The syntagmatic and paradigmatic axes of productivity: an application to the onomasiological model of word-formation⁷¹

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Abstract

Studies of word-formation have pointed towards a multifaceted nature of morphological productivity (Bauer 2001, Plag 2006). With this in mind, this article explores Štekauer's (1998, 2001) approach to word-formation based on three pivotal oppositions: availability vs. profitability, paradigmatic vs. syntagmatic relations, and a quantitative vs. qualitative view of language. Once word creation is depicted from an onomasiological perspective, we turn to the syntagmatic and paradigmatic axes of productivity and illustrate the phenomenon with examples from the semantic category INSTRUMENT. This also serves to portray the naming act and productivity measurement as understood in the onomasiological approach.

Keywords: morphological productivity, syntagmatic and paradigmatic relations, availability, profitability, onomasiology, word-formation

1 Introduction

Much of the attention directed at English word-formation during the past two decades has pivoted on the slippery notion of productivity, both from theoretical and from practical standpoints. Regarding the former, considerable effort has been devoted to an update of the concept of productivity and the clarification of its associated terminology (Bauer 2001, 2014, Plag 2006); regarding the latter, the most widespread application

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has probably been (corpus-based) productivity measurement in its different forms (Baayen and Lieber 1991, Cowie and Dalton Puffer 2002, Baayen 2009).

Štekauer (1998, 2001, Štekauer et al. 2005) has contributed to this debate by proposing a system of word-formation in which productivity is conceived from a cognitive-semantic perspective, such that its measurement is conducted by paying attention to meaning categories rather than to the formal makeup of lexemes. In this model, word-formation rules are considered as 100 per cent productive with regard to a given semantic category (AGENT, INSTRUMENT, LOCATIVE, etc.), and the word-formation process that gives rise to the unit plays a secondary role, as opposed to what has been customary in the generative tradition. By asserting that word-formation rules are permanently accessible to speakers, Štekauer's understanding of productivity emerges as predominantly available with regard to the pivotal dichotomy *availability* vs. *profitability* (Carstairs-McCarthy 1992: 37). The significance of availability for the onomasiological model makes it fundamentally qualitative in nature (see section 2).

This article examines Štekauer's productivity system in the light of three notional dichotomies: availability vs. profitability, paradigmatic vs. syntagmatic relations, and a quantitative vs. qualitative view of productivity. Starting from de Saussure (1916), I study the relationship between these concepts and their implications within the onomasiological model. A sample of units with the semantic role INSTRUMENT is used to illustrate the points under discussion, for instance, which units come into play in paradigmatic/syntagmatic relations, to which extent the model can integrate profitability, or how this system accounts for the competition among word-formation processes.

2 Syntagmatic and paradigmatic productivity

The earliest allusions to the dynamic character of word-formation reportedly date back to the Sanskrit grammarians, although these are veiled references and the terms employed today were not on hand yet. Interestingly enough, not few inaccuracies have remained and the literature on productivity is still replete with terminological uses that emerge as ambiguous or equivocal in the light of more recent developments (see Bauer 2001: 11-15, 2005: 316-317).

One seminal distinction in this sense is owed to Kastovsky, who recognizes two different sides of productivity and warns about their often unsystematic usage: the "[...] scope of a rule [availability] and its actual utilization in performance [profitability]" (1986: 586). Simply put, one morphological process is available if it can form new lexemes; then, if available, that process will be profitable to a higher or lower degree – unavailable processes cannot generate lexemes and therefore do not have a bearing on synchronic word-formation. Originally termed *disponibilité* and *rentabilité* by Corbin (1987), these two concepts are combined to build the epiphenomenon of productivity, although their demarcation is more simply done in notional than in practical terms. As has been pointed out (Bauer 2001: 47-51, 2005: 331-332, Plag 2006: 122), availability is intrinsically qualitative because a process either is available or it is not. In contrast, profitability is quantitative-oriented because some word-formation processes coin more words than others.

In view of the attributes just outlined, a connection seems to exist between availability and profitability and paradigmatic and syntagmatic language relations. Taking de Saussure (1916) as a basis, the following axis alignment may be proposed to depict the multifaceted nature of productivity:



Figure 3 The paradigmatic and syntagmatic axes of productivity

Figure 1 differentiates two complementary but opposite components within morphological productivity. Availability is represented vertically, on a par with paradigmatic language relations because word-formation is an only-once act, i.e. a lexeme is created on one occasion, and further occurrences will be repeated uses of that coinage (Aronoff 1983). Accordingly, when a naming need arises, the language user opts for a given coining device, and in that unconscious route only one of the processes available is chosen. On the other hand, profitability stands on the horizontal axis inasmuch as its nature is analogue to syntagmatic language relations: an available word-formation rule creates a number of lexemes, all of which accumulate as the outcome of the recurrent use of such process.

