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# LEXICAL INTEGRITY AS A CONSTRUCTIONAL STRATEGY 

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## 1. INTRODUCTION

What is the input of word formation? As basic as this question may appear, a clear answer is still missing. Not only that: Depending on the answer, the very existence of morphology as an autonomous component of language has been challenged. In this sense, the Lexical Integrity Hypothesis (cf. Bresnan and Mchombo 1995) as well as the No Phrase Constraint (cf. Botha 1983) are complementary principles watching over the autonomy of morphology from other components, and specifically syntax. Both principles have been strongly criticized and even rejected as empirically inadequate. ${ }^{1}$ It is not my concern to enter into details here; for the sake of the following discussion, my only interest is to emphasize the 'spirit' underlying both of them, namely their watchdog function against any intrusion of syntax into (lexical) morphology.

Those who want to deny any autonomy to morphology usually draw attention to two kinds of examples showing that morphology can be directly fed by syntax, and accordingly no kind of lexical integrity can be seriously defended. Therefore, morphology as a theoretical construct is supposed to lack any conceptual density and can be reduced to more general properties of the language faculty (cf. Lieber 1992:21). The first set of examples comes from incorporation, where it can be shown that lexical stuff and syntactic structures are so intertwined that the basic notion of lexical word gives up much of its sense (cf. Baker 1988 vs. Mithun 1984). Against the reductionist approach adopted by those who favor a syntactic treatment of noun incorporation, one can object that a thoroughly syntactic analysis cannot cope with «the fact that apparently syntactic construcions frequently become highly lexicalized as languages develop. At some point, then, these syntactic processes have to enter the lexicon, so why not assume that such processes, where mediated morphologically, are given a single level at which they are represented, namely the morphological component or the lexicon?» (Spencer 1993: 304).

This line of thought can be nicely combined with similar observations by Carstairs-McCarthy (2005), who shows that what determines the relative well-formedness of an English phrasal compound like defective component problem with respect to ?expensive component problem has to do with
whether or not one of its elements is a lexical item, in the sense of being institutionalised and stored as a whole. In this example the phrase defective component is lexicalized as a cliché, whereas expensive component is not, notwithstanding their text frequencies which are quite similar, at least relying on a Google query.

By mentioning phrasal compounds we touched upon the second argument generally used against lexical integrity, because they display any kind of inflected (i.e. syntactically activated) word forms as shown by the much-discussed cases (cf. Lieber 1992:11-12), reported in (1) for English, Dutch, German and Italian: ${ }^{2}$
(1) a. the ich bin ein Berliner speech
a floor of a birdcage taste a certain je ne se quoi quality
b. kleine-kinderen gedrag lach of ik schiet humor God is dood theologie
c. die Muskel-für-Muskel-Methode die Gott-mit-uns-Ideologie die Wer-war-das-Frage
d. due ragazze tutte casa e chiesa il metodo porta a porta Tutte proposte usa e getta
'small children behavior'
'laugh-or-I-shoot humour'
'God-is-dead theology'
'the muscle for muscle method'
'the God-with-us ideology
'the who-was-that question'
'two home-and-church girls'
'the door-by-door method
'use-and-waste proposals'

The paper will focus on this latter set of examples, drawing particular attention to compounding as input of derivation. The latter case is highly significant for the lexicalist hypothesis for evident reasons.

