interviews 1989-1993 and 2011-2015 Distribution of qualitative variants (Figure from Hansen ms.)
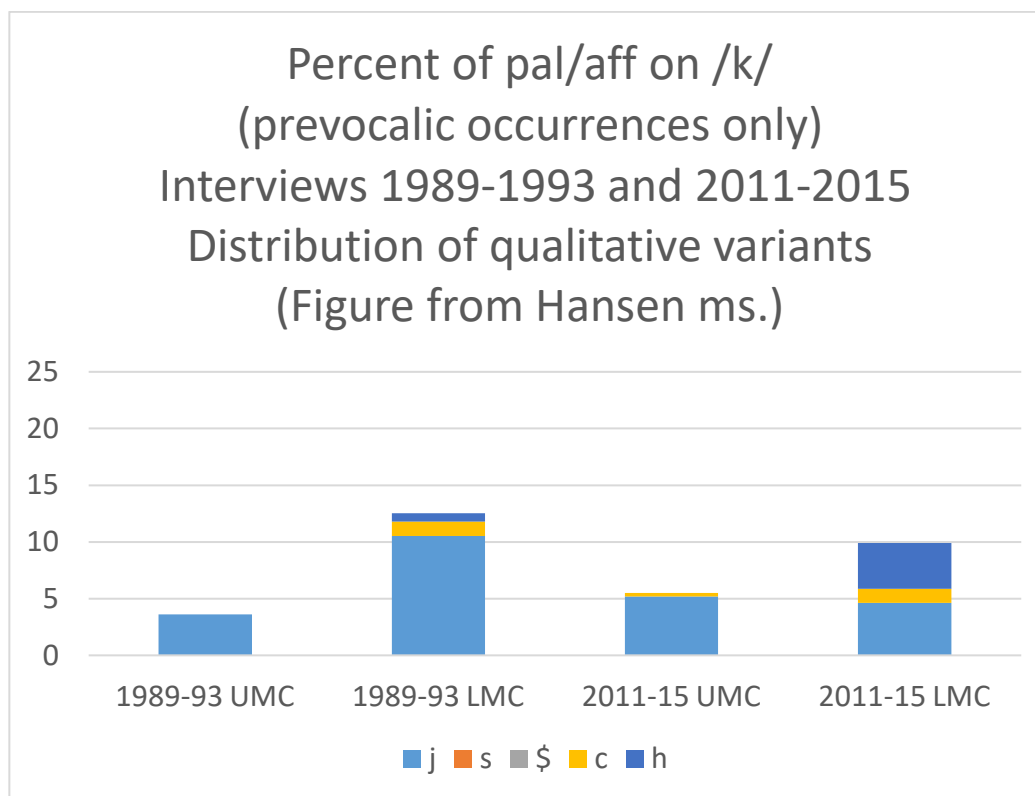
Fig. 5: Qualitative analysis of the realization of pal/aff on prevocalic /k/ across time and speaker groups.

These data point to a dynamic force within the phenomenon of pal/aff on the French plosives /t/ and /k/ which not only makes them noisier over time (more often added friction, less often added [j]) in the least privileged of the middle-class groups examined here (LMC), but also among the UMC speakers, who, albeit somewhat timidly, seem to follow a similar qualitative development in their use. Bajulaz' observation of a phonetic reinforcement of the phenomenon in the Grenoble suburbs for immigrants of Maghreb descent is thus also detectable in the Paris region among middle-class speakers, in roughly the same period of time, though the pal/aff does not seem to progress in *quantitative* terms for our Parisian speakers (cf. Figure 3). Of course, these findings cannot tell us if Franco-Arabic bilingual persons have an influence on the general development. The social patterning of pal/aff outside this milieu shows, however, that it is linked to (and phonetically most developed in) lower social layers in the Paris region, and this makes it likely that it has been boosted in the "croissant" through a reallocation process by segments of the population who share the economic conditions of the French working class.

6. Analysis of attitudinal (perceptual) reactions in France to speech from the Paris region
6.1. Methodological characteristics of the attitudinal (perception) study
In the Labovian recommendations for studies of phonetic change, it is crucial that these not only include the *transition* over time (which can be taken care of by a real-time design like the one we describe above), and the *embedding* in the social and linguistic matrix of use (which we have also exemplified above by studying different speaker groups and different linguistic contexts), but also the *evaluative dimension* (cf. Weinreich, Labov & Herzog 1968: 170-183; Labov 1972: chap. 7) – i.e. an attempt to grasp the level of awareness and the social connotations carried by the examined variants. This latter dimension of sociolinguistic investigations of sound change has, however, been less developed than the two first aspects (a lack also noted by Kristiansen et al. 2005: 32), and only

recently has there been a recovery to mend the situation. Not only has there been a refinement of classic methods in social psychology (such as the original matched guise test by Lambert et al. 1960), but the renaissance of *folk linguistics* (Niedzielski & Preston 2000) has also brought new methods into play (Hansen ms.: chap. 1.1.3, 1.5 analyzes this development). Sociolinguistic studies in France have joined these lines of investigation relatively late (see Falkert 2013 and Hansen ms.: chap. 4 for an overview). Thus, the use of listener reactions to speech samples were rare in that country (Léon & Léon 1980; Paltridge & Giles 1984) until after 2000 (Castellotti & Robillard 2001, 2003; Detey & Le Gac 2010; Hansen 2015; Boula de Mareüil et al. 2017), and it is also only after the millennium that folk linguistic-inspired methods (such as map tasks or reactions to spatial labels) have entered the scene for Hexagonal French (Kuiper 2005; Stewart 2012).

For the purpose of discovering subjective attitudes to palatalized / affricated plosives among middle-class speakers in France, we shall report here on an experiment we undertook in 2012-2013 (partial results in Hansen 2015, a full account in Hansen ms.: chap. 12). Is this segment of the population aware of the pal/aff feature at all? What does it seem to connote to them? Does the correlate of "immigration" or "immigrant descent" ever occur in relation to it?

A total of 235 persons, raised in France and declaring French as their first language,[15] took part in the study. To assure a rough social homogeneity, they were mainly contacted in university settings. Among the participants, 83% were between 17 and 25 years old (the average age being 24.4 years), and 96.6% were either engaged in BA or MA university studies or had already obtained such a diploma (cf. Hansen ms.: chap. 11.2.3). Through this solid link to higher education, we believe to have encompassed a population that could be characterized as "middle-class" (see also section 5), though we have not tried to obtain a strictly representative sample in sociological terms. They lived in different French cities at the moment of the experiment (Paris, Lille, Lyon, Nancy, Rennes, Toulouse, Tours, cf. Hansen ms.: chap. 10.4.3, 11.2.3).