Allusions to the paradigmatic nature of morphological productivity can be found in the word-formation literature: "The coining of new words is by no means limited to the addition of affixes. New words may also be paradigmatically coined by means of affix subtraction and affix substitution" (van Marle 2000: 231). Van Marle (2000) recognizes the paradigmatic nature of word-formation and, despite not going further into the issue, there is the acknowledgement that affix subtraction and affix substitution stand on a par with affixation for the creation of neologisms. A similar but here implicit reference to the topic is found in Carroll and Tanenhaus (1975: 52), who provide the following choices when discussing nominalization patterns:

a. reversal, recital, proposal, transmittal
b. reversion, recitation, proposition, transmission
c. refusal, rehearsal, acquittal, arrival
*d. refusation, rehearsion, acquitation, arrivation
e. derivation, description, conversion, confusion
*f. derival, describal, conversal, confusal

With these examples Carroll and Tanenhaus (1975) illustrate the (im)possibility to derive nouns by means of a number of deverbal suffixes, with the morphological processes (a) to (f) embodying the paradigmatic axis of productivity and each series of

lexemes denoting its syntagmatic axis. Their proposal matches the scheme in Figure 1, since the authors demonstrate that (1) there exists a series of aligned word-formation options when satisfying a naming need, (2) only one of these options can be selected at a time, and (3) the constraint of blocking operates in order to prevent coinage of terms for already existing concepts.

By contrast to mainstream linguistics, the onomasiological model maintains that the alternatives above (including (d) and (f)) are formally possible and synchronically available, only there has been no naming need calling them, and this is why they have failed to materialize (see Štekauer 1998: 88). Following these notional remarks, section 3 offers a synopsis of productivity as understood in the onomasiological model and draws a parallel between Štekauer's proposal and the system outlined in Figure 1.

3 Productivity in the onomasiological model

As has been explained, one critical issue in word-formation studies is the delimitation of productivity from a theoretical perspective. The present section considers how productivity is conceived in the onomasiological model (3.1) and how the view of productivity described above applies to it (3.2).

3.1 Theoretical foundations

Several essential features characterize the underpinnings of Štekauer's (1998, 2001, Štekauer et al. 2005) account of morphological productivity. A first particularity involves the possible approaches to productivity, as outlined in Table 1:

productivity type		object of study	level	features
		actual naming units	lexicon (as a	most objective;
actual		(institutionalized in	part of the	diachronic or
productivity in the	actual word-	the speech	language	synchronic
narrow sense	formation	community)	system)	focus
	productivity	nonce-formations	intermediate	less objective;
subsystem		(units not yet	level	an
productivity		institutionalized)		implementation
				of the language
				system
potentiality-level productivity		non-existing units	potentiality	most subjective

Table 1 Three possible approaches to productivity

Štekauer distinguishes three types of productivity. Actual productivity in the narrow sense⁷², first, is the most tangible one, as its object of study is actual naming units, i.e. lexemes that have been institutionalized and are in circulation in the speech community. This kind of productivity is placed at the level of the lexicon as part of the language system (i.e. de Saussure's *langue*), and may be approached synchronically or diachronically. A second type is *subsystem productivity*, which is concerned with nonce-formations, i.e. items that have been coined but are not institutionalized. Subsystem productivity ranges between the levels of the system and the non-existing, and represents "the opportunities offered by the potentiality level" (Štekauer 1998: 75), some of which will materialize if a nonce-formation becomes an institutionalized lexeme (see Bauer 1983: 45-46, 2001: 46). Štekauer offers a hyperonym for actual productivity, which comprises all the existing units in the speech community, regardless of their level of assimilation in it. The third type is *potentiality-level productivity*, whose interest is in non-existing, to-be-coined units and therefore is found at the potentiality

⁷² Not to be confused with *productivity in the narrow sense*, one of Baayen and Lieber's (1991) probabilistic formulae for productivity computations.

level of language. The appeal of these lexemes lies in the research opportunities which they offer for word-formation theory, given that they embody the fundamental but slippery notion of *potential word* (Aronoff 1983, Kjellmer 2000, Bauer 2001: 40). The study of these units entails hypothetical and often conjectural postulations, which is why potentiality-level productivity is the most subjective kind.

