Remarks on prenominal liaison consonants in French

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Introduction

One of the greatest difficulties for non-native learners of French has always been the dramatic distance between its archaic spelling system and its pronunciation. In the Western humanistic culture in which letters used to represent the highest values, teaching foreign languages was necessarily centred on written texts and relied heavily on reading techniques allowing the learner some ways to guess the pronunciation from the spelling.

Particularly intricate were the rules for the interpretation of word-final graphic consonants. By the end of the nineteenth century, for instance, the final ‹t› of ‹petit› 'small' had become mute in the standard language in most contexts, as in *il est petit* 'he is small', *le petit est meilleur* 'the small one is better', *le petit hall* [lə p(ə)ti ol] 'the small lounge'. It was, nonetheless, pronounced in *le petit homme* [lə p(ə)ti tɔm] 'the small man'. The meaning of the highly polysemous term *liaison* was enlarged in the eighteenth century to include the phonic uses of these sometimes-silent word-final graphic consonants. With the development of historical linguistics, *liaison consonants* were also understood as odd surviving reflexes of earlier word-final consonants that otherwise disappeared, whereas later structural linguistic analyses tried to give it a phonological interpretation (cf. Morrison 1969, who lists some 200 studies concerned, at least partly, with liaison between the years 1800 and 1968).

In many cases, it is difficult to decide exactly which of the meanings of *liaison* is being used; a typical example is Fouché's influential *Traité de la prononciation française* (1956), a textbook primarily written for the teaching of French as a second language — all too

often mistakenly taken for a linguistic description of French.[1] In this paper, I shall use the term *liaison* as a cover term for the various aspects it has been associated with in linguistics without assuming that these aspects should be synchronically related.

1. Early linguistic accounts of liaison: the latent analyses

Inevitably, the weight of tradition strongly influenced most (synchronic) linguistic analyses of the diverse phenomena traditionally brought together under the common label *liaison.* Three of the most entrenched, seldom challenged assumptions of these analyses are

1. that these phenomena share a common phonological interpretation;
2. that liaison can only occur within phonological phrases and disappears as soon as there is a slight pause between two words; and
3. that somehow the liaison consonant phonologically "belongs" to the preceding "word", just as the mute graphic consonant belongs to the preceding graphic word in the conventional spelling or as its historical ancestor belonged to the preceding word centuries ago.

Typically, one assumes that word-final consonants are of two types: *fixed* consonants that are "always pronounced"[2] and *latent* consonants that are "pronounced only under certain circumstances, such as liaison contexts" (Tranel 1995a: 798–799). It is probably in Pichon (1938: 117) that one finds the most explicit statement on the specific phonological status of latent consonants,[3] which amounts to saying that each segment in the phonological system of a language could come under two distinct forms: a fixed one and a latent one.

A similar concept of latent segment was developed by the Danish school (cf. Hjelmslev 1943, 1971: 119; Togeby [1951] 1965: 36, 42) according to which, latent segments are segments that are not always phonetically realised and may condition the form of neighbouring segments whether or not they are phonetically realised. Under Togeby's analysis, however, it appears that latency need not have been

phonologically distinctive: (1) the vowel /ə/ and the mute consonant /h/ are latent in all positions, while (2) the other consonants are latent in word-final position and fixed elsewhere. For instance, all the consonants in the words *cape* /kapə/ '(hooded) cape', *cap* /kapə/ 'cape', *petit* /pətit/ 'small' and *petitesse* /pətitɛs/ 'smallness' are fixed, except for the last /t/ of /pətit/.

Earlier generative studies of liaison (e.g., Schane 1968; Dell 1970; Selkirk 1972) also used a similar form of latency, which was not phonologically distinctive either. The advent of non-linear phonology provided the formal tools to fulfil Pichon's segmental luxuriance: it became relatively trivial to double — or even triple, as in Encrevé's analysis (1988) — the inventory of segments without appearing blatantly *ad hoc*. This led to a mesh of new interpretations of latency, requiring the sagacity and determination of a Tranel to disentangle the issues (1986, 1990, 1992, 1993, 1995a, 1995b, 1995c, 1996a, 1996b, 1999, 2000).