Since linguistic attitudes are a complex phenomenon, in that they can be both implicit (offered subconsciously) and explicit (offered consciously),[16] our research design included both a listening test (to access implicit attitudes) and a metalinguistic question (testing explicit attitudes). See Figure 6. As for the listening part, our participants were confronted with speech sequences (read and spoken) taken from our entire set of middle-class recordings in the Paris region in 2011-2012, but with no mention of the social or geographic origin of the speech samples, other than the information that they came from French speakers. These sequences (two times 40 seconds stemming from each of eight different upper- or lower-middle-class speakers from different age groups, and displaying various levels of use of pal/aff variants on /t/ and /k/ – see Figure 6) had to be evaluated on Likert scales from 1 (lowest) to 5 (highest) with regard to different parameters, such as level of education, social class, mastery of the official pronunciation norm, and aptitude for being newsreaders on national television or teachers of French in France. It was our aim, with this part, to answer the following question: What is the match between listeners' evaluation of the social success and overt linguistic norm compliance of the speaker, on the one hand, and the use of pal/aff variants by the speaker, on the other hand? Further down, we shall report mainly, but not exclusively, on the reactions to read-aloud speech, since the input data are best controlled here (syntax and lexicon being identical for all speakers).[17] The listeners were given the possibility of justifying their scores on the Likert scales by commenting on the features that made them answer the way they did. This option was added to obtain insight into the level of awareness or salience of different features, in a mode where participants were unaware of the origin of the samples.

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[15] Foreign exchange students or others not raised in France were excluded from the initial number of 285 participants.
[16] Cf. Bassili & Brown (2005); Kristiansen (2009).
[17] Hansen (ms.: chap. 12) contains the full analysis and discusses this methodological issue.

As for the metalinguistic part, the question pertaining to the present research focus was formulated as follows: "On what linguistic features do you recognize a person from the Paris region?".[18] Just like the justification option in the listening test, this question pertained to the level of awareness of different phonetic features in speech, but this time in an explicit question that also presented a particular geographical frame to the participant, i.e. that of the Paris region. This was done to activate any possible officially known linguistic stereotypes about speakers from this region among the participants.

Participants in attitudinal experiment:	N = 235
Listening test	Read and spoken sequences from eight middle-class speakers (Sp.1-Sp.8) from the Paris region (recorded in 2011-2012) • Sp.3, 4, 6 *do not* use pal/aff variants (all UMC speakers) • Sp.1, 2, 5, 7, 8 *do* use pal/aff variants (Sp.1 is UMC, the others are LMC, Sp.5 and 8 combine pal/aff with a few norm breaches in reading) Evaluation on Likert scales (1-5) for different parameters
Metalinguistic question	"On what linguistic features do you recognize a person from the Paris region?"

Fig. 6: Methodological design of the attitudinal experiment (listening test and a metalinguistic question) among 235 French middle-class participants.

6.2. Results of the attitudinal (perception) study
When the Likert scale responses to the listening test were analyzed, it became clear that some of the speakers in the sample were evaluated as closer to the top of educational and social hierarchy and as more apt for prestigious linguistic performances than others (see Figure 7 in which scores from 1 to 5 have been transformed to percentages between 0 and 100%).

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[18] Formulation in French: 'Sur quels traits linguistiques reconnaissez-vous une personne venant de la région parisienne?'.
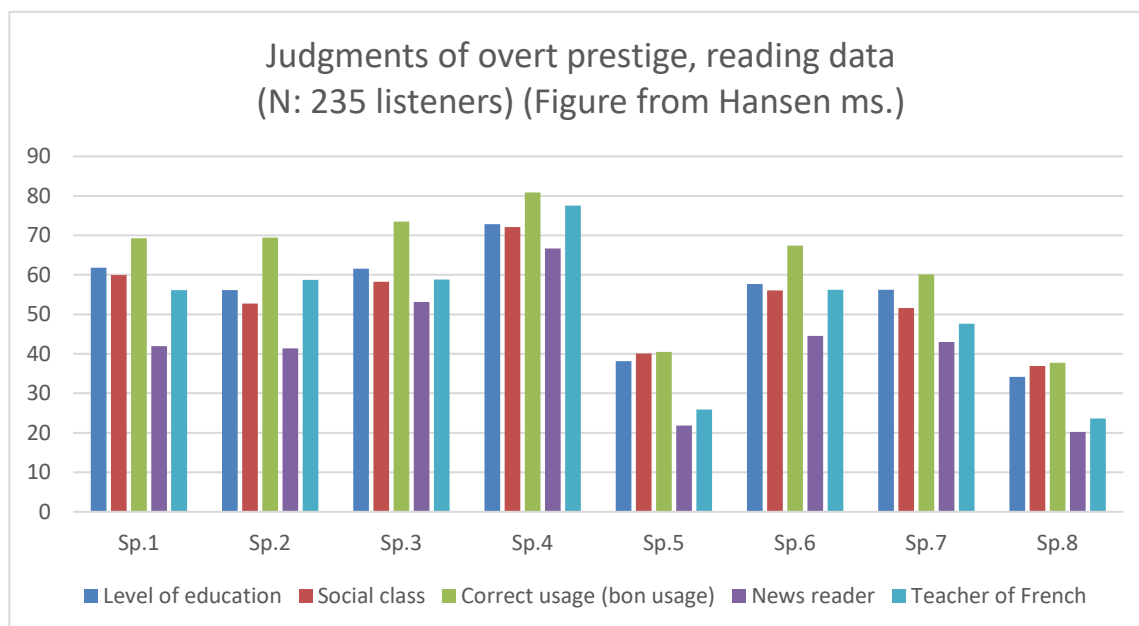
Fig. 7: Listeners' judgments of overt prestige parameters for the eight speakers (in reading).

The speakers scoring the best evaluations – Sp.1, 3, 4, and 6 – are all UMC speakers, and three of them do *not* use pal/aff variants in the reading passage presented to listeners (cf. Figure 6). Since Sp.1, however, does in fact use pal/aff, we interpret this as a certain amount of compatibility of this feature with perception of high status on overt prestige parameters. As for the bottom end of the evaluative scores, we find Sp. 2, 5, 7, and 8, who are all from the LMC layer, all using pal/aff variants while reading. While this could be a confirmation of a negative social prestige attached to the feature of pal/aff, we have to take into account that the four speakers in question are not judged in an equally severe fashion: It is clear from the graph (and also when the scores for the five tested parameters are combined into one average),[19] that only two of these speakers are singled out with very low scores, Sp.5 and Sp.8, and these are exactly the ones who commit a couple of norm breaches while reading (a few misread words, a non-conformity in one place to classical *liaison* rules, cf. Figure 6). The presence of pal/aff, within an otherwise acceptable reading, thus does not seem to affect listeners' reactions dramatically.