Besides this demarcation of productivity categories, Štekauer (1998) separates *external* from *internal* factors, both of which affect system productivity. External factors involve the speaker's knowledge, discovery of new objects, real life phenomena and circumstances, while internal factors involve blocking and constraints of an etymological, phonological or morphological type. These external factors, represented mainly by sociolinguistic aspects, take a leading role in the onomasiological model, and manifestly differentiate it from proposals of a more formal and semasiological character⁷³.

Differences between the onomasiological model and other proposals are noticeable in the coining process as well. Štekauer (to appear) alludes to a *triad of relations* between the extralinguistic reality, the speech community and the word-formation component. According to the author, naming needs that cannot be satisfied by the words existing in the lexicon are the trigger for the creation of naming units (NUs), a procedure that ensures that any new concept can labeled. In this view, it is in principle irrelevant whether a naming need materializes as, say, an instance of *-ness* suffixation, Adjective+Noun compounding or Noun>Verb conversion but, rather, the fact that word-formation happens and the naming need is satisfied. As is illustrated below in this section, if a speaker requires the coining of an INSTRUMENT, the function of word-formation is to make it available regardless of the process used for it. Because the naming process takes place whenever required, morphological productivity is leveled

⁷³ Semasiological and onomasiological approaches essentially differ in that the former tackle language by moving from form/names to meaning/concepts, while the latter takes the opposite direction. The significance of adopting one or the other in word-formation can be appreciated for instance in Štekauer's proposal for productivity measurement (see section 4), which is based on conceptual-notional categories rather than on specific affixes, as has been the norm in the Western tradition (Štekauer 2001: 18, ten Hacken and Panocová 2013: 20-21). Marchand (1969) is a renowned example of a semasiological approach of word-formation.

with syntactic productivity, and word-formation is therefore regarded as regular, predictable and absolutely productive *as far as cognitive categories are concerned* (see Štekauer 1998: 73-75).

The naming process in the onomasiological model takes seven steps, from the initial stage, when the naming demand arises in the speech community, to the phonological level, where a pronunciation and spelling are provided for expression. In between, five further levels specify the extralinguistic reality and the conceptual, semantic, onomasiological and onomatological features of the naming unit (for details see Štekauer 2001: 24-32). The formal shape of a lexeme starts materializing in the onomasiological level. Here, a maximum of three semantic components is specified for each unit (the onomasiological base, the determined and the determining constituents of the mark), depending on which each lexeme falls under one Onomasiological Type $(OT)^{74}$:

- i) OT I, where all three possible morphemes are present in the lexeme. For example, *status indicator*⁷⁵, which consists of the OBJECT (*status*), the ACTION (*indicate*) and the INSTRUMENT (*-or*).
- ii) OT II, where the determined constituent of the onomasiological mark (the right-hand constituent) is left unexpressed, as in *separator*, which consists of the ACTION (*separate*) and the INSTRUMENT (*-or*), but not a third morpheme like AGENT or QUALITY.
- iii) OT III, where the determining constituent of the onomasiological mark (the lefthand constituent) is missing, as in *sugar-bowl*, which consists of an OBJECT (*sugar*) and an INSTRUMENT (*bowl*), but not of an ACTION.

⁷⁴ Note that the present account of the onomasiological approach hinges exclusively on Štekauer (1998, 2001). A fine-grained version of the model is offered in Štekauer (to appear), where OTs I-III remain the same but the original OTs IV and V are revised, and three additional OTs (VI, VII and VIII) are introduced. In spite of these recent developments, it has been here decided to rely on the model's standard version given its larger number of examples and discussions, based on which sections 3 and 4 develop. ⁷⁵ All examples taken from Štekauer (1998: 94-102).

- iv) OT IV, where the determining and determining constituents cannot be separated and which is thus regarded as a simple structure. This is the less common OT, one example of which is *lionhearted* (not in Case study I).
- v) OT V, where the naming unit lacks the onomasiological base or mark. It corresponds to conversion/zero-derivation, as in $steady_{ADJ} > steady_N$.