Contrary to the numerous treatises written for non-native learners, none of the advocates of latent analyses, however, really felt the need to give a precise account of the "circumstances" under which latent consonants were pronounced (this was definitely not part of the early structuralist mores, and later, generativists eventually gave up the problem). After all, is it not obvious that liaison contexts exist and that their precise inventory is but a trite, unrevealing task? The consensus appears to have been that latent consonants were licensed by the presence of a following vowel-initial word[4] in specific morphosyntactic contexts, referred to as "liaison contexts", which one did not need to fully describe, but for which it sufficed to list some archetypal sequences, e.g., Adjective+Noun or Determiner+Noun combinations, as in *petit homme* [p(ə)ti tɔm] and in *les hommes* [le zɔm] 'the men'. Such accounts sometimes identify a special class of words, the so-called "words beginning with aspirate *h*'s" which do not allow liaison in "liaison contexts" although they do begin with a vowel, as in *petit hall* [p(ə)ti ol]; most often, however, these words are assumed to begin with a phonetically non-realised latent consonant /h/, which — like any other consonant — prevents the licensing of a preceding latent consonant. Selkirk (1972, 1974) was the only serious attempt to bring some rigor to the neglected aspect of "liaison

contexts" that was, unfortunately, unsuccessful (cf. Morin and Kaye 1982).[5]

2. Morin and Kaye (1982): a program for the study of liaisons

Morin and Kaye (1982), echoing some earlier analyses, in particular Gougenheim (1938), challenged the linguistic wisdom that viewed liaison as a uniform linguistic phenomenon and claimed that the different grammatical processes described as liaison by traditional pedagogical manuals may often admit of diverse, more interesting analyses. They isolated at least three distinct processes that could be distinguished in Modern French:

1. A form of simple epenthesis
   a. between most clitics (singular determiners *un, aucun, mon, ton, son…* 'a, no, my, your, his…', clitic pronouns *on, vous, en* 'one, you, of it', prepositions *en, dans, sous* 'in, in, under') and a following host, and
   b. between singular adjectives (*bon, ancien, gros, petit, grand…* 'good, former, big, small, large…') and a following noun.[6]
2. A form of morphologised epenthesis after verb forms, as in *ils vont t-arriver* 'they will come' (sometimes extended to larger verbal constituents in spontaneous usage, as in *c'est l'image qui m'est venue t-à l'esprit* 'That's what came to my mind').
3. A plural prefix, as argued by Gougenheim (1938: 59–60), before plural nouns, adjectives, and quasi-adjectives, as in *(les) z-hommes* [(le) z ɔ m] '(the) men', *de petits z-hommes* [də p(ə)ti zɔm] 'some small men', *(les) z-avions z-américains* [(le) zavjõ zamerikɛ̃] '(the) American planes', *des z-avions z-en bois* 'wooden planes', resulting from the complete grammaticalisation of a former [z]-liaison.

Under this analysis, the initial [z] is a regular plural *prefix,* as in the forms [zɔm] or [zamerikɛ̃], with the same morphological status as, e.g., the English plural *suffix* [z] found in *weeds* [wiːdz].[7] The distribution of the French plural prefix [z], however, is relatively limited,

as it can only appear before a sub-class of vowel-initial stems (which excludes stems beginning with so-called aspirated *h*'s). Furthermore, different agreement patterns are found: the use of the plural marker [z] is almost systematic after determiners and prenominal adjectives, but relatively limited elsewhere, where its use is characteristic of so-called "elevated speech".

In these three processes, they claimed, the liaison consonants had become completely dissociated from the preceding words to which they were historically related (a frequent historical process, known as *resegmenting* or *recutting*). This meant that liaison after pauses should not be unexpected — and indeed, such liaisons have been noticed at least since Pichon (1938: 123) in expressions such as *un robuste, mais petit, t-enfant* 'a strong, but small, child' where the [t]-liaison occurs after a parenthetic expression (*pace* frequent later assertions to the contrary). It also implied that liaison consonants were *phonologically* independent from other historically related consonants, e.g., there no longer existed a phonological relationship between the [t]-liaison after *petit* [pəti] and the final [t] of its feminine form *petite* [pətit].