The methodological risk that the participants do not react to pal/aff at all but simply react to an overall impression of how the person masters reading aloud can of course not be ruled out on the basis of reading sequences alone.[20] In order to verify the listeners' awareness of elements in the sound input, we therefore now proceed onto the analysis of the linguistic features that were spontaneously mentioned by listeners during the test as justifications for their evaluation scores (again on data from reading stimuli only).

A great deal of the comments were, in fact, of a non-segmental nature (a listener from Tours, in

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[19] Average transformed score for the five tested parameters for each of the eight speakers in descending order: Sp.4: 74.01, Sp.3: 61.04, Sp.1: 57.75, Sp.6: 56.38, Sp.2: 55.71, Sp.7: 51.73, Sp.5: 33.2, Sp.8: 30.57 (cf. Hansen ms.: chap. 12.4).

[20] Hansen (ms.: chap. 12.4.1) – which includes an analysis of reactions to the spontaneous passages from the same eight speakers – shows, however, that these speakers can be organized in roughly the same order for the overt prestige parameters level of education, social class and mastery of correct usage for the read aloud and the spoken stimuli: The four UMC speakers 1, 3, 4, and 6 score better than the three LWC speakers 5, 7, and 8 – while Sp.2 (LMC) ends up among the first group. Since performance in reading aloud cannot explain the evaluative difference among the speakers in their spontaneous guise, phonetic realization as such comes in as a stronger explanatory factor here, though differences within syntax and lexicon in the free-speech passages of course might also play a role that cannot be controlled for.

response to Sp.7 noting "not enough intonation in the sentences" to justify the score 2 on "Aptitude for being a professor of French in France"; a listener from Nancy, in response to Sp.5 noting "not enough self-assurance in the voice" to justify the score 1 on "Aptitude for being a newsreader on national television"), but when we zoomed in on the specific segmental phonetic or phonological comments that were in fact proposed in connection with the evaluations, a highly polarized picture emerged (see Figure 8, taken from Hansen ms.: chap. 12).

Whereas more than a third of the 235 participants (34%) commented on the use of *liaison* by the speakers (which is actually more a morphophonological than a phonetic phenomenon in French), and almost the same proportion had comments to the /A/-quality (29%), all other types of precise comments on sounds or sound types were each held by around a fourth or less of the speakers, descending to very low percentages for some phenomena. As Figure 8 shows, comments on the realization of the plosives (/t/, /d/, /k/, and /g/) are found in the very lower end, being proposed by only 4% of the participants (10/235). We interpret this an indicator of low awareness of the pal/aff as compared to other segmental phenomena. Interestingly enough, the phenomenon is never commented on for the one UMC-speaker who uses it (Sp.1), but for the LMC-speakers (Sp. 2, 5, 7, and 8, all using it) it is.
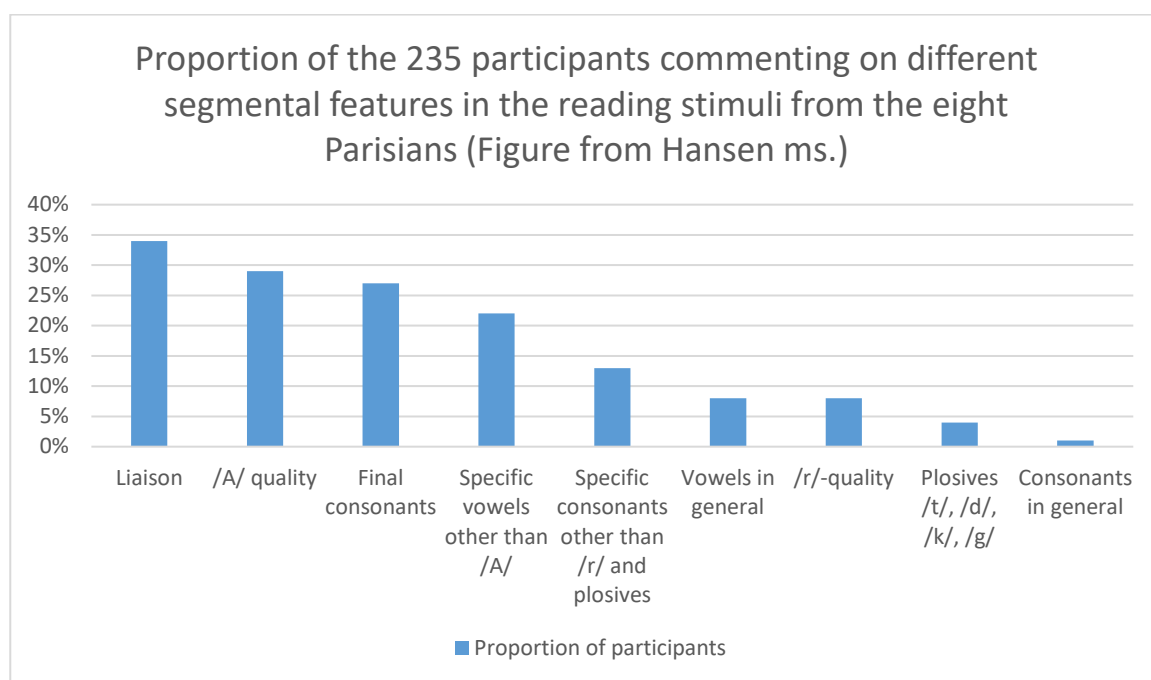
Fig. 8: Salience of phonetic or phonological features in the sound sequences. Proportion of the 235 participants commenting on different segmental features in the reading stimuli from the eight Parisians (Figure from Hansen ms.).