3.2 A qualitative turn

Considering the principles formulated in sections 2 and 3.1, it seems reasonable to regard the onomasiological approach to word-formation as a fundamentally availabilityoriented one. While morphological productivity is not explicitly portrayed in the above terms in the onomasiological theory, evident qualitative traits can be found throughout Štekauer's work. Figure 2 illustrates such tenets by resorting to a sample of lexemes from Case study I in Štekauer (1998: 93-107), which focuses on units expressing the meaning of INSTRUMENT (although the points equally hold for any other semantic role; see Štekauer et al. 2005: 7-10). It is paramount to remember that, due to the emphasis on meaning of this model, the syntagmatic and paradigmatic axes of productivity should be here considered for cognitive-semantic labels. For this reason, each slot on the vertical axis corresponds to one of the five OTs, which compete for the coining of INSTRUMENTS⁷⁶:

⁷⁶ Štekauer (1998: 93) specifies several semes for the meaning Instrument: [-ANIMATE], [-HUMAN], [±TANGIBLE] and [±PURPOSE]. All examples taken from Štekauer (1998: 94-102).



Figure 4 An overview of OTs (WFTC INSTRUMENT)

As becomes apparent, the naming of a given INSTRUMENT may occur through a number of lexical procedures, grouped throughout the OTs (see section 3.1). Note that all the naming units in Figure 2 carry the sense of INSTRUMENT, even if different word-formation processes interact in their formal makeup. While OTs I to V compete with each other for the coining of a given unit, the value of productivity in this model lies is the capacity of the word-formation component to name concepts when required, regardless of which OT is activated on each particular occasion. The unit *soot collector*, for example, belongs to OT I, since all three possible morphemes are present in it, but it would appear under a different OT if its meaning was encoded by a lexeme like, say, *accumulator* (OT II) or *soot store* (OT III).

The availability-profitability interplay proposed in Figure 2 allows accounting for the fact that no lexeme has been coined via OT IV, the rarest in use according to the author. For reasons which may be of a linguistic or an extralinguistic kind, all INSTRUMENTS have been created by OTs I, II, III and V, hence indicating that, *even if available*, OT IV is not preferred by language users. It is this line of argumentation which places Štekauer's approach on the availability axis of productivity, since all OTs

are regarded as constantly available, regardless of whether proof of their use has been attested or not. This standpoint may be difficult to bring together with assertions like Bauer's: "statements of availability are temporally limited. What is available in one period may not be in the next. Availability can change diachronically and valid statements about availability in one period do not necessarily apply to any adjacent period" (2001: 205-206). Then, while the literature often regards availability as fluctuating in time (Kastovsky 1986, Cowie and Dalton Puffer 2002, Plag 2006), this concept assumes a different role in the onomasiological model. If, as has been argued above, a customary view of productivity consists of the hyponyms availability and *profitability*, an onomasiological conception emphasizes a distribution of productivity into availability and speech community, "represented by a 'coiner' of a new complex word" (Stekauer to appear). And it is especially regarding the speech community where the onomasiological model proves distinctive. Instead of endowing morphological processes per se with the capacity of word-formation, this faculty is awarded to the speech community, whose naming needs determine the circumstances for coinages – the onomasiological approach thereby counterweighs the scarce relevance of profitability through the relevance given to the speech community (see ten Hacken and Panocová 2013: 23-27). As Štekauer clarifies, "[f]rom this point of view, the individual [wordformation] types do not block each other: rather; they compete, and are mutually complementary in meeting the demand of a language community within their respective scope of activity" (1998: 87; emphasis as in the original). Besides other theoretical benefits⁷⁷, this statement evidences the emphasis on paradigmatic productivity in this model: word-formation is competition and processes are available on demand.

It has been discussed that productivity may be examined with varying degrees of specificity, of which Figure 2 represents one alternative. Further details can be noticed in Figure 3, where a selection of the naming units from Case study I is categorized not only by OTs, but also by the logical-semantic class of each component. Besides the

⁷⁷ In particular, the inclusion of the extralinguistic factor allows eliminating the concept of *overgeneration* (see Spencer 1991: 76) and does away with "[...] the generally conceived prejudice concerning the limited productivity of Word-Formation Rules in contrast with inflectional and syntactic rules" (Štekauer 1998: 87).

general heading OT I, II, III and V, each OT encompasses at least one further semantic specification of the kind SUBSTANCE-SUBSTANCE or ACTION-SUBSTANCE for the onomasiological base:



Figure 5 The semantic breakdown of OTs (WFTC INSTRUMENT)