## 2. ITALIAN WORD FORMATION: A CONSTRUCTIONAL VIEW

In Italian, compounds can be further derived by means of suffixes:
(2) ferrovia 'railway' $\rightarrow$ ferroviere 'railwayman'
crocerossa 'Red Cross' $\rightarrow$ crocerossina 'Red Cross nurse'
malavita 'underworld' $\rightarrow \quad$ malavitoso 'criminal'
guardaroba 'wardrobe' $\rightarrow$ guardarobiera 'linen maid'
centrocampo 'middle field' $\rightarrow$ centrocampista 'center halfback'
About the productivity of this strategy there may be doubts, as laid down by Scalise (1994:238). However, the question is much more complex than the sketchy picture given by Scalise, and needs probably to be investigated separately for the single suffixes as observed by Bisetto (2004:54). In fact,
if one takes into consideration highly productive suffixes like -ista '-ist', -ismo '-ism', -ale, '-al', etc., a number of examples comes to mind which speak in favor of the productivity of the process. At any rate, the problem needs to be thoroughly investigated in a systematic way (see Gaeta 2003 for a first attempt). Moreover, the question of bracketing paradoxes and of false intermediate steps shows up here, as can be gathered from the following examples which are mostly extracted from a three years newspaper corpus (cf. Gaeta \& Ricca 2006), and are not attested even in big-size dictionaries like GRADIT containing about 350,000 entries:
a. terzomondiale
cortocircuitale
doppiosensista
liberoscambista
stileliberista
luogocomunismo
scialpinismo
terzaforzismo
primonovecentesco
tardonovecentesco
b chiaroscurale
doppiogiochismoldoppiogiochista ' doppiolavorismoldoppiolavorista terzaviista
terzomondismolterzomondista
seigiornista
duecentometrista
seimetrista
'of the Third World'
'of a short circuit'
'who's expert on double entendre'
'supporter of free trade'
'crawl-swimmer'
'attitude of being full of commonplaces'
'Alpine-skiing'
'supporter of the Third Force'
'of the early $20^{\text {th }}$ century'
'of the late $20^{\text {th }}$ century'
'of the chiaroscuro'
'(attitude of being a) double-crosser'
'attitude of / who's having a double job'
'supporter of the third way'
'(attitude of) supporter of the Third World'
'participant of the Six-Days cycle race'
'runner of the two hundred meters race'
'pole-vaulter recording six meters'

In (3a) an interpretation like terzo+mondiale is formally possible, even though semantically wrong, i.e. we have a classical bracketing paradox. In (3b) the double analysis is not possible since in chiaro + *scurale the derivative $*$ scurale is not attested (nor even possible), partially similar to cases like the much-discussed English example blue-eyed, where the derivative *eyed is not attested (cf. Spencer 1991:398-417):
(4) a. $\left[[\text { terzo }]_{\mathrm{A}}[\text { mondiale }]_{\mathrm{A}}\right]_{\mathrm{A}} \quad\left[\left[[\text { terzo }]_{\mathrm{A}}[\text { mond }]_{\mathrm{N}}\right]_{\mathrm{N}} \text { iale }\right]_{\mathrm{A}}$
b. $\left[[\text { chiaro }]_{\mathrm{A}} *[\text { scurale }]_{\mathrm{A}}\right]_{\mathrm{A}} \quad\left[\left[[\text { chiaro }]_{\mathrm{A}}[\text { scur }]_{\mathrm{A}}\right]_{\mathrm{N}} \text { ale }\right]_{\mathrm{A}}$

Booij (2005) has recently suggested treating bracketing paradoxes in a construction morphology framework, according to which schemas are better-suited to deal with such false intermediate steps. Three general schemas must be assumed:
a. Compounding: $\left.\left[[\mathrm{X}]_{\mathrm{X}}\right][\mathrm{Y}]_{\mathrm{Y}}\right]_{\mathrm{Y}} \quad$ c. Prefixation: $\left[\mathrm{X}[\mathrm{Y}]_{\mathrm{Y}}\right]_{\mathrm{Y}}$
b. Suffixation: $\left[[\mathrm{X}]_{\mathrm{X}} \mathrm{Y}\right]_{\mathrm{Y}}$

To represent Booij's schemas, I adopt the (black) box notation displayed in (6). ${ }^{3}$ Compounds consist of two lexical items (the two internal boxes in (6a)), each specified with a lexical category; the internal box with the bold line represents the head of the compound which percolates to the external box. ${ }^{4}$ Similarly, a suffix (cf. (6b)), which behaves as a head, is represented as a bolded box containing a further box, i.e. the input form selected. On the other hand, prefixes in (6c) are not considered heads and accordingly the external box is not bolded, because the whole shows the same lexical category of the inner base. ${ }^{5}$
(6)
a.

b.

c.