When we analyzed the answers to the metalinguistic question "On what linguistic features do you recognize a person from the Paris region?" – where we ask in an explicit manner with an accurate geographical frame – something similar to the comments in the listening test appeared.[21] It appeared, though, that 40% of the respondents gave an answer that does not mention anything concrete (9.5% left the case blank, 9.5 % wrote that they do not know, 12% that they were unable to recognize a person from the Paris region, and 9% that they recognized such a person on the *absence* of accent or

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[21] Only 201 answers could be analyzed, since our questionnaire did not contain this question when it was first distributed.

specific features).[22] The remaining 60% of the respondents claimed to be capable of recognizing a person from Ile-de-France while actually mentioning on what concrete facts they based this recognition. The mentioned observations constitute, however, a very heterogenous category in which we also find comments on lexicon and on prosody (speed, intonation), as well as comments on tone of voice indicating personality traits, but in which allusions to pronunciation or phonetic factors are nevertheless frequent too.[23]

The mentioned phonetic aspects range from very general comments ("leur prononciation" = "their pronunciation") to more specific ones, and only one or two cases refer to a phenomenon that we might as specialists identify as palatalization/affrication on the plosives. The one sure case is the comment by a participant in Lyon: "Le /ɑ/ ouvert, les dentales prononcées alvéolaires" = "Open /ɑ/, dentals pronounced in an alveolar fashion", which alludes to a /t/ with a place of articulation further back than dental and thus "palatalized". The less sure case is that of a participant in Tours: "'T' accentuées comme s'il y avait un 'h' après" = "'T' accentuated as though there were an 'h' after", which could mean a /t/ followed by aspiration, and thus affricated. Other comments are vaguer, as that of another Tours participant: "Sur les consonnes et les ponctuations de phrases" = "On the consonants and the way of punctuating the sentences", and do not allow for inclusion as proof of awareness of pal/aff on plosives. The challenge in interpreting correctly what precise phenomena participants have in mind is of course an obstacle in this kind of analysis, and recalls Preston's skepticism about "folk linguistic awareness" as for its degree of accuracy and its level of specificity (cf. Preston 1996: 40-41).

To sum up, how are we to interpret the almost absolute lack of precise mentions of a phenomenon that is obviously present in French from the Paris region, not only in multicultural suburbs but also, according to our production study (cf. section 5.2), in the middle-class in the southern and western parts of the area? Is it not mentioned because laypersons are unable to be precise about their phonetic observations? In our opinion, such an argument is invalidated by the rest of the metalinguistic data set. Participants are very well capable of formulating a series of other observations that correspond to those made by sociolinguists in Ile-de-France (strongly articulated /r/'s, reinforced final [ə], /A/-quality different from other parts of France, confusion of /E/ sounds in word endings ([e]/[ɛ]), reductions of phonetic material [be it consonant or vowel drop]; cf. Hansen ms.: chap. 12.5.2). The only explanation for the (quasi-)absence of palatalized/affricated plosives in this list seems to be that of lesser salience. This explanation corresponds to the result from the listening test, where the phenomenon was also very rarely hinted at (cf. Figure 8), though a bit more frequently than in the metalinguistic part. This difference is perhaps due to the fact that participants were not biased by a "Parisian" frame in this first task, which might have made them listen in a less prejudiced manner.[24]

At this stage of our attitudinal analysis we seem to have evidence that the pal/aff on plosives is not very easily remarked by our middle-class (mainly young) French test population and that it does not constitute a linguistic stereotype for them when they are asked explicitly to write how they recognize persons from the Paris region. As for what the phenomenon connotes, we saw in 6.1 that its presence in the reading stimuli to some extent correlated with *low evaluation scores* on overt prestige parameters (which would correspond to the actual social distribution in our production analysis, cf. Figure 3), but for a couple of reasons (including its presence in stimuli from a well-rated UMC speaker and general methodological challenges in isolating the effects of single features) this

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[22] Cf. Hansen (ms.: chap. 12.3.2).
[23] Analysis in Hansen (ms.: chap. 12.5.2).
[24] That the capital region connotes superiority and correctness (and thus maybe activates less attention towards non-standard linguistic features) is clear from many of the answers to the metalinguistic question, including those that speak of recognition through the personality traits of pride, snobbery, mannerism; although a few respondents answer in terms that reveal a more nuanced view of the Paris region and hint to its several accents (*bourgeoisie* vs. *banlieue*).

result was not entirely convincing, and we still have a question left for examination: Does the correlate of "immigration" or "immigrant descent" ever occur in relation to the speakers who use pal/aff in the recordings?

Since we did not want to hint directly at immigration so as not to affect the results, we obtained information about imagined origin of the eight speakers in another way: Our listening test design included questions in which the listeners were asked more broadly 1) if they thought each of the speakers had an accent (and if so, which accent), 2) how probable it occurred to them that the person could be from the Paris region (Likert scale 1-5), and if improbable, where they thought the person came from (Hansen ms.: chap. 12.3.1). Curiously enough, the two speakers deemed to have the most accent in their spontaneous guises, and to be the less likely from the Paris region, turned out to be one LMC and one UMC speaker, both males, who had an advanced age in common (Sp. 2: 82 years old, using pal/aff; Sp. 6: 73 years old, not using pal/aff). Several French provincial regions (or rural areas in general) were proposed as origins for these two (a fact which might be connected to their conservative use of /A/, cf. Hansen ms.). In comparison, the young speakers who use pal/aff in the spontaneous stimuli (Sp. 1, 5, 7, and 8), are much more rarely associated with regional French among the listeners. However, three of them, all LMC-speakers (Sp. 5, 7 and 8), trigger correlates of foreignness and particular mentions of Parisian suburban areas in some of the responses (see Figure 9). In the answers where the exact foreignness is detailed out for these speakers, which it mostly is, we see that it almost exclusively pertains to North Africa (the Maghreb-area).

Sp. 5	Sp. 7	Sp. 8
RE-36: Maghreb 'Maghreb' RE-49: Voix avec un accent qui semble venir de Paris ou de la banlieue, voix forte et franche 'Voice with an accent that seems to come from Paris or from the suburbs, loud and frank voice' PA-75: Banlieue parisienne 'Parisian suburbs' TO-33: Accent de banlieue 'Accent from the suburbs' LI-02: « Accent » de « parler jeune » / Plutôt banlieue parisienne 'Youth accent / Rather Parisian surburbs'	NA-16: Peut-être des parents d'origine étrangère 'Maybe parents of foreign origin' RE-10: Origine maghrébine 'Maghreb origin' RE-29 : Maghreb 'Maghreb' RE-31: Suisse 'Switzerland' RE-39 : Arabe 'Arab' PA-45: Maghreb, intonation "un p´tit peu" légèrement chuintant 'Maghreb, intonation "a littl' bit" lightly hissing' TL-08: Plutôt un pays du Maghreb 'Rather a country in the Maghreb' TL-14: Orient, Algérie 'The East, Algeria' TO-07: D'origine maghrébine 'Of Maghreb origin' NA-01: Impression d'un accent un peu "banlieusard" 'Impression of accent that is a bit "suburban"' NA-19: Banlieues, quantiers défavorisés 'Suburbs, disadvantaged neighborhoods' RE-35: Banlieue, province 'Suburbs, province' RE-50: Banlieue? 'Suburbs?' RE-73: Sud/Banlieue 'South/Suburbs' LY-10: Banlieue → cf. articulation 'Suburbs → cf. articulation' TL-10: Accent banlieusard (un peu) '(Slightly) suburban accent' TL-11: Banlieue défavorisée, probablement région parisienne, peut-être Marseille 'Disadvantaged suburbs, probably the Paris region, maybe Marseille' TO-35: Semble être issu d'une "cite" difficile 'Sounds like coming from a poor high-rise neighborhood' LI-02: Parler de banlieue / Plutôt de banlieue parisienne 'Suburban speech / Rather Parisian suburbs' LI-05: L'accent sonne banlieue parisienne 'The accent sounds like Parisian suburbs'	LI-02: On a l'impression que le français c'est pas sa langue maternelle. 'You get the impression that French is not his mother tongue' RE-14: Banlieue parisienne 'Parisian suburbs' LY-10: Banlieue 'Suburbs' TO-27: Banlieue parisienne 'Parisian suburbs'

