# Contemporary Morphology

Edited by

Wolfgang U. Dressler, Hans C. Luschützky, Oskar E. Pfeiffer, John R. Rennison

Mouton de Gruyter Berlin · New York 1990 Parasitic formation in inflectional morphology

Yves-Charles Morin

One can oppose two radically different conceptions of inflectional morphology, which can be described as "lexicon internal" and "lexicon external". This paper examines the formation of past subjunctive verbs in French which involves a process described by Matthews (1972: 86) as "parasitic", whose analysis favors a model of lexicon-internal inflection.

### 1. The place of inflectional morphology in grammar

In a model of lexicon-internal inflection, lexical items appear fully inflected in the lexicon (cf. Bresnan 1982, Halle 1973, Kiparsky 1982, Lieber 1980) and are the only forms which "are lexically inserted into phrase structures" (Bresnan 1982: 307). Under this conception, the lexicon is not only a repository of the idiosyncratic properties of the language, but also generates forms which may be only temporarily retained.

In the lexicon-external model of inflection developed by Anderson (1977, 1982, 1986), the lexicon may also have some generative capacities, but only for derivation. It "supplies a comprehensive set of well-formed stems ... which represents complete words, with exception of inflectional material" (Anderson 1982: 592). Stems may nonetheless contain some inflectional information, but only those which are idiosyncratic. For instance, the lexical entry for *naître* in French would not only contain the default stem /nɛs-/ (i.e., the stem used in all but the otherwise specified cases), but also the idiosyncratic stem /naki-/ for preterit indicative, specified as [preterit indicative] in the lexicon.

## 2. Defective paradigms

It is sometimes thought that the existence of defective paradigms might jeopardize a lexicon-external model of inflection: "if only *ir*regular inflections are listed in the lexicon, we have no ready account of the problem of defective paradigms" notes Anderson (1982: 593n9). Actually, defective paradigms would only be problematic if one had to postulate a default stem in the analysis of a defective paradigm whose gaps are neither semantically nor phonologically motivated (cf. Morin 1987).

The theoretical difficulties traditionally associated with defective paradigms in French (Dell 1970: 227-228, Plénat 1981: 155-156), for instance, do not result from any specific lexical model for inflection, but from further assumptions about the allomorphic relationship between stems. The restrictions on the verb *frire*, which is limited to infinitive, past participle, future, conditional, and singular present indicative forms can be shown to result from the fact that it only has one specific stem /fri-/ - lexically marked for these inflections - and no default stem (cf. Morin 1987).

In Anderson's model, lexical insertion allows a stem to be inserted under a syntactic node only when it is consistent with the requirements of the morpho-lexical representation of that node. None of the stems of the verb *frire*, thus can be inserted under, e.g., a syntactic node [+Vpresent indicative 1pl] if the lexical entry of this verb neither contains a default stem nor a specific one for [present indicative pl]. The insertion procedures proposed by Anderson thus automatically account for *frire*'s defectiveness.

### 3. Parasitic formation

The past subjunctive is now obsolete in modern French. The fact that there nonetheless exist some speakers who have internalized this tense allows us to assume that an account of the verbal morphology of French which includes the past subjunctive is a reasonable model of a natural inflectional system and hence relevant to linguistic theory.

Past subjunctive stems are regularly derived from the corresponding (unmarked) preterit indicative stems by adding the suffix /s/ for all persons, except for the third person singular for which the past subjunctive

stem is identical to the preterit stem; e.g., from the preterit indicative stem /dɔrmi-/ of *dormir*, one derives two past subjunctive stems: (1) /dɔrmi/ for third person singular and /dɔrmis-/ for all other persons. This correspondence between preterit indicative and past subjunctive stems is systematic , whether the preterit stem is regular, as in the case of *excuser*, pret. /ɛkskyza-/, past subj. /ɛkskyza(s-)/, semi-regular as in the case of *devoir*, pret. /dy-/, past subj. /dy(s-)/, or totally idiosyncratic, as in the case of *être*, pret. /fy-/, past subj. /fy(s-)/ or *naître*, pret. /naki-/, past subj. /naki(s-)/. Defective verbs such as *extraire* which lack a preterit stem also lack a past subjunctive stem. Defective verbs which lack a default stem, but have a specific preterit stem have a past subjunctive stem, e.g., *cheoir*, pret. /ʃy-/, past subj. /ʃy(s-)/.<sup>1</sup>

In this account of past subjunctive stems, one "does derive a 'stem' (i.e., a part of one word-form) from another 'stem' (a part of anotherword-form) of identical status", a process Matthews (1972: 86) calls a parasitic formation. This runs counter the principles for inflectional morphology proposed by this author, who then develops other tools to circumvent the problem (Matthews 1972: 175-182).