Unlike Dutch as investigated by Booij, Italian compounds may be either left- or right-headed, depending on the lexical categories involved. Usually, compounds are left-headed; however, if the first member of the compound is an adjective and the second one is a noun, the latter usually plays the head-role (cf. Scalise 1992 for a general survey of Italian compounds):
a. $\left.\left[[\mathrm{X}]_{\mathrm{X}}\right][\mathrm{Y}]_{\mathrm{Y}}\right]_{\mathrm{X}}$
$\left[[\text { natura }]_{\mathrm{N}}[\text { morta }]_{\mathrm{A}}\right]_{\mathrm{N}}$ 'still life'
b. $\left.\left[[\mathrm{X}]_{\mathrm{X}}\right][\mathrm{Y}]_{\mathrm{Y}}\right]_{\mathrm{Y}}$
$\left[[\text { alto }]_{\mathrm{A}}[\text { piano }]_{\mathrm{N}}\right]_{\mathrm{N}}$ 'table-land'

An exception is constituted by color terms, in which a noun occurring on the right acts as a modifier: ${ }^{6}$
(8) $\left.\left[[\text { color term }]_{\mathrm{A}}\right][\mathrm{Y}]_{\mathrm{Y}}\right]_{\mathrm{A}}$
$\left[[b l u]_{\mathrm{A}}[n o t t e]_{\mathrm{N}}\right]_{\mathrm{A}} \quad$ 'night-blue'
$\left[[r o s s o]_{\mathrm{A}}[\text { fuoco }]_{\mathrm{N}}\right]_{\mathrm{A}}$ 'fire-red'
$\left[[\text { verde }]_{\mathrm{A}}[\text { cupo }]_{\mathrm{A}}\right]_{\mathrm{A}} \quad$ 'dark green'
Therefore, the general schema in (6a) must be further specified adding more conditions on the lexical categories implementing it. Apart from these details, we can treat an Italian compound like centrocampo 'center halfback' or altopiano as the instantiation of a general schema, which is part of the lexicon and represents the pairing of a formal structure with a semantic structure, as suggested by Booij for Dutch:


The box notation allows one to represent the different patterns as a whole net of specific implementations of the general underspecified schema when lexical items are inserted into it:


The relevant thing to be gathered from the box notation is that the schema provides the general frame which is further specified by the concrete items entering the schema and forcing more specific interpretations as for compounds containing color terms.

In a similar way, a particular suffix represents the instantiation of the more general schema, in which each lower node inherits the property of its dominating node:

```
a. [[X] [X Y] 
    [[X] }\mp@subsup{]}{\textrm{N}}{}\mp@subsup{i}{}{\mathrm{ sta }}\mp@subsup{]}{\textrm{N}}{}\quad\mathrm{ 'one who carries out an activity relating to/typical for X'
    [[aut]}\mp@subsup{]}{\textrm{N}}{}\mathrm{ ista ] ]
[auto]}\mp@subsup{}{N}{
```

b. $\left[[\mathrm{X}]_{\mathrm{X}} \mathrm{Y}\right]_{\mathrm{Y}}$

| ${ }_{\left[[\mathrm{X}]_{\mathrm{N}}\right.}$ ale $]_{\mathrm{A}}$ | 'relating to X ' |
| :--- | :--- |
| $\left[[\text { circuit }]_{\mathrm{N}} \text { ale }\right]_{\mathrm{A}}$ | 'of a circuit' |

$\left[\right.$ circuito $_{\mathrm{N}}$

In the case of autista, this word inherits the properties from the base lexeme auto to which it is linked. The semantics of the schema must be general enough to capture the broad spectrum of meanings of the derivatives: for an
auto it is typical to drive it, but for a finale it is typical to play it; therefore the meaning of finalista will be 'player of the finale'. Thus, the semantics of the formal schema also needs to be schematic enough to be enriched on the basis of encyclopaedic knowledge. The same holds for -ale. This is summarized by the general net:


To account for derivatives such as those in (3) above, Booij (2005) assumes the conflation of the compounding and of the suffixation schemas, in that «this template does not introduce a new formal type of complex words, but it expresses that it is the combination of two independently motivated word formation processes that systematically and productively co-occur»:

centrocampista doppiosensista naturamortista


The box notation allows us to represent the conflation process in the following straightforward way:
(14)


As suggested by Booij (2005), conflation may give rise to constructional idioms, namely constructions which regularly result from the combination of occurring schemas and display some kind of semantic idiosyncrasy, as in the case of the German examples given in (15a), comparable to the similar Italian structure in (15b), in which the left constituent A has scope over the nominal base of the adjectival head:
a. $\left[\mathrm{A}[\mathrm{N}-\mathrm{ig}]_{\mathrm{A}}\right]_{\mathrm{A}}$
recht-eck-ig
kurz-bein-ig
zwei-silb-ig
'having N with property A '
'rectangular'
'short-legged'
'disyllabic'
b. $\left[\mathrm{A}\left[[\mathrm{X}]_{\mathrm{N}} \mathrm{Y}\right]_{\mathrm{A}}\right]_{\mathrm{A}} \quad$ 'relating to the A span of $\mathrm{N}^{\prime}$
tardorinascimentale 'relating to the late Renaissance'
primonovecentesco 'relating to the early $20^{\text {th }}$ century'
tardoalessandrino 'relating to the late period of the Alexandrian empire' tardoborbonico 'relating to the late period of Borbonic kingdom'