Fig. 9: Correlates of foreignness and suburban origin in listener responses for LMC-speakers Sp.5, 7, and 8 in spoken sequences (listener initials: PA = Paris, LI = Lille, LY= Lyon, NA = Nancy, RE = Rennes, TL = Toulouse, TO = Tours).

The three LMC-speakers in Figure 9 are not the only ones that are evaluated as having a "foreign"

accent in the data set by a few listeners, but wherever such a mention touches one of the UMC-speakers, it is either formulated as a francophone accent (Belgian, Québécois, …) or is not combined with a frequent mention of the Parisian suburbs for the same speaker. Thus, the three young LMC-speakers do sound particularly similar to descendants of non-native French speakers, mainly from North Africa, and as suburban, despite the fact (taken from our biographic interviews with them during our field work) that these speakers do not speak Arabic at home, are ethnically native Parisians, and do not live in the parts of the Paris region where bi- or multilingualism is frequent. This, of course, leaves us with the intriguing question of what input elements from the spontaneous speech of these speakers exactly produce this impression on some of the hearers. While it could be the palatalized/affricated plosives, a comment given for all three of them in reaction to their reading (though by only a few alert listeners), it could also be their /r/'s, another one of the features said to be characteristic of speakers of Maghreb descent in Ile-de-France: Figure 8 did not detail out how the linguistic features used for justifying the evaluative scores were distributed on each of the speakers, but Hansen (ms.: chap. 12.5.1) clarifies that the /r/'s are commented on for all three young LWC-speakers, and that, taken together, plosives and /r/s are commented on by more listeners, all in all for these three speakers, than for any of the other speakers in the reading samples. The answer to why the three of them attract more subjective reactions that point to immigrant descent and suburban ties might then well be that they display a complex combination of features, in which prosody perhaps also plays a role, features that apparently serve for listeners both as cues for lower class origin and for a possible multilingual background.

7. Conclusion

In this paper we have tried to contribute to the debate about the phonetic transformations of French in the capital region of Paris that take place in its poor, multicultural northern and eastern suburbs. We have presented diverging claims from the literature about the sources of the sound variants that are seen as dynamic – reallocation from earlier *français populaire* or effects of language contact with immigrant languages such as Arabic? The question is complex and ought to be investigated more deeply by experts in contact linguistics, but from a sociophonetic viewpoint, we have argued that it is possible to study their chances of spreading to middle-class layers of Ile-de-France by looking into their distributional patterns (or the embedding) outside the "poor croissant" and into the social value that they carry.

In the production part of our study, the variable chosen for examination, i.e. the palatalizations/affrications of the plosives /t/ and /k/, turned out to be systematically distributed in the upper- and lower-middle-class speakers in our corpus in a way that confirms their roots in Parisian lower social classes, in speakers living well outside the north-eastern suburbs. In the attitudinal part of study, the pal/aff phenomenon seemed to have relatively little salience for the 235 French middle-class participants – whether the task was to evaluate reading samples from middle-class persons of whom they were unaware of the Parisian origin, or whether they were asked explicitly to name on what linguistic features they recognized a Parisian. But the fact that the three young LMC-speakers, who all use the feature (in combination with strongly articulated /r/'s), were evaluated in the bottom part of the social and professional hierarchy, and were given correlates of perceived (mostly Maghreb) non-nativeness and banlieue origin to an extent that did not affect the other speakers equally, paints a picture where the phonetic indices of low social class and immigrant descent has probably merged perceptually for (at least some of) our middle-class respondents.

Whether a feature such as palatalized or affricated plosives will spread upwards from lower to higher middle-class layers over time remains to be seen. Our longitudinal data did show a rather stable picture on the surface, but analysis of the qualitative realizations of the phenomenon around 1990 as opposed to around 2015 indicated that our upper-middle-class speakers have come to imitate the noisier way of producing pal/aff which is prevalent in the social layer below them. More research is

of course needed to understand how the phenomenon can, at the same time, be linked to stigmatized population segments and creep (albeit discretely in quantitative terms) into usages of middle-class speakers (a mechanism of so-called "change from below"). If it turns out to be an enhanced trend over time, this Parisian example will join in with comparable phonetic examples from Berlin and Copenhagen, just to mention a few other large European cities.

Methodologically speaking, a few critical remarks will round off this study. The chosen design for the listening test in our study did not enable us to isolate reactions to single phonetic features, even though the use of reading would guarantee comparability on a lot of parameters as compared to the use of spontaneous speech samples. Ideally, further research should control this aspect better. On the other hand, open questions about the origin of speakers seemed to be a good way of accessing important information. As for the use of justification options, as well as for the use of a metalinguistic question, we found the capacity of the respondents to formulate their observations regarding speech from the Paris region surprisingly developed. Instead of finding "folk linguistic awareness" inaccurate and not detailed enough, we found it an interesting tool for ranking the linguistic phenomena noted by our participants in order of salience. Hopefully, this type of approach might shed light on other cases of linguistic variation and change in the future and, as such, contribute to develop the evaluative dimension of sociolinguistic studies in this research area.

References

Armstrong, Nigel & Mikaël Jamin (2002). '*Le français des banlieues*: Uniformity and Discontinuity in the French of the *Hexagone*'. In Kamal Salhi (ed.), *French in and out of France. Language Policies, Intercultural Antagonisms and Dialogue*. Oxford: Peter Lang. 107-136.