3. Morin (1992): a reanalysis of prenominal adjectives

In Morin (1992), I decided to examine in more detail the status of liaison consonants after prenominal adjectives and their relationship to their historical counterparts in morphologically related forms. Of particular interest were the following two hypotheses commonly found in latent analyses, at least since Togeby [1951] (1965):

Hypothesis 1
  In the unmarked case, all contextual variants of an adjective form have a common underlying (lexical) representation. For adjectives which are followed by a liaison consonant in "liaison contexts", this common underlying representation ends with a latent consonant that is identical, or at least directly related by regular phonological processes, to the liaison consonant. The presence or absence of a liaison consonant in "liaison contexts" *automatically*

and uniquely derives from this phonological representation and *general* rules (or principles) that license latent consonants.

Hypothesis 2
   In the unmarked case, the underlying (lexical) representation of the feminine form of an adjective is derived from that of the masculine. If the latter ends with a latent consonant, it is turned into a fixed consonant as the result of some phonological or morphological operations (depending on specific analyses).

The two hypotheses are in principle independent. One may well consider, for instance, that the underlying forms of *grand* and *long* are respectively /grɑ̃^{t}/ and /lõ^g/, the last segments of which are latent (latent segments being represented here as exponents) and licensed in "liaison contexts" such as *grand t-homme* 'great man' and *long g-apprentissage* 'long training'. Their feminine counterparts *grande* and *longue* (as well as the related derivatives *grandeur* 'greatness', *longueur* 'length') could be derived from the lexically distinct stems /grɑ̃d/ and /lõg/. Indeed, most recent latent analyses of liaison (as examined by Tranel, for instance) are only concerned with the first hypothesis. Those that also mention the second one, do so only cursorily and in ways that make it quite independent from the first hypothesis.
   The weaknesses of the second hypothesis have been known for a long time. A large number of adjectives such as *vieux, beau, nouveau, gentil, lourd, sourd, court, fort,* or *bref* 'old, beautiful, new, nice, heavy, muffled, short, strong, brief' are marked and must have specific feminine representations (unless one posits more or less *ad hoc* rules that might transform, e.g., /bɛ^l/ into [bo] and /kur^t/ into [kur] to account for the alternations *beau* [bo] and its feminine *belle* [bɛl] or *court* [kur] (as in *un court instant* 'a short period') and its feminine *courte* [kurt]). Specific adjustment rules are also posited — a voicing rule for the alternations [s] ~ [z] as in *grosse* [gros] 'big (feminine)' ~ *gros z-orteil* 'big toe', or on the contrary a devoicing rule for the alternation [d] ~ [t] as in *grande* ~ *grand t-homme* — that are quite *ad hoc* as well; cf. the absence of devoicing for *long* in Modern French, under similar conditions: *longue* [lõg] ~ *un long*

g-apprentissage.[8] Even more problematic is the frequent analogical [t]-liaison found after *gros,* as in *un gros t-enfant* 'a big child',[9] which is totally incompatible with the second hypothesis. This liaison consonant cannot be related to a putative feminine form **grôte* [grot] (or **grotte* [grɔt]) — in contradiction with this hypothesis, which, in the unmarked (and hence innovative) cases, requires liaison consonants found after masculine singular adjectives to be phonologically related to the final fixed consonant of their feminine forms.

An observation by Martinon (1913: 365n1) concerning the defective distribution of many adjectives in "liaison contexts" suggested a simple experiment to further test the validity of these two hypotheses. In this test, some ten speakers were required to fill in the blank of the following sentences by the appropriate form of the adjective that appears between parentheses (the test was administered orally and the blanks were indicated by the nonsense syllables *tatata*):[10]

(1) a   *Nous avons eu*   *une … conversation (franc)*
     b.   *une … intervention (franc)*
     c.   *de … conversations (franc)*
     d.   *de … interventions (franc)*
     e.   *de … débats (franc)*
     f.   *de … entretiens (franc)*
     g.   *un … débat (franc)*
     h.   *un … entretien (franc)*