The relevant fact expressed by conflation is that starting with a fully regular stepwise derivation (cf. respectively rechteckig $\leftarrow$ recht + eckig and tardorinascimentale $\leftarrow$ tardo+rinascimentale), an anomaly arises in cases like kurzbeinig or tardoborbonico, because the semantic interpretation requires the adjectival modifer to have scope over the embedded noun rather than over the derived adjective, which is furthermore not attested in German (cf. *beinig). Notice that for tardorinascimentale as well as for rechteckig a direct derivation respectively from tardo Rinascimento 'late Renaissance' and Rechteck 'rectangle' is available (and required by semantics), whereas this is excluded for tardoborbonico $\leftarrow{ }^{*}$ tardo Borbone and kurzbeinig $\leftarrow *$ Kurzbein.

A conflation can be further assumed for the fairly productive pattern of the Italian so-called parasynthetic verbs (cf. Iacobini 2004 for a survey):
a. im-burr $N_{N}$ are 'to butter' $s^{- \text {brin }_{N}}$-are 'to defrost'

[^0]$\begin{array}{lll}\text { b. }[ & \left.[\text { oli }]_{\mathrm{N}} \text { are }\right]_{\mathrm{V}} \text { 'to oil' } & \leftarrow \text { olio 'oil' } \\ {\left[\text { im }[\text { mettere }]_{\mathrm{V}}\right]_{\mathrm{V}} \text { 'to put in' }} & \leftarrow \text { mettere 'to put' } \\ {\left[s[\text { caricare }]_{\mathrm{V}}\right]_{\mathrm{V}} \text { 'to unload' }} & \leftarrow \text { caricare 'to load' }\end{array}$
They have always been considered problematic because of the false intermediate step required by the alledged conversion burro $\rightarrow$ *burrare followed by a prefixation *burrare $\rightarrow$ imburrare, similar to the attested olio $\rightarrow$ oliare and mettere $\rightarrow$ immettere, caricare $\rightarrow$ scaricare. As an alternative, the prefix has been considered head of the derivative, forcing a category change and the consequent inflectional class assignment of the derived verb. Under a constructional approach, in which the derivatives are accounted for by means of the conflation of the basic schemas for prefixation and for suffixation shown in (17), these problems disappear because of the crucial property of construction morphology of allowing for intermediate representations, in between the concrete words and the abstract pattern.


Notice that the conflation of the schemas for prefixation and suffixation presupposes the simultaneity of the affixation processes (as already suggested by Darmesteter $1877: 129$ ), but assigns a priority to the latter over the former. Although it might appear stipulative (at least for those who view prefixes as heads, see above), this is justified by the occurrence of word pairs displaying different prefixes: ingrassare/sgrassare 'to grease/degrease', infornare/sfornare 'to put into/to take out of the oven', etc. ${ }^{7}$

Thus, the constructional representation explains the effects of paradigmatic morphology as in terzomondiale; furthermore, it solves the bracketing paradoxes represented by tardonovecentesco or the false intermediate steps required by parasynthetic verbs. As concluded by Booij (2005):
«Lexical hierarchies of this sort, with individual lexemes at the bottom of hierarchy, and abstract patterns at higher levels express the tight relationship between the paradigmatic axis and the syntagmatic axis of language structure. Words can be assigned internal morphological structure and linked to abstract constructions (the syntagmatic dimension) on the basis of systematic formmeaning correspondences between existing lexemes (the paradigmatic dimension)»

## 3. CONSTRUCTIONAL IDIOMS AS DERIVATIONAL BASES

On this background, let us now consider further examples of conflated derivatives which are very peculiar because they come from what has been recently called a constructional idiom (cf. Fillmore, Kay and O’Connor 1988, Jackendoff 1997, Kay and Fillmore 1999):
cerchiobottismo / cerchiobottista
panciafichismo / panciafichista
gattotopesco
'the attitude of/who's supporting both sides in an argument'
'neutralism / neutralist'
'lit. cat-mous-y'