Armstrong, Nigel & Tim Pooley (2010). *Social and Linguistic Change in European French*. London: Palgrave Macmillan. DOI: https://doi.org/10.1057/9780230281714

Ashby, William J. (2001). 'Un nouveau regard sur la chute du *ne* en français parlé tourangeau: s'agit-il d'un changement en cours?'. *Journal of French Language Studies*, 11(1): 1-22. DOI: https://doi.org/10.1017/S0959269501000114

Audrit, Stéphane (2009). *Variation linguistique et signification sociale chez les jeunes Bruxellois issues de l'immigration maghrébine. Analyse socio-phonétique de trois variantes non standard*. Doctoral thesis: Université Catholique de Louvain.
https://dial.uclouvain.be/pr/boreal/object/boreal:28881 (Retrieved on August 16, 2023).

Bajulaz, Chrystelle (2007). *Etude de l'évolution de la variable affriquée dans les pratiques langagières de deux groupes d'adolescents grenoblois entre 1988 et 2005*. Master thesis: Université Stendhal Grenoble III.

Bassili, John N. & Rick D. Brown (2005). 'Implicit and Explicit Attitudes: Research, Challenges, and Theory'. In Dolores Albarracín, Blair T. Johnson & Mark P. Zanna (eds.), *The Handbook of Attitudes*. Mahwah (N.J.): Lawrence Erlbaum Associates Publishers. 543-574.

Bertucci, Marie-Madeleine (2009). 'L'intégration des migrants dans la société française: situation linguistique, territorialisation, minorisation?'. In Lise Toft & Lisbeth Verstraete-Hansen (eds.), *Une francophonie plurielle. Langues, idées et cultures en mouvement*. Copenhagen: Museum Tusculanum Press. 33-46.

Billiez, Jacqueline (1993). 'Le "parler véhiculaire interethnique" de groupes d'adolescents en milieu urbain'. In Elhousseine Gouaini & Ndiassé Thiam (eds.), *Des langues et des villes*. Paris: Didier Érudition. 117-126.

Boughton, Zoë (2007). '*Ce que prononcer veut dire*: The Social Value of Variable Phonology in French'. *Nottingham French Studies*, 46(2): 7-22. DOI: https://doi.org/10.3366/nfs.2007-2.002

Boula de Mareüil, Philippe, Yves Scherrer & Jean-Philippe Goldman (2017). 'Combien d'accents en français? Focus sur la France, la Belgique et la Suisse'. *Bulletin suisse de linguistique appliquée*, special volume 2. 91-103.

Britain, David & Peter Trudgill (1999). 'Migration, New-Dialect Formation and Sociolinguistic Refunctionalisation: *Reallocation* as an Outcome of Dialect Contact'. *Transactions of the Philological Society*, 97(2): 245-256. DOI: https://doi.org/10.1111/1467-968X.00050

Calvet, Louis-Jean (1993). 'The migrant languages of Paris'. In Carol Sanders (ed.), *French today. Language in its social context*. Cambridge: Cambridge University Press. 105-119. DOI: https://doi.org/10.1017/CBO9780511620980.006

Calvet, Louis-Jean (1994). *Les voix de la ville. Introduction à la sociolinguistique urbaine*. Paris: Payot & Rivages.

Candea, Maria (2014). 'Discours sociolinguistiques et discours profanes face à la variation stylistique dans la prononciation du français'. *Lidil. Revue de linguistique et de didactique des langues*, 50. 45-61. DOI: https://doi.org/10.4000/lidil.3557

Candea, Maria, Martine Adda-Decker & Lori Lamel (2013). 'Recent evolution of non-standard consonantal variants in French broadcast news'. In *Proceedings of the Annual Conference of the International Speech Communication Association, INTERSPEECH 2013*. Lyon: ISCA. 412-416. DOI: https://doi.org/10.21437/Interspeech.2013-125

Carton, Fernand (2000). 'La prononciation'. In Gérald Antoine & Bernard Cerquiglini (eds.), *Histoire de la langue française 1945-2000*. Paris: CNRS Éditions. 25-60.

Carton, Fernand, Mario Rossi, Denis Autesserre & Pierre R. Léon (1983). *Les accents des Français*. Paris: Hachette.

Castellotti, Véronique & Didier de Robillard (2001). 'Images de la variation du français: dominantes et harmoniques, changements'. *Travaux neuchâtelois de linguistique*, 34/35: 393-410. DOI: https://doi.org/10.26034/tranel.2001.2567

Castellotti, Véronique & Didier de Robillard (2003). 'Des Français devant la variation: quelques hypothèses'. *Cahiers de l'Institut de Linguistique de Louvain*, 29(1-2): 223-240. DOI: https://doi.org/10.2143/CILL.29.1.504022

Detey, Sylvain & David Le Gac (2010). 'Le français de référence: quels locuteurs?'. In Sylvain Detey, Jacques Durand, Bernard Laks & Chantal Lyche (eds.), *Les variétés du français parlé dans l'espace francophone. Ressources pour l'enseignement*. Paris: Ophrys. 167-180.

Devilla, Lorenzo & Cyril Trimaille (2010). 'Variantes palatalisées/affriquées en français hexagonal: quel(s) statut(s) sociolinguistique(s) pour quel destin?'. In Maria Iliescu, Heidi Siller-Runggaldier & Paul Danler (eds.), *Actes du XXVᵉ Congrès International de Linguistique et de Philologie Romanes, 3-8 septembre 2007 Innsbruck. Tome IV*. Berlin: De Gruyter. 99-107. DOI: https://doi.org/10.1515/9783110231922.4-99

Eckert, Penelope (2008). 'Variation and the indexical field'. *Journal of Sociolinguistics*, 12(4): 453-476. DOI: https://doi.org/10.1111/j.1467-9841.2008.00374.x

Fagyal, Zsuzsanna (2007). 'Syncope: de l'irrégularité rythmique dans la musique rap au dévoisement des voyelles dans la parole des adolescents dits « des banlieues »'. *Nottingham French Studies*, 46(2): 119-134. DOI: https://doi.org/10.3366/nfs.2007-2.008

Fagyal, Zsuzsanna (2010). *Accents de banlieue. Aspects prosodiques du français populaire en contact avec les langues de l'immigration*. Paris: L'Harmattan.

Falkert, Anika (2013). 'Introduction'. In Anika Falkert (ed.), *La perception des accents du français hors de France. Actes du colloque international d'Avignon, 17-18 novembre 2011*. Mons: CIPA. 9-19.

Fónagy, Ivan (1989). 'Le français change de visage?'. *Revue Romane*, 24(2): 225-253.