(2) e. *On pouvait*   *de … bouquets d'étoiles parfumées (blanc)*
          voir au loin
     f.   *de … amas d'étoiles parfumées (blanc)*
     g.   *un … bouquet d'étoiles parfumées (blanc)*
     h.   *un … amas d'étoiles parfumées (blanc)*

(3) a. *Donnez-moi*   *une … banane (sot)*
     b.   *une … orange (sot)*
     f.   *de … ananas (sot)*
     h.   *un … ananas (sot)*

Each adjective was followed by different nouns that exemplified various gender, number and phonological distinctions: (a–d/e–h) for feminine/masculine, (a, b, g, h/c–f) for singular/plural, and (a, c, e, g/ b, d, f, h) for consonant-initial/vowel-initial nouns. The full range of distinctions was used for *franc/franche* [frã/frãʃ] 'frank (masculine/ feminine)', and only a subset for *blanc/blanche* [blã/blãʃ] 'white (masculine/feminine)' and *sot/sotte* [so/sɔt] 'foolish (masculine/ feminine)'. In all three series, the last query related to a singular masculine noun beginning with a vowel, i.e., combination (h) — which was the only problematic form.

The target sentences in (1) were of the general form *Nous avons eu une franche **conversation*** 'We had a frank discussion', where *conversation* (feminine) 'discussion' alternated with the following similar nouns: *intervention* (feminine) 'speech', *débat* (masculine) 'discussion, debate' and *entretien* (masculine) 'discussion, debate'. In (2), they were of the form *On pouvait voir au loin de blancs **bouquets** d'étoiles parfumées* 'One could see in the distance white bouquets of fragrant stars' (after a verse by Mallarmé), where *bouquet* alternated with *amas* 'constellation'. In (3), they were of the form *Donnez-moi une sotte **banane*** 'Give me a foolish banana', where *banana* (feminine) alternated with *orange* (feminine) and *ananas* (masculine) 'pineapple'.

The purpose of the test was to see what liaison consonants, if any, would be used when the feminine adjective ended with the consonant [ʃ] — a consonant that never appears as liaison in "liaison contexts" (sentences 1 and 2) — and when a normally postnominal adjective was used in prenominal position, either in a poetic way as in sentences (2), or in a surrealistic fashion as in (3).

The sentences were controlled for semantic homogeneity and stylistic effect. All sentences in (1) are equally semantically plausible and devoid of stylistic effect: *franc/franche* is free to appear in prenominal position when it means *qui s'exprime ou se présente ouvertement, en toute clarté, sans artifice, ni réticence* 'expressed or presented openly, candidly, without disguise nor reserve' as in *Nous avons eu une franche explication* 'we had a frank explanation', *Jouons franc jeu* 'let's play a straightforward game', *une franche hostilité* 'a downright hostility' (cf. the *Petit Robert*); it appears,

however, that its distribution is defective before masculine singular vowel-initial nouns. In a similar way, all sentences in (2) were equally semantically plausible and equally stylistically marked, as *blanc/blanche* is not normally used in prenominal position; all these sentences had a distinctly poetical flavour. Finally, all sentences in (3) were both semantically implausible and stylistically marked, as *sot/sotte* is not normally used in prenominal position;[11] all would qualify as surrealistic creations.

The second hypothesis predicts that, in the absence of previous specific evidence to the contrary, speakers should *automatically* use the last consonant of the feminine form as a liaison in sentences (1h, 2h, 3h). The argument runs as follows. A typical French speaker is bound to have frequently heard before the test alternations *franc* [frɑ̃] ~ *franche* [frɑ̃ʃ], *blanc* [blɑ̃] ~ *blanche* [blɑ̃ʃ], and *sot* [so] ~ *sotte* [sɔt]. He must then have internalised the following underlying (lexical) representation for the singular masculine forms: /frɑ̃ʃ/, /blɑ̃ʃ/ and /sɔᵗ/. None of the other data he ever heard was likely to suggest that this internalised form was not adequate; in particular he never heard any liaison consonant before singular masculine vowel-initial nouns because (1) the distribution of *franc/franche* is defective in this context, and (2) the adjectives *blanc/blanche* and *sot/sotte* are not normally used in prenominal position. In a test where he is asked to produce sentences (1h, 2h, 3h), such speaker should produce a [ʃ]-liaison (for 1h and 2h) and a [t]-liaison (for 3h), just as automatically as he produces a [t] after *petit* or *maudit* 'damned', as this is the necessary consequence of the latent analysis. The fact that [ʃ] is otherwise never used as a liaison consonant in French or seldom used as a latent consonant should be irrelevant.[12]