Their input is given by the so-called formal idioms in (19), which have the peculiarity of being partially underspecified, or lexically open, because they can be fitted into syntactic contexts:
(19) dare un colpo al cerchio e uno alla botte 'lit. give a blow to the hoop and another to the cask'
salvar la pancia per i fichi
giocare come il gatto col topo
'lit. save the belly for the figs, go easy on the first courses'
'lit. play like the cat with the mouse act cruelly towards somebody'

Far from representing severe violations of lexical integrity, I rather argue that they provide empirical support for highlighting the role played by lexical integrity as a constructional strategy, which forces the selection of lexical material filtering out grammatical stuff, in the cases at stake here articles, prepositions, and even verbs.

Concretely, this happens by matching the input idioms with the complex construction resulting from the conflation of the compound construction $\left[[\mathrm{X}]_{\mathrm{X}}[\mathrm{Y}]_{\mathrm{Y}}\right]_{\mathrm{X}}$ in (6a) and the construction for suffixation $\left[[\mathrm{X}]_{\mathrm{X}} \mathrm{Y}\right]_{\mathrm{Y}}$ in (6b), which allows compounds to be further derived as shown above for [[[centro][camp]]ista] 'center halfback'. As has been seen in § 2, constructions specify the basic container for possible lexical derivations, independently of the intermediate steps, which may not exist: *cerchiobotte, *bottista.

A construction is output-oriented: it is not bound with what is the (syntactic or lexical) base for the input, but it rather guides the derivation mapping the input onto a morphological output configuration. ${ }^{8}$ The morphological schema filters out grammatical material leaving only the lexical material matching the construction. ${ }^{9}$ This is further confirmed by a significant number of cases, only sporadically quoted in the literature, in which similar derivatives based on frozen phrases occur:

| braccioferrista | $\leftarrow$ braccio di ferro |
| :--- | :--- |
|  | 'lit. arm of iron, trial of strength' |
| caneguardismo | $\leftarrow$ cane da guardia 'watch-dog' |
| casalibertario/casalibertista | $\leftarrow$ casa delle libertà 'house of the liberties' |
| malpancista | $\leftarrow$ mal di pancia 'stomach ache' |
| restomondista | $\leftarrow$ resto del mondo 'rest of the world' |
| saccopelismo/saccopelista | $\leftarrow$ sacco a pelo 'sleeping bag' |
| saltomortista | $\leftarrow$ salto della morte 'somersault' |
| volovelismo/volovelista | $\leftarrow$ volo a vela 'soaring' |
| portaportista ${ }^{10}$ | $\leftarrow$ porta a porta 'door-by-door' |
| marcabollare | $\leftarrow$ marca da bollo |
| 'provide with stamps' | 'revenue stamp' |

These cases provide further evidence in support of the view that the morphological schema has filtered out the incompatible grammatical stuff. Similar cases have also been pointed out for Spanish by Rainer (1993:100), who observes in this respect that «manchmal die phrasale Basis verändert wird, damit sie [scil. the derivatives] wortähnlicher erscheinen»:11

$$
\begin{array}{lll}
\text { fin de semana 'week-end' } & \rightarrow & \text { finsemanista }  \tag{21}\\
\text { (dar) por el culo 'to bugger' } & \rightarrow & \text { porculizar }^{12}
\end{array}
$$

The constructional mechanism allows us to spell out Rainer's suggestion that such frozen phrases (namely idioms) are matched with a morphological schema licensing them after the incompatible grammatical stuff has been filtered out. Furthermore, it must be noted that these examples severely cast doubt on a rule-based approach to word formation, because it is practically impossible to formulate general rules for deriving those words.

From the perspective of a construction-based morphology, which is also able to deal with constructional idioms, the whole question of phrasal compounds can now be analyzed.