Forsé, Michel & Yannick Lemel (2002). 'Status Consistency Trends of Occupational, Educational and Economic Position in France, Germany and the United States'. In Yannick Lemel & Heinz-Herbert Noll (eds.), *Changing Structures of Inequality: A Comparative Perspective*. Montreal: McGill-Queen's University Press. 251-274.

Gadet, Françoise (1992). *Le français populaire*. Paris: Presses Universitaires de France.

Gadet, Françoise (2007). *La variation sociale en français* (2nd ed.). Paris: Ophrys.

Gadet, Françoise (2008). 'Immigrant Languages in France'. In Ulrich Ammon & Harald Haarmann (eds.), *Lexikon der Sprachen des europäischen Westens, volume 1*. Klagenfurt: Wieser Verlag. 459-469.

Gadet, Françoise (2016). 'Variation et contact dans un corpus parisien: 'Multicultural Paris French''. *Repères-Dorif*, 11: 1-6.

Gadet, Françoise (ed.) (2017). *Les parlers jeunes dans l'Île-de-France multiculturelle*. Paris: Ophrys.

Gasquet-Cyrus, Médéric (2004). Pratiques et représentations de l'humour verbal. Etude sociolinguistique du cas marseillais. Doctoral thesis: Université de Provence.

Goudaillier, Jean-Pierre (1997). *Comment tu tchatches ! Dictionnaire du français contemporain des cités*. Paris: Maisonneuve et Larose.

Guiraud, Pierre (1978). *Le français populaire* (4th ed.). Paris: Presses Universitaires de France.

Hansen, Anita Berit (1990). *Analyse sociolinguistique de deux évolutions linguistiques dans le français parlé à Paris: la stabilisation du « e caduc » interconsonantique et l'apparition d'un [ə] final*. Master thesis: Université de Copenhague.

Hansen, Anita Berit (1994). 'Etude du E caduc — stabilisation en cours et variations lexicales'. *Journal of French Language Studies*, 4(1): 25-54. DOI: https://doi.org/10.1017/S0959269500001964

Hansen, Anita Berit (1998). *Les voyelles nasales du français parisien moderne. Aspects linguistiques, sociolinguistiques et perceptuels des changements en cours*. Copenhagen: Museum Tusculanum Press

Hansen, Anita Berit (2014). 'Lexique et phonologie. Le cas de la perte de distinction /a/-/ɑ/ en français parisien'. In Jacques Durand, Gjert Kristoffersen, Bernard Laks & Julie Peuvergne (eds.), *La phonologie du français: normes, périphéries, modélisation. Mélanges pour Chantal Lyche*. Paris: Presses Universitaires de Paris Ouest. 261-284

Hansen, Anita Berit (2015). 'Sensibilité et insensibilité devant la variation phonétique: une étude perceptive sur le français de la région parisienne'. *Langage & Société*, 151: 45-65. DOI: https://doi.org/10.3917/ls.151.0045

Hansen, Anita Berit (ms). *Changements phonétiques à Paris autour du millénaire. Apports empiriques et théoriques d'une approche à méthodes multiples*.

Hansen, Anita Berit & Kathrine Asla Østby (2016). 'Variation in the capital city of France. Paris'. In Sylvain Detey, Jacques Durand, Bernard Laks & Chantal Lyche (eds.), *Varieties of Spoken French*. Oxford: Oxford University Press. 403-416. DOI: https://doi.org/10.1093/acprof:oso/9780199573714.003.0032

Hornsby, David & Mari C. Jones (2013). 'Exception française? Levelling, Exclusion, and Urban Social Structure in France'. In Mari C. Jones & David Hornsby (eds.), *Language and Social Structure in Urban France*. London: Legenda. 94-109. DOI: https://doi.org/10.4324/9781315092058-9

Hornsby, David & Tim Pooley (2001). 'La sociolinguistique et les accents français d'Europe'. In Marie-Anne Hintze, Tim Pooley & Anne Judge (eds.), *French accents: Phonological and sociolinguistic perspectives*. London: AFLS/CILT. 305-343.

Jamin, Mikaël (2007). 'The 'Return' of [ɑ] in Parisian French: A Case of Sociolinguistic Recycling?'. *Nottingham French Studies*, 46(2): 23-39. DOI: https://doi.org/10.3366/nfs.2007-2.003

Jamin, Mikaël, Cyril Trimaille & Médéric Gasquet-Cyrus (2006). 'De la convergence dans la divergence: le cas des quartiers pluri-ethniques en France'. *Journal of French Language Studies*, 16(3): 335-356. DOI: https://doi.org/10.1017/S0959269506002559

Jannedy, Stefanie & Melanie Weirich (2014). 'Sound change in an urban setting. Category instability of the palatal fricative in Berlin'. *Journal of Laboratory Phonology*, 5(1): 91-122. DOI: https://doi.org/10.1515/lp-2014-0005

Kristiansen, Tore (2009). 'The macro-level social meanings of late-modern Danish accents'. *Acta Linguistica Hafniensia*, 41. 167-192. DOI: https://doi.org/10.1080/03740460903364219

Kristiansen, Tore, Peter Garrett & Nikolas Coupland (2005). 'Introducing Subjectivities in Language Variation and Change'. *Acta Linguistica Hafniensia*, 37. 9-35. DOI: https://doi.org/10.1080/03740463.2005.10416081

Kuiper, Lawrence (2005). 'Perception is reality: Parisian and Provençal perceptions of regional varieties of French'. *Journal of Sociolinguistics*, 9(1): 28-52. DOI: https://doi.org/10.1111/j.1360-6441.2005.00280.x

Labov, William (1972). *Sociolinguistic Patterns*. Philadelphia: University of Pennsylvania Press.

Labov, William (1984). 'Field Methods of the Project on Linguistic Change and Variation'. In John Baugh & Joel Sherzer (eds.), *Language in Use. Readings in Sociolinguistics*. Englewood Cliffs (N.J.): Prentice-Hall. 28-53.

Labov, William (1994). *Principles of Linguistic Change. Volume 1: Internal Factors*. Oxford (UK): Blackwell.

Lambert, Paul (2013). 'Social Stratification in France: Measures and Trends'. In Mari C. Jones & David Hornsby (eds.), *Language and Social Structure in Urban France*. London: Legenda. 22-34. DOI: https://doi.org/10.4324/9781315092058-3

Lambert, Wallace E., Richard C. Hodgson, Robert C. Gardner & Stanley Fillenbaum (1960). 'Evaluational Reactions to Spoken Languages'. *Journal of Abnormal and Social Psychology*, 60(1): 44-51. DOI: https://doi.org/10.1037/h0044430

Lennig, Matthew (1978). *Acoustic Measurement of Linguistic Change: The Modern Paris Vowel System*. PhD thesis: University of Pennsylvania.