The results of the test disconfirm the second hypothesis. None of the subjects spontaneously used a [ʃ]-liaison, and all refused *un franc ch-entretien* or *un blanc ch-amas* when they were later asked for grammaticality judgements. None of them spontaneously used the [t]-liaison for (3h), although some volunteered it after some hesitations. Furthermore, most speakers were reluctant to produce sentences (1h, 2h, 3h) and commented that "they would not say that" or that "they would say it differently" — a typical avoidance strategy used by speakers to cope with defective paradigms.

On the other hand, they had no problem with the other sentences for which they almost instantly gave the expected forms. This indicates that this blocking does not result from syntactic, semantic, or stylistic constraints; as these factors are identical, e.g., in *un franc débat* (1g) and *un franc entretien* (1h). Similarly, the sentences *une sotte banane* (3a) and *un sot ananas* (3h) are equally surrealistic and equally syntactically marked, yet the subjects, once they are told they are expected to produce surrealistic sentences, have no problem with (3a), yet find it difficult to combine the words for (3h). What appears to be problematic for the subjects is their (grammatical) inability to decide whether this construction requires a liaison consonant, and if so, what it is. The presence of a liaison consonant is not even at stake, as the subjects did not hesitate to produce, e.g., *de francs z-entretiens* in (1f) or *de blancs z-amas d'étoiles parfumées* in (2f); in this case, however, the plural [z]-liaison is grammatically determined.[13]

These results equally disconfirm the first hypothesis, even if one totally discards the second hypothesis. Our typical French speaker's internalised knowledge necessarily includes a specific phonological representation of *franc* (whatever it may be) which underlies his productions of this adjective. He never had a chance, however, to hear this adjective before a singular masculine vowel-initial noun, and thus could not have learned a specific liaison consonant for that context. As there are no semantic, syntactic, or stylistic constraints that prevent the syntactic derivation of *un franc entretien*, the first hypothesis predicts that the internalised grammar of this speaker should operate as smoothly as in *un franc débat* and automatically license the necessary phonic material for the speaker to use without further ado. But, as we have seen, that was not the case.[14]

These results are, on the contrary, quite compatible with Morin and Kaye's epenthetical analysis. As morphology began to be seriously examined in generative grammar, however, it appeared that a morphological analysis would offer a more precise alternative. In the (1992) analysis, I proposed that liaison after prenominal adjectives might be best interpreted as a form of adjectival declension, as one finds, e.g., in Occitan and in some Germanic languages. In this reanalysis, the adjective *grand/grande*, for instance, had three different

underlying phonological representations: a non-inflected masculine form /grã/, an inflected masculine form /grãt/ (or /grã+t/ with an explicit morpheme boundary between the stem /grã/ and the inflectional ending /t/) and a feminine form /grãd/. One weakness of this analysis, however, is that it required *ad hoc* manipulations of the inflectional ending to have it surface as the initial consonant of a following noun whenever a pause would intervene between the two, as in *un robuste, mais petit, t-enfant*, as such relinking is not observed with other, regular word-final consonants; for instance, in *il s'appuyait sur une robuste, mais petite, aspérité* 'he was leaning on a sturdy, but small, bump', the final consonant of *petite* [pətit] precedes the pause, and is not articulated as the onset of the following syllable.