In fact, loose or phrasal compounds of the Dutch type lach of ik schiet humor 'laugh-or-I-shoot humour' seen in (1) above actually are instantiations of the compound construction, where the modifier encodes a (often idiomatic and highly frequent) unit, i.e. a construction with substantive items (cf. Fillmore, Kay and O’Connor 1988). In contrast with formal idioms, substantive idioms are completely frozen, i.e. they cannot be fitted into any syntactic context. This analysis is entirely compatible with Bresnan and Mchombo's (1995:194) approach to phrasal compounds which are interpreted as «an N associated with the phrase XP». Similar observations hold true for the Italian examples mentioned in (1d) above. There is no need to look for some special mechanism such as conflation: for those cases, one just has to assume that in the compounding schema of
(6a) the modifier position can be occupied by one lexical(ized) cliché-based unit (cf. Carstairs-McCarthy 2005), which in this case has the form of a substantive idiom. In contrast with formal idioms, substantive idioms are entirely frozen, i.e. they cannot be fitted into any syntactic context.

A similar approach can be adopted for the English examples know-it-all-ish reported by Bresnan \& Mchombo (1995:193) and stick-it-iveness mentioned by Bauer (1983:164), as well as for Italian derivatives such as the following ones:
(22) menefreghismo / menefreghista chissenefreghista celodurismo / celodurista
benaltrismo / benaltrista
usaegettismo ${ }^{13}$
'(attitude of a) couldn't-care-less person' 'who-cares-person'
'(attitude of a) man with a permanent hard-on, male chauvinist'
'(attitude of) who always wishes something different' 'attitude of who always uses and wastes'

In these cases, the suffixation schema in (6b) is selected. Their input is given by the substantive idioms which count as a unit, revealing their idiomatic status:
(23) Me ne frego!

Ce l'ho duro!
Chi se ne frega!
(Ci vuole) ben altro!
'I couldn't care less!'
'lit. I've got it hard, I have a hard-on!'
'Who cares!'
'It will take something different from that!'

The latter is made explicit by plural, which operates following the general nominal pattern and not extending to the whole substantive idiom, even though the latter option would be theoretically conceivable:
a. celodurista / celoduristi
b. *celabbianduristi
'lit. we-have-a-hard-on-ists'

* cenefreghiamisti
'lit. we-couldn't-care-less-ists'

In other words, substantive idioms are fixed expressions, which are entirely inert from a morphosyntactic point of view. Here, one may venture the hypothesis that substantive idioms are usually treated as unanalyzed inputs, insertable into a suffixation schema, whereas formal idioms are at least partially analyzed and therefore force the intervention of a lexical integrity filter. This hypothesis needs however to be further investigated extending the range of empirical evidence in a language like Italian and more in general cross-linguistically. ${ }^{14}$

## 4. CONCLUSION

To sum up, I tried to show the role played by constructions in deriving words by means of highly general schemas. The schemas are able to overcome the question of bracketing paradoxes and false intermediate steps relying on schema conflation, induced by frequent extended patterns. Moreover, schemas can be fed by constructional idioms: in the latter cases lexical integrity shows up as a filter for eliminating grammatical stuff incompatible with the lexical schema.

These examples are relevant on a double basis: on the one hand they show that the rule concept on which post-Aronovian word formation is based does not hold at least for this set of examples. In fact, it is not possible to spell out an explicit rule even for the single cases considered. The only common thing is the outcome, which is adequately expressed by a schematic view of morphology. On the other, they support the active role played by lexical integrity as a strategy for fitting idioms into lexical patterns.

To be sure, this set of examples refers to a small portion of the lexicon. One might therefore object that this evidence is rather scanty or even worse, that these formations are intentional coins laying down a flavor of artificiality. I have three counter-arguments against both critical remarks. First, these data reflect derivatives formed by means of highly productive word formation devices. Claiming that they are marginal simply discards this evidence and overshadows its relevance. Since speakers productively employ this strategy for forming new words, I do not consider reasonable to put this evidence aside simply because it does not fit into the general rule. Second, intentionality is a rather slippery escape because its role is in general rather difficult to establish. The best example that can be mentioned to demonstrate the slipperiness of this concept is terminology. Terminological coins are to a large extent intentional; however, it is not excluded that they may reflect normal patterns of word formation for a given language (see Plag 1999:13 for a discussion). Third, my feeling is that these examples reveal to the morphologist what idioms reveal to the syntactician: idioms apparently are (and mostly have been treated as) exceptions to the general regularity of syntactic structures. In fact, the opposite might also be the case (and a growing wealth of research is accumulating supporting this view).