Parasitic formations are equally problematic for a model of lexiconexternal inflection if the basis for the derivation is a stem which sometimes does, and sometimes does not, belong to the lexicon. To see why, let us examine how some specific cases could be analyzed in Anderson's model.

The only stem of *naître* which can be inserted under a node having the morpholexical representation [subjunctive past 1pl] is the specific preterit stem /naki-/ to which the regular affixes /-s-/, /-j-/, and /- $\tilde{o}$ / would be added by the rules of the "phonological" component to form /nakisj $\tilde{o}$ /. The same analysis applies to all the verbs which have a specific preterit stem. In the case of regular verbs, however, the lexicon does not have access to any such stem — as regularly inflected forms are not generated within the lexicon. One would thus be required to have two completely different mechanisms for past subjunctive depending upon the presence of a specific preterit stem in the lexicon. This is clearly inadequate, as the formation of past-subjunctive forms is obviously the same in all cases.

One solution to the problems raised by the parasitic formation described here for a model of lexicon-external inflection would require that both preterit-indicative and past-subjunctive forms be derived from a common intermediate stem, phonologically identical but nonetheless morphologically distinct from the preterit indicative — that is to say, find an alternate analysis without parasitic formation. For instance, one would derive from the intermediate stems /\*ɛkskyza-/, /\*dormi-/, and /\*naki-/ both the preterit indicative stems /ɛkskyza-/, /dɔrmi/, and /naki-/and the past subjunctive stems /ɛkskyza(s)/, /dɔrmi(s-)/, and /naki(s-)/. The idiosyncratic stem /\*naki-/ would be listed in the lexicon, while the regularly inflected forms /\*ɛkskyza-/, /\*dɔrmi-/ would be derived from the default stems /ɛkskyz-/ and /\*dɔrm-/ outside of the lexicon. The complete parallelism between preterit indicative and past subjunctive could now be accounted for directly by the (lexicon-external) rules of the grammar which could derive them both in similar ways from the intermediate stems.

However, there does not appear to be any empirical justification for such intermediate stems. In particular, the intermediate stems cannot be interpreted as being "past" stems from which one could derive both past subjunctive and past (traditionally called "preterit") indicative stems. Although one can reasonably define a "past" morphological category to include both past subjunctive and preterit indicative, it would also have to include at least the imperfect indicative. For instance, congruence patterns which could be used to justify a common past category, do not distinguish between imperfect and preterit indicative verbs which can equally govern past subjunctive embedded sentences: (i) *il demanda* [preterit indicative] *alors qu'on l'excusât* [past subjunctive] vs. (ii) *il demandait* [imperfect indicative] *souvent qu'on l'excusât* [past subjunctive] (cf. Grevisse 1980: section 2743). The imperfect forms, however, cannot be derived from such intermediate stems, cf. the imperfect indicative stem /nes-/ of *(il) naissait* of *naître* vs. the preterit indicative stem /naki-/.

One could perhaps try to justify intermediate stems underlying both preterit indicative and past subjunctive stems as a matter of principle, because such stems cannot be morphologically derived from one another, although they are obviously related. This stance would deny any relevance to the worries about parasitic formation discussed by Matthews (1972), and would claim that the distinction between lexicon-internal and lexiconexternal inflection is not an empirical issue. If this is the case, then no argumentation is possible.

But if we assume that the distinction must be empirical, then there is but one means to express in a linguistically significant manner the complete regularity by which past subjunctive stems are systematically derived from the corresponding preterit indicative stems — whether or not these stems are completely predictable or highly idiosyncratic, and that is, by allowing all such stems to appear in the lexicon. In other words, the formation of regular inflected forms must be allowed within the lexicon.

## 4. Conclusion

The formation of past subjunctive forms in French shows the necessity for at least some of the inflection to be carried within the lexicon. This immediate conclusion may even seem acceptable to some proponents of lexicon-external inflection. For instance, Platt (1981: 53), who otherwise adopts Anderson's model, proposes stem-formation rules which derive perfect and imperfect forms in Old Provençal within the lexicon (she does not argue, however, that this is an empirical necessity). Platt, in all other cases however, describes the inflection as a lexicon-external operation.