4. Towards a new solution

Reanalysing prenominal liaison consonants as part of the following noun would automatically remedy this problem. Thus in *grand t-ami* 'good friend', the [t]-liaison would simply be a prefix of the noun [tami], just as in *grands z-ami* 'good friends', the [z]-liaison was analysed by Kaye and Morin as a plural prefix of [zami]. This implied, however, that the *head* of a noun phrase would receive an inflectional marker depending on the presence of a complement. I found it difficult to conceive that a syntactic head could be inflectionally dependent on a syntactically subordinate constituent. A learned colleague obligingly explained to me that such inflectional dependency was actually quite common and traditionally known as *status* inflection, taking two values: *status constructus* and *status absolutus* (cf. Mel'c&uk 1994: 260–262). In Persian, for instance, the head of a noun phrase receives a suffix (known as *idafa* or *izafet*) when it has any postnominal complement besides a relative clause,[15] cf. *ketab* 'book' vs. *ketabe xub* 'good book'.

There are thus no principled objections against an analysis of such liaison consonants as nominal prefixes. There would thus be five status prefixes in French [t, z, n, r] and [g], that can only be found before a sub-class of vowel-initial nominal stems (excluded are the

stems of nouns beginning with so-called aspirated *h*'s). In masculine singular nouns, these prefixes formally indicate the presence of a preceding adjective or determiner belonging to a specific class (*petit*, *grand*, *profond*, *maudit*… 'small, large, deep, damned…' for [t], *gros*, *mauvais*… 'big, bad…' for [z], *ancien*, *aucun*, *un*, *mon*… 'former, no, a/one, my…' for [n],[16] *premier*, *dernier*, *léger* 'first, last, light' for [r], and *long* for [g]).[17] Conversely, the absence of a status prefix in a singular noun that may otherwise take one is strongly correlated to the absence of one of the preceding adjectives or determiners: adjectives such as *énorme*, *bel*, *court*, *gentil*, *demi*, *sacré*… 'huge, beautiful, short, kind, half, bloody…' thus constitute another morphological class, requiring a following singular noun or adjective to be without an (overt) status prefix.

Under the new morphological analysis, the emergence of a [t]-liaison after masculine *gros,* as in *gros t-enfant,* while the final [s] is retained in the feminine *grosse* [gros], can be interpreted as the reallocation of the adjective *gros* to the class of adjectives *petit*, *grand*, *profond*, *maudit*, etc., that trigger the status prefix [t]. For obvious historical reasons, membership of an adjective to a given class corresponds to the nature of the now deleted final consonant, and synchronically very often also to that of the corresponding final consonant of its feminine form. This kind of synchronic relationship may assure the historical stability of a morphological class (cf. Aronoff 1994, for many such relationships between phonological shape and morphological class), but does not guarantee that it always will. Other morphological pressures may be applied that force changes in class membership, as happened in the grammar of such speakers that say *gros t-enfant.* In requiring that, in the unmarked case, the liaison consonant be the final consonant of the corresponding feminine form, the latent analysis makes it impossible for such changes to occur.

The historical development of French only allowed a small set of liaison consonants which did not include [ʃ] (the historically expected liaison for *franc* (feminine: *franche*) and *blanc* (feminine: *blanche*) was [k]). In the course of history these two masculine adjectives lost their membership in the [k]-status triggering class (for reasons that are not quite transparent for *franc*). In utterances where he intends to use *franc* or *blanc* before a vowel-initial singular mas-

culine noun such as *amas* or *entretien,* a speaker has no pre-set an-
swers, as his grammar contains no direct indication about its belong-
ing to any relevant adjective morphological class. He may try to in-
novate by direct analogy with other regularities. This may induce
him to create a new prefix [ʃ] (after the feminine forms [frɑ̃ʃ] and
[blɑ̃ʃ]) or a new prefix [k] (after the spelling *c*).[18] But this is an inno-
vation that is not yet part of in his automatic grammatical reflexes.
Whenever it is possible — and it is often possible in normal condi-
tions of speech production — he prefers to avoid such syntactic con-
structions (which is why defective distributions are usually retained).