Therefore, there is no principled reason for denying a general status to schemas. The evidence suggests that schema-based behavior may be normal, and that rules only represent a generalization of highly transparent and frequent patterns, as also laid down by Bauer's (2001b:97) conclusion that «it could be that speakers work with analogy, but that linguists' descriptions of the output of this behaviour are in terms of rules». In other terms, analogical modeling is normal, and rules are rough generalizations extracted to account for highly recurrent patterns, cf. Kay \& Fillmore (1999:30-1):
«To know what is idiomatic about a phrase one has to know what is nongeneral and to identify something as nongeneral one has to be able to identify the general. In grammar, the investigation of the idiomatic and of the general are the same; the study of the periphery is the study of the core - and vice versa ... Proceeding in this somewhat inductive fashion from the empirical particularities and patterns whose existence cannot be denied to the broader generalizations and principles that order these patterns, a construction-based approach appears to provide promise of accounting both for the relatively idiomatic and for the abstract and more fully productive aspects of a language»

Constructions are «vertical»structures cutting across the different components of language, combining semantic, syntactic and phonological information (cf. Croft \& Cruse 2004:247). From a constructional point of view, the problem is therefore not that syntax can be input for morphology; there is no need of a No Phrase Constraint. Rather, there are schematic representations specifically arranging morphological constructions which are different from syntactic constructions. Lexical integrity must be looked at as a strategy followed by the lexical component to instantiate morphological encoding.

## NOTES

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This paper was presented at the Fifth Mediterranean Morphology Meeting held in Fréjus (15-18.9.2005). I thank two anonymous reviewers as well as all colleagues and friends who attended the meeting for their active discussion of my paper, which has greatly benefited from their kind suggestions and remarks. Needless to say, I carry the full responsability for the views expressed and the errors remaining in the paper.
${ }^{1}$ For instance, it has been objected that the name of the No Phrase Constraint already contains a violation of what it states! For a critical survey, cf. Spencer (1991:321).
${ }^{2}$ An anonymous reviewer questions whether there are indeed cases of purely «syntactically activated» word forms being input of compounding. In this respect, one can mention Hungarian compounds like tévé-t néz 'watch television' (cf. Kiefer 1992:64-65) in which the noun tévé-t carries an accusative marker. Cf. Bauer (2001a) for a survey.
${ }^{3}$ I leave it open whether my notation also makes different predictions from Booij's, because it is not relevant for the purposes of the present discussion.
${ }^{4}$ Since I am elaborating on Booij's paper, I take Dutch to exemplify the three basic types of constructions; accordingly, compounds are right-headed, as shown by the bolded right box of (6a). As will be discussed below, this need not be true crosslinguistically, e.g. for Italian. At any rate, the box notation allows one to express the peculiarities of a given language in a rather flexible way.

[^1]for instance Italian diminutive suffixes like the one occurring in letto 'bed' $\rightarrow$ lett-in-o, macchina 'car' $\rightarrow$ macchin-in- $a$, etc., in which the suffix is claimed not to behave as a head (cf. Scalise 1994: 264-266 for a discussion):