One certainly cannot accept that the principles governing the distinction between lexicon-external and lexicon-internal operations should be simple matters of convenience. If inflections in some well-defined cases must be carried within the lexicon, would it not be conceptually simpler if it were always the case? As a matter of fact, no strong empirical argument appears to have ever been advanced for lexicon-external inflection. In Chomsky (1965: 84-88), where an autonomous lexical component was first developed in generative grammar, lexical insertion preceded syntactic transformations, and lexicon-external inflection appeared at first to be a necessity as the morphosyntactic properties of inflected forms are not specified at this level of the derivation. This choice, however, is not felicitous, as there is no simple way to insert idiosyncratic stems at this stage, cf. Halle (1973: 9), who argued in favor of lexicon-internal inflection and suggested that "lexical insertion transformations insert partial or entire paradigms" and that the choice of relevant forms be made later after the syntactic rules have specified the morpho-syntactic properties. The decision to have lexical insertion apply after the syntactic rules, as in Anderson (1982), is another way to circumvent that problem, but does not justify the choice of lexicon-external inflection, which probably is one of "the many aspects of this model [which] are assumed without justification" (Anderson 1982: 594). Indeed, the formal mechanism he proposes for inflection can be straightforwardly transposed to operate within the lexicon, although a reformulation along the lines proposed by Platt for Old Provençal perfect may be more appropriate (cf. also Morin 1987 for another model of lexicon-internal inflection).

As a more general conclusion, therefore, the characteristics of past subjunctive inflections in French and the absence of strong empirical evidence for lexicon-external inflection strongly favor a conception of lexicon-internal inflection in linguistic theory.

#### 202 Yves-Charles Morin

#### Note

1. Bouix-Leeman et al. (1980: 81) only mention the third singular past subjunctive stem  $/\int y_{-}$ , but my informants also used the general stem  $/\int y_{-}$ , without hesitation.

#### References

Anderson, Stephen R.

1977 "On the formal description of inflection", CLS 13: 15-44.

1982 "Where's morphology?", Linguistic Inquiry 13: 571-612.

- 1986 "Disjunctive ordering in inflectional morphology", Natural Language and Linguistic Theory 4: 1-31.
- Bouix-Leeman, Danielle Colonna-Cesari, Helène Dubois, Jean Sobotka-Kannas, Claude.

1980 Larousse de la conjugaison. (Paris: Larousse).

Bresnan, Joan (ed.)

1982 The mental representation of grammatical relations. (Cambridge, MA: MIT Press).

Chomsky, Noam

1965 Aspects of the theory of syntax. (Cambridge, MA: MIT Press).

Dell, François

1970 Les règles phonologiques tardives et la morphologie dérivationnelle du français [PhD dissertation, MIT].

Grevisse, Maurice

1980 Le bon usage (11° éd.) (Paris & Gembloux: Duculot).

Halle, Morris

- 1973 "Prolegomena to a theory of word-formation", *Linguistic Inquiry* 4: 3-16. Kiparsky, Paul
  - 1982 "From cyclic phonology to lexical phonology", in: H. van der Hulst-N. Smith (eds.) The structure of phonological representations (Dordrecht: Foris), vol. 1, 131-175.

Lieber, Rochelle

1980 On the organization of the lexicon [Ph.D. dissertation, MIT]. Matthews, Peter H.

1972 Inflectional morphology. (Cambridge: Cambridge University Press).

Morin, Yves-Charles

- 1987 "Remarques sur l'organisation de la flexion des verbes français", ITL-Review of Applied Linguistics 77/78: 13-91.
- 1988 "Disjunctive ordering and French morphology", Natural Language and Linguistic Theory 6: 271-282.

Platt, Diana

1981 "Old Provençal verb inflection: the balance between regularity and irregularity in morphology", in: T. Thomas-Flinders (ed.) *Inflectional morphology: introduction to the extended word-and-paradigm theory*, (UCLA occasional papers 4, Working papers in morphology), 41-71.

Plénat, Marc 1981

L' "autre" conjugaison ou de la régularité des verbes irréguliers (Cahiers de grammaire 3, Université de Toulouse-le Mirail).