   The status markers that I have postulated in this paper emerge
quite naturally from the segmentation of speech into words during
acquisition. It has long been observed that French-speaking children
often interpret liaison consonants (as well as some determiners or
part of determiners) as belonging to the following word: *le t-ours*
'the bear', *les t-ours* 'the bears', *le n-âne* 'the donkey', *le petit
z-enfant* 'the small child', *des n-oiseaux* 'some birds', *leʂ affaires*
'the things', *uⱦ écureuil* [ɛ̃ ekyrœj] 'a squirrel' (examples from Sour-
dot 1977; similar forms can be found in Kilani-Schoch 1998). At the
beginning, these consonants do not have the distribution of adult
status prefixes. The child most likely learns the unprefixed and the
various prefixed forms of the same noun as variants of a single lexi-
cal unit, having each an autonomous phonological representation:
avion, *l-avion*, *n-avion*, *z-avion*, *t-avion*… 'aeroplane'. At the begin-
ning, several variants may appear in the same contexts: *leʂ avions* ~
les z-avions, *un n-avion* ~ *un z-avion*, *un gros t-avion* ~ *un groʂ
avion*, etc. (complete free distribution of the variants is not attested,
but that may be simply because the available data are extremely
scanty; it is nonetheless possible that restrictions on possible colloca-
tions already exist at an early age). The child progressively learns
that these variants are determined by the context (*t-avion* appears af-
ter *petit*, *grand*, etc.; *n-avion* after *un*, *aucun*, etc…), and thus builds
up the morphological system proposed here.[19]

Notes

1   Even worse, Fouché's work is all too often used as a moral warrant by theore-
    ticians who did not even consult it (cf. Morin 1987: 820).
2. This is not quite true. Some "fixed" underlying consonants may also be pho-
    netically absent. This is the case of word-final liquids after most obstruents,
    and many obstruents after [s], e.g., *table* /tabl/ realised as [tabl] or [tab], *Est*
    /ɛst/ realised as [ɛst] or [ɛs], *ministre* /ministr/ realised as [ministr], [minist] or
    [minist]. In such cases, however, the "fixed" consonants are assumed to have
    been deleted by late stylistic rules.
3. According to Gougenheim (1935: 52), the term *latent* was introduced by
    Damourette and Pichon in the first published volume of their *Des mots à la
    pensée* (1927). The only term that they use with some consistency, however, is
    instable 'unstable'.
4. Encrevé (1983, 1988) is one of the rare exceptions that would allow a latent
    consonant to be licensed before a following consonant-initial word; this pro-
    perty, however, was limited to the final latent consonant of *quand* 'when' (cf.,
    however, Morin 1990).
5. Later analyses have, on the whole, fallen back on the same concept of "liaison
    contexts" extrapolated from a few archetypes. Sometimes, as in Lamarche
    (1991: 228–231) or Paradis and El Fenne (1995: 189), one finds a timid at-
    tempt to present some general rules, which however turn out to be no more in-
    formative. In the last of these articles, the authors misleadingly refer to "Morin
    and Kaye (1982) for a painstaking description of liaison domains in French",
    as there is no attempt in this reference to provide even a minimal description of
    the "liaison contexts" such analyses would require.
6. For expository reasons, all examples of epenthesis — that was only tangen-
    tially relevant to the discussion in Morin and Kaye's paper — were chosen
    among clitics and prenominal adjectives ending with a nasalised vowel; other
    examples are found in Kaye and Morin (1978).
7. Of course, *all* [z]-liaisons are not instances of the plural prefix, just as *all*
    word-final [z]'s are not instances of the plural suffix in English (*pace*
    Klausenburger who claims that the analogical form "*un sacré z-ennui* certainly
    seems to pose a problem for the plural analysis" (1984: 34) — the analogical
    model for *un sacré z-ennui* 'a big trouble' may well have been singular expres-
    sions such as *un gros z-ennui* 'a big trouble'.
8. The traditional norm for Standard French at the beginning of this century re-
    quired an unvoiced [k]-liaison after *long*. This norm appears to have already
    been archaic around 1930 (perhaps earlier, but reliable data are lacking). It is
    nonetheless often presented as the current norm, not only in older textbooks
    such as Fouché [1956] (1959:436), but also in more recent ones — in some
    cases, it could be a regional feature.

9. This example is given by Morin and Kaye (1982: 297), as they emphasised the importance of "false" liaisons for the study of liaisons.

10. This is actually the result of a pilot test that was conducted rather informally with friends and colleagues at coffee breaks or in similar situations. The results were so eloquent that a full formal test was deemed unnecessary; sceptics are invited to replicate it.