${ }^{6}$ I cannot agree with Bisetto (2004:41), who claims that such compounds are basically $\mathrm{N}+\mathrm{N}$, in which the color term is a noun further modified by a noun. Independent of the serious question of how to delimit adjectives and nouns when employed as modifiers within a NP (cf. Ricca 2005), for such compounds syntactic agreement with the head noun occasionally occurs in our corpus, which speaks in favor of their adjectival status: «emozionato dai manifesti rossi fuoco» (La Stampa 9-1996). More in general, in Italian the property of agreement is rather weak in the case of color terms, because they are often invariable (cf. le camicie sono rosa / *rose 'the shirts are pink'). I am not sure whether considering all these color terms as nouns would be both theoretically and empirically an adequate solution.
${ }^{7}$ Furthermore, it is not necessary to allow for two different derivational processes for ingressive and egressive parasynthetic verbs, as put forward by Iacobini (2004:16872), who claims that only the first type should be considered a true parasynthetic verb, whereas the second type should be treated as a case of prefix substitution. Independently of the plausibility of Iacobini's analysis, this also points to a further case of paradigmatic morphology at least for the egressive class, which is of interest here.
${ }^{8}$ Being output-oriented, the constructions are also sensitive to salience as for the lexical material selected. Though the question of salience needs further research, it can be observed that in the formal idioms listed in (19) the verbs approach the status of a support predication, being easily replaceable by means of truly support verbs like fare 'to do' (e.g. fare come il gatto con il topo 'lit. to make like the cat with the mouse'). Instead, both nouns are highly salient and cannot be easily replaced by synonymous or hyperonymous terms: *giocare come il gatto con il sorcio, *giocare come il felino con il topo.
${ }^{9}$ Moreover, in Italian the compound schema is preferably selected for further derivations only in the case of non verbal lexical units (i.e., either nouns or adjectives). Verbs can be taken as input of further derivations only if an intermediate nominal VN derivative (which may also be interpreted as a reduced VP, cf. Ricca 2005) is attested. In other words, an unproductive formation like guardarobiera 'linen maid' given in (2) above as well as an isolated new formation such as calabraghismo 'attitude of giving in' (cf. La Repubblica 19/10/2004: Espugnata Roma grazie al calabraghismo di Fini 'Having Rome been stormed because of Fini's giving in') are mediated respectively by guardaroba 'wardrobe' and calabraghe 'lit. somebody who pulls down his trousers, coward'. This strongly limits the possibility for verbs being input of the conflation schema given in (14) above. Therefore, for cases like calabraghismo the suffixation schema of (6b) is selected.
10 The example comes from the following chat-passage: «Io sono solo un postino: ambasciator non porta pena. Insomma sono un cattivo volantinatore per lo stesso motivo per cui sono un cattivo 'portaportista'», 'I am only a mailman: the messenger does not carry any responsability. I am very bad in giving around leaflets for the same reason that I am a bad door-by-door seller' (Google search 06/01/2006).
${ }^{11}$ Translation: «sometimes the phrasal basis is modified so as to make the derivatives more similar to words».
${ }^{12}$ One can compare this derivative with similar Italian formations such as perculare (cf. «non mi venite a perculare, ché la situazione è seria», 'don't bugger me about, 'cause the thing is serious', elicitable from the NUNC-corpus available at urL: http://www.corpora.unito.it). One might object that in this case the grammatical word per is not filtered out; however, one has to consider that both in the Italian (prendere per il culo 'lit. take for the ass') and in the Spanish example, the preposition is explicitly specified as part of the formal idiom underlying the derivative.
${ }^{13}$ This form is attested in the following chat-passage: «e dai, non accusarmi di usaegettismo. i bss vengono da 2 dischi eccellenti e qui boh. ma non sono abbastanza inascoltabili per te, mi sa!», 'come on, don't accuse me of using-and-wasting. The bss. come from 2 excellent records, but they are probably not enough unhearable for you!" (Google-query, 6.1.2006).
${ }^{14}$ One has to add that in order to verify this hypothesis the criteria have to be made clear which distinguish between substantive and formal idioms, because, as is often the case in language, the boundaries between the two typologies may be uncertain, as was pointed out to me by N . Vincent in the discussion which followed my talk in Fréjus. Furthermore, the role of salience should be carefully investigated because it is likely to weigh differently for the different pieces forming an idiom. Thus, articles (and articulated prepositions) are presumably not very salient in Italian idioms, but they play a crucial role in German in detecting the so-called Funktionsverbgefüge ('function verb chain') as in etwas zum/*zu dem Ausdruck bringen 'to express something, lit. bring something to the expression'. On the other hand, as was observed above for per, prepositions may be very salient in Italian idioms.

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Summary: In questo articolo si difende l'approccio «costruzionale» alla formazione delle parole. I vantaggi di un tale approccio, basato su schemi, è illustrato mediante una serie di casi dell'italiano in cui delle frasi idiomatiche «fossilizzate» sono l'input della derivazione suffissale. Lungi dal rappresentare gravi violazioni dell'Ipotesi d'Integrità Lessicale, si sostiene che questi casi provano che l'integrità lessicale è una strategia «costruzionale» che forza la selezione del materiale lessicale, lasciando da parte il materiale grammaticale/funzionale delle frasi idiomatiche iniziali. L'Integrità Lessicale può quindi essere vista come una strategia usata dal componente lessicale per mettere in atto la codifica morfologica delle parole complesse, basata su schemi analogici astratti anziché su regole esplicite.


[^0]:    *burrare $\leftarrow$ burro 'butter'
    *brinare $\leftarrow$ brina 'hoar-frost'

[^1]:    ${ }^{5}$ A similar representation can be assumed for non-category-changing suffixation,