Like those in Figure 2, the lexemes displayed in Figure 3 have been derived from Case study I, however this fine-grained analysis allows observing not only broad semantic tendencies, but also specific meanings and contrasts within every OT. For example, it will be appreciated that some INSTRUMENTS in OT V have been created by a recategorization ACTION > SUBSTANCE (e.g. *sink stop*), while others have followed the

route QUALITY > SUBSTANCE (e.g. *steady*). Similar remarks can be made for the rest of OTs, thus enabling a semantic inspection of productivity deeper than that of Figure 2. Notice that, in spite of this more complex variant, the underlying mechanisms here are identical to those sketched above. Therefore, even though OT I enjoys the three sub-options SUBSTANCE-SUBSTANCE, CONCOMITANT CIRCUMSTANCE-SUBSTANCE and ACTION-SUBSTANCE, only one will be selected for word-formation. This involves that the meaning conveyed by *sonometer* will appear under the SUBSTANCE-SUBSTANCE variant and under no other, and confirms the validity of the two proposed axes of productivity at different levels of scrutiny. In this sample, OT I is the most heterogeneous kind, with up to three cognitive-semantic variants in its morphological realization, while OT II is the most uniform with just one possible realization.

One advantage of the thorough semantic inspection in Štekauer (1998: 94-102) is that the procedure illustrated in Figures 2 and 3 for Case study I can be taken one step further. For instance, in OT III, and within the realization CONCOMITANT CIRCUMSTANCE-SUBSTANCE, Štekauer discerns a third level of analysis, with four additional cognitive categories:

(2)	a. Man -	(Act) — Instr	speedboat, stereoscope
	b. Temp -	(Act) — Instr	summerhouse, sunglasses
	c. Patt -	(Act) — Instr	sunlamp
	d. Loc -	(Act) — Intr	streetcar, submarine

These four subgroups share the features of OT III (e.g. having an omitted ACTION) and convey the broad meanings CONCOMITANT CIRCUMSTANCE-SUBSTANCE, but each type (a) to (d) is distinguished by having a different CONCOMITANT CIRCUMSTANCE. So, the first component of the lexeme (which carries the broad meaning CONCOMITANT CIRCUMSTANCE) is MANNER in (a), TIME in (b), PATTERN in (c) and LOCATION in (d), and this causes meaning distinctions in the resulting naming units. For obvious reasons, the second component of the lexeme (with the meaning SUBSTANCE) is an INSTRUMENT in all items of Case study I. Due to space limitations, it has been preferred not to

incorporate a graph illustrating the applicability of the syntagmatic and paradigmatic axes of productivity to this last step.

4 **Productivity calculations**

With a few notable exceptions (see Bauer 2001: 143-161), all recent techniques for the quantification of productivity have incorporated mathematical or statistical procedures at some point. The majority of these proposals are corpus-based and, as acknowledged by Baayen (2009: 906; see Baayen and Lieber 1991), they stand close to Corbin's (1987) *rentabilité* and are essentially quantitative in nature.

Štekauer, in contrast, constructs a model based on the premises under 3 and offers a qualitative alternative. In particular, OTs are integrated under a *Word-Formation Type Cluster* (WFTC), which accounts for the community's naming needs and is regarded as 100% productive as far as cognitive-semantic categories are concerned. When faced with a set of lexemes that share a meaning, a given WFTC takes in 100% productivity, and each of the OTs is allocated a portion of such percentage depending on how many units it contains. An advantage is that a given OT can be easily compared not only with the rest of OTs in the same WFTC but also with OTs from different WFTCs. Table 2 presents the INSTRUMENTS and productivity values in Case study I:

Total number of naming units:		100%
ONOMASIOLOGICAL TYPE I		28.1%
1. SUBSTANCE - SUBSTANCE	35	18.2%
(a1) Obj <- (Act) — Instr		15.1%
(a2) Act -> Obj — (Instr)	1	0.5%
(b) Fact <- Act — Instr	2	1%
(c) Instr/Man - Act — Instr	3	1.5%
2. CONCOMITANT CIRCUMSTANCE - SUBSTANCE	17	8.8%
(a) Man - Act — Instr	15	7.8%
(b) Loc - Act — Instr	2	1%
3. ACTION - SUBSTANCE	2	1%
(a) Fact [=Process] <- Act — Instr	1	0.5%
(b) Obj ———————————————————————————————————	1	0.5%
ONOMASIOLOGICAL TYPE II	105	54.6%
1. ACTION - SUBSTANCE		54.6%
(a) Act — Instr		54.6%
ONOMASIOLOGICAL TYPE III		12.5%
1. SUBSTANCE - SUBSTANCE		8.8%
(a) Obj <- (Act) — Instr		6.7%
(b) Instr/Man - (Act) — Instr		2.1%
2. CONCOMITANT CIRCUMSTANCE - SUBSTANCE		3.6%
(a) Man - (Act) — Instr		1%
(b) Temp - (Act) — Instr		1%
(c) Patt - (Act) — Instr		0.5%
(d) Loc - (Act) — Instr		1%
ONOMASIOLOGICAL TYPE V		4.7%
1. ACTION — SUBSTANCE	8	4.2%
2. QUALITY — SUBSTANCE		0.5%