11. Except in the generative literature on French liaison and in a few fixed archaic expressions such as *sot animal* or *sots métiers*.

12. This is a fact that El Fenne and Paradis' (1995: 170–171) critique of Morin (1992) fails to understand. The authors seem to suggest that /ʃ/ might not be granted latent status in French because it is rarely found in word-final position. They do not tell us why statistics should be relevant rather than paradigmatic relationship, as is always assumed in such analyses. More generally, these authors' critique is seriously flawed because they do not understand the nature of the issues addressed in the experiment. For instance, they suggest that a valid experiment should use adjectives that are more commonly used in prenominal position ("dont la position prénominale est plus habituelle") without noting that the test was essentially based on *franc/franche* which is precisely such an adjective (in their discussion, they regularly present *franc/franche* as an exclusively postnominal adjective, on a par with *blanc/blanche* and *sot/sotte*). They fail to realise that most other prenominal adjectives should be avoided. In order to ascertain whether speakers automatically generalise the final consonant of the feminine form as a liaison consonant rather than use a specific liaison consonant previously learned from direct exposure, one cannot use prenominal adjectives for which such exposure is likely to have occurred long ago. The prenominal adjective *franc/franche* is exceptional in that respect — and can be used in the test — because its distribution is defective in contexts where the singular liaison consonant is expected.

13. I find curious El Fenne and Paradis' recurrent critique that the experiment reported in Morin (1992) did not control for semantic, syntax and/or style.

14. That does not mean that the subjects did not "try out" some forms, especially as the experimental situation, and sometimes the experimenter, pressed them to produce "something". The most frequent forced answer to (1h) was *franc* [frã], without liaison. Some other speakers tried out a [t]-liaison and even once a [k]-liaison, without real conviction though. Most of the subjects concluded that in any case they would avoid such constructions. The existence of various morphological, grapho-phonemic or analogical strategies that allowed such answers is not an issue here. What is significant is the striking difference observed between the reaction to the (1h, 2h, 3h) sentences and the others. *Wug*-tests (à la Jean Berko) with nonce forms, as used by El Fenne and Paradis in their reply to Morin (1992), are particularly ill-fitted to examine defective distributions. For instance, it is simple enough to have a French speaker produce

[il drijɛ] in a *wug*-test as the third singular imperfect verb form corresponding to the nonce third singular present [il dri], although the same speaker will consistently claim that he cannot think of ways to produce the third singular imperfect form of the defective verb *frire* 'to fry', although he can produce its third singular present form [il fri] *ad libitum.*

15. The *idafa* prefix may have other functions.

16. The present analysis extends automatically to [n]-liaison after adjectives such as *ancien* where the nasalised vowel is retained, as in *un ancien ami* [ɛ̃ nɑ̃sjɛ̃ nami] 'an old friend'. As shown by Tranel (1990, 1992), adjective forms with a denasalised vowel, e.g., *bon* in *un bon ami* [ɛ̃ bɔn ami] 'a good friend', must be analysed as suppletive.

17. Just as Persian's *idafa* may appear recursively on each non-final postnominal complement: *ketabe xub* 'good book', *ketabe xube bozorg* 'big good book', *ketabe xube bozorge daneʃdʒu* '(the) student's big good book' (cf. Mel'čuk 1994: 261), French status prefixes may also appear before prenominal adjectives and specifiers, as in *un n-ancien n-excellent t-officier* 'a former excellent officier'.

18. This appears to be how a new prefix [g] was developed after *long*.

19. Morel (1994: 88–89) suggests a different scenario. She also supposes an initial stage where the unprefixed and the prefixed variants of the same noun have different phonological representations as argued here, followed however, by a complete restructuring of the internalised lexicon (not yet achieved by the age of four), after which the child erases all phonological representation of the early prefixed forms (*l-avion*, *n-avion*, *z-avion*, *t-avion*, etc.) from his memory, while he presumably adds a latent consonant to the early representations of singular masculine adjectives. The reason why she postulates such a drastic restructuring at such a relatively late period is not motivated by any specific empirical evidence, only by her unquestioned adoption of the latent model for liaisons.

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