Léon, Pierre R. (1992). *Phonétisme et prononciations du français*. Paris: Nathan.

Léon, Pierre R. (1993). *Précis de phonostylistique. Parole et expressivité*. Paris: Nathan.

Léon, Pierre R. & Monique Léon (1980). 'Observations sur l'accentuation des français régionaux'. *Studia Phonetica*, 15: 93-106.

Levon, Erez (2014). 'Categories, stereotypes, and the linguistic perception of sexuality'. *Language in Society*, 43(5): 539-566. DOI: https://doi.org/10.1017/S0047404514000554

Lodge, R. Anthony (2004). *A Sociolinguistic History of Parisian French*. Cambridge: Cambridge University Press. DOI: https://doi.org/10.1017/CBO9780511486685

Lyche, Chantal & Kathrine Asla Østby (2009). 'Le français de la haute bourgeoisie parisienne: une variété conservatrice?'. In Jacques Durand, Bernard Laks & Chantal Lyche (eds.), *Phonologie, variation et accents du français*. Paris: Lavoisier Hermes Science. 203-230.

Malécot, André (1977). *Introduction à la phonétique française*. The Hague: Mouton. DOI: https://doi.org/10.1515/9783110807578

Niedzielski, Nancy A. & Dennis R. Preston (2000). *Folk Linguistics*. Berlin: Mouton de Gruyter. DOI: https://doi.org/10.1515/9783110803389

Nortier, Jacomine & Bente A. Svendsen (eds.) (2015). *Language, use, and identity in the 21st century. Linguistic practices across urban spaces*. Cambridge: Cambridge University Press. DOI: https://doi.org/10.1017/CBO9781139061896

Paltridge, John & Howard Giles (1984). 'Attitudes towards speakers of regional accents of French: Effects of regionality, age and sex of listeners'. *Linguistische Berichte*, 90: 71-85.

Paternostro, Roberto (2012). 'Aspects phonétiques de l' « accent parisien multiculturel »: innovation, créativité, métissage(s)'. *Cahiers AFLS*, 17(2): 32-54.

Paternostro, Roberto (2017). 'Les jeunes ont-ils un accent?'. In Françoise Gadet (ed.), *Les parlers jeunes dans l'Île-de-France multiculturelle*. Paris: Ophrys. 55-71.

Pharao, Nicolai, Marie Maegaard, Janus Spindler Møller & Tore Kristiansen (2014). 'Indexical meanings of [s+] among Copenhagen youth: Social perception of a phonetic variant in different prosodic contexts'. *Language in Society*, 43(1): 1-31. DOI:

https://doi.org/10.1017/S0047404513000857

Pinçon, Michel & Monique Pinçon-Charlot (2008). *Sociologie de Paris* (2nd éd.). Paris: La Découverte. DOI: https://doi.org/10.3917/dec.pinco.2008.01

Preston, Dennis R. (1996). 'Whaddayaknow?: The Modes of Folk Linguistic Awareness'. *Language Awareness*, 5(1): 40-74. DOI: https://doi.org/10.1080/09658416.1996.9959890

Quist, Pia (2008). 'Sociolinguistic approaches to multiethnolect: Language variety and stylistic practice'. *International Journal of Bilingualism*, 12(1-2): 43-61. DOI: https://doi.org/10.1177/13670069080120010401

Rampton, Ben (2015). 'Contemporary urban vernaculars'. In Jacomine Nortier & Bente A. Svendsen (eds.), *Language, Youth and Identity in the 21st Century. Linguistic Practices across Urban Spaces*. Cambridge: Cambridge University Press. 24-44. DOI: https://doi.org/10.1017/CBO9781139061896.003

Sørensen, Randi Skovbjerg (2014). *Turning the spotlight: Looking at the interviewers. A dialogical approach to interaction analysis of two interviewers' sociolinguistic interviews with a personality psychological perspective on the interviewers*. PhD thesis: University of Copenhagen.

Spini, Mathilde & Cyril Trimaille (2017). 'Les significations sociales de la palatalisation/affrication à Marseille: processus ségrégatifs et changement linguistique'. *Langage & Société*, 162: 53-78. DOI: https://doi.org/10.3917/ls.162.0053

Stewart, Christopher Michael (2012). 'Mapping language ideologies in multi-ethnic urban Europe: the case of Parisian French'. *Journal of Multilingual and Multicultural Development*, 33(2): 187-202. DOI: https://doi.org/10.1080/01434632.2011.617821

Trimaille, Cyril (2003). *Approche sociolinguistique de la socialisation langagière d'adolescents*. Doctoral thesis: Université Stendhal Grenoble III.

Trimaille, Cyril (2010). 'Consonnes dentales palatalisées/affriquées en français contemporain: indicateurs, marqueurs et/ou variantes en développement?'. In Michaël Abecassis & Gudrun Ledegen (eds.), *Les Voix des Français. Volume 2. En parlant, en écrivant*. Oxford: Peter Lang. 89-100.

Trimaille, Cyril, Maria Candea & Iryna Lehka-Lemarchand (2012). 'Existe-t-il une signification sociale stable et univoque de la palatalisation/affrication en français? Étude sur la perception de variantes non standard'. *Congrès Mondial de Linguistique Française - CMLF 2012. SHS Web of Conferences*, 1. 2249-2262. DOI: https://doi.org/10.1051/shsconf/20120100122

Trudgill, Peter (1986). *Dialects in Contact*. Oxford: Basil Blackwell.

Trudgill, Peter (1988). 'Norwich Revisited: Recent Linguistic Changes in an English Urban Dialect'. *English World-Wide*, 9(1): 33-49. DOI: https://doi.org/10.1075/eww.9.1.03tru

Weinreich, Uriel, William Labov & Marvin I. Herzog (1968). 'Empirical Foundations for a Theory of Language Change'. In Winfred P. Lehmann & Yakov Malkiel (eds.), *Directions for Historical Linguistics. A Symposium*. Austin: University of Texas Press. 95-195.

Links

Multicultural Paris French (MPF): https://www.ortolang.fr/market/corpora/mpf (Retrieved on August 16, 2023).

Map of the Paris region. Average annual income in euros: https://fr.wikipedia.org/wiki/Banlieue (Retrieved on August 16, 2023).

Percentage of immigrants in Paris vs provinces in 2013: https://www.insee.fr/fr/statistiques/3136640 (comparison from 2013) (Retrieved on August 16, 2023).

Percentage of immigrants in France in 2022: https://www.insee.fr/fr/statistiques/2381757 (Retrieved on August 16, 2023).