Table 2 WFTC INSTRUMENTS (Case study I)

The total of naming units in Case study I amounts to 192, and this figure represents 100% of this WFTC. The WFTC can also be broken down into the different OTs, and each OT embraces at least one meaning realization which, in turn, may have further semantic specifications. This arrangement of results makes it possible to state that the lexemes in this experiment have been generated by four different OTs, OT II being the most productive one (54.6%) and OT IV, with 0 units (not displayed in Table 2), being the least productive. OTs I (28.1%), III (12.5%) and V (4.7%) occupy intermediate positions in the productivity ranking.

It is also possible to look into individual OTs and notice that all 105 units in OT II display the semantic structure ACTION (ACTION) - SUBSTANCE (INSTRUMENT), as in sealer, sorting machine, stemmer or stop button, which points towards a rather compact materialization of lexemes. On the other hand, OT I is the most heterogeneous in morpho-semantic terms, since it consists of three possible arrangements for meaning expression: SUBSTANCE - SUBSTANCE (18.2%), CONCOMITANT CIRCUMSTANCE -SUBSTANCE (8.8%) and ACTION - SUBSTANCE (1%). While mainstream productivity models based their computations on word-formation rules like deadjectival -ness or deverbal -er, they lack the potential that the onomasiological approach offers to appreciate delicate nuances of meaning. Despite the obvious difficulties that this model poses for comparisons with other proposals, the present approach is valuable because it encompasses all word-formation processes and not just affixation while providing productivity percentages for internal inspection. This viewpoint places heavy emphasis on cognitive labels rather than on the formal structure of naming units, and makes it possible to gauge the productivity not only of concatenative processes, especially affixation, but also of root compounding (which roughly corresponds to OT III) or conversion (subsumed under OT V).

5 Conclusion

The present article has offered an overview of morphological productivity as conceived in Štekauer's (1998, 2001) onomasiological approach to word-formation by stressing the "relationships between elements *in absentia*" (van Marle 2000: 233). This is achieved by first stressing a view of morphological productivity as comprised by availability and profitability. Section 2 justifies a dual syntagmatic-paradigmatic nature of productivity and forges links with a qualitative and a quantitative view of word-formation:

Axis 1: syntagmatic relations	profitability	quantitative
Axis 2: paradigmatic relations	availability	qualitative

The onomasiological approach is considered in section 3 by first reviewing its theoretical and terminological foundations (section 3.1) and then depicting the model's qualitative and cognitive orientation (section 3.2). Even if we agree that Štekauer's conception "[...] simply ignores the question of profitability" (Bauer 2005: 331), a number of advantages have been revealed as well. Bearing in mind the weight of the speech community, the qualitative orientation of the onomasiological model seems reasonable if we recall that "[...] *disponibilité* is more connected to the individual speakers' competence, whereas *rentabilité* is more a result of social interaction in the speech community and linked to performance" (ten Hacken and Panocová 2013: 3). In connection with the model's tenets, section 4 illustrates productivity measurement and proves that, even if mostly WFTC-internal, the different OTs supply effective productivity indices and they can be at the same time paralleled with traditional wordformation terms like *root compounding* and *conversion*.

In a nutshell, the onomasiological approach has been validated as a natural choice for a meaning-centered study of the naming act, with advantages of a theoretical and a practical kind. As acknowledged by Štekauer (to appear), the role of the onomasiological approach is not to replace semasiological methods; instead, both perspectives should be complementarily exploited in the description of the system of complex words. Still, and despite these developments, the morphologist's agenda is full with unresolved tasks, among them the evaluation of availability through corpora (ten Hacken and Panocová 2013: 19, Bauer 2014: 98-101) or the measurement of productivity in processes like conversion and blending (Brdar-Szabó and Brdar 2008).

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