Exploring the Properties of English Lexical Affixes by Exploiting the Resources of English General-Purpose Dictionaries

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Abstract: This paper proposes a new model for exploring the properties of English lexical affixes, based on exploiting the resources of English general-purpose dictionaries. Developed primarily for EFL university students and motivated by the highly inconsistent treatment of affixes in those dictionaries, this model builds around a heuristic self-study method and its accompanying bare-bones inferential dictionary (BBID), purposefully designed, produced and distributed as a guide to students' discoveries. The model has been devised so as to direct students away from affix entries in general-purpose dictionaries towards word entries which contain specific affixes and to lead students to discover the properties of target affixes by analysing corresponding source words provided in BBID. The exposition is divided into four parts, as follows: Section 1 brings some introductory, scene-setting remarks; in Section 2, essential and relational affixal properties are presented; in Section 3, the five major aspects of the new model are explained and exemplified: pragmatic reasons, main objectives, underlying principles, instructional material and real-life functioning; finally, Section 4 offers a summary and a critical assessment of the model and its BBID, together with a glimpse into their future.

Keywords: LEXICAL AFFIXES, ESSENTIAL PROPERTIES, RELATIONAL PROPERTIES, GENERAL-PURPOSE DICTIONARIES, BARE-BONES INFERENTIAL DICTIONARY, HEURISTIC, SELF-STUDY, ENGLISH

Opsomming: Die verkenning van die eienskappe van Engelse leksikale affikse deur die benutting van die hulpbronne in Engelse woordeboeke vir algemene doeleindes. In hierdie artikel word 'n nuwe model, gegrond op die ontginning van Engelse woordeboeke vir algemene doeleindes as hulpbronne, vir die verkenning van die eienskappe van Engelse leksikale affikse voorgestel. Hoofsaaklik ontwikkel vir EVT-universiteitstudente en gemotiveer deur die hoogs inkonsekwente hantering van affikse in hierdie woordeboeke, word die model saamgestel rondom 'n heuristiese selfstudiemetode en die gepaardgaande basiese deduktiewe woordeboek (Engels BBID), wat doelmatig ontwerp, geproduseer en versprei word as 'n gids vir studenteverkenning. Die model is ontwerp om studente weg te stuur van affiksinskrywings in woordeboeke vir algemene doeleindes na woordinskrywings wat spesifieke affikse bevat en om studente te lei na die ontdekking van die eienskappe van doelaffikse deur ooreenstemmende bronwoorde wat in die BBID verskaf word, te analiseer. Die uiteensetting word verdeel in vier dele: Afdeling 1 bevat inleidende, beskrywende opmerkings; in afdeling 2 word noodsaaklike en

relasionele eienskappe van affikse weergegee; in afdeling 3 word die vyf hoofaspekte van die nuwe model uiteengesit en toegelig: pragmatiese motiewe, hoofdoelwitte, onderliggende beginsels, onderrigmateriaal en werklike funksionering; laastens bied afdeling 4 'n opsomming en 'n kritiese beoordeling van die model en sy BBID aan, met terselfdertyd 'n kykie na die toekoms.

Sleutelwoorde: LEKSIKALE AFFIKSE, NOODSAAKLIKE EIENSKAPPE, RELASIONELE EIENSKAPPE, WOORDEBOEKE VIR ALGEMENE DOELEINDES, BASIESE DEDUKTIEWE WOORDEBOEK, HEURISTIES, SELFSTUDIE, ENGELS

1.   Opening remarks

In this paper, a solution to the problem of acquiring the properties of English lexical affixes, especially by EFL university students, will be put forward, with the intention of ensuring that all students possess roughly the same working knowledge sufficient for interpreting and understanding both established and new prefixations and suffixations, as they crop up in real-world situations. It will soon be shown that English general-purpose dictionaries, learner's and native-speaker ones alike, for the most part, fail to provide a satisfactory coverage of affixal properties, because their provisions are often inconsistent and/or incomplete, sometimes inaccurate or even lacking altogether. As a result, resources of this kind cannot be recommended for educational use. What is needed in the circumstances is the formulation and adoption of a coherent strategy for a theoretically and methodologically well-founded and well-balanced lexicographic treatment of the properties of lexical affixes, to be implemented in future monolingual general-purpose dictionaries and, better still, in specialized dictionaries of lexical affixes, compiled from scratch.

The said strategy would be based on two key principles: firstly, from a theoretical point of view, the strategy would consider the system of affixes as a network whose elements, i.e. prefixes and suffixes, have their own unique identities and are, concurrently, interconnected with other elements by their comparable forms and/or functions and/or contents (details to be spelled out below); and secondly, from a methodological point of view, the strategy would establish a general — ideally a standardized or at least a widely accepted — lexicographic procedure for representing this unique identity-cum-interconnectedness dichotomy in an integral, effective and user-friendly manner (details yet to be set out). If achieving a common and strong enough consensus among practical and theoretical lexicographers and word-formationists, this innovative approach, or its modified or amended version, could, in the short run, directly contribute to a more consistent, complete and accurate treatment of affixes in general-purpose dictionaries. In the long run, the approach could lead to the compilation of new specialized dictionaries of lexical affixes, or, preferably, a modular electronic dictionary, offering coverage of variable, user-selectable, depth and breadth, to cater for various target groups of users, but paying particular attention to addressing the communicative and educational

needs of advanced learners world-wide — specifically, EFL university students.

With these preconditions in mind, the solution, in the form of a new model, about to be worked out here, is meant to bridge the divide between the present and the future state of affairs, and that is why it should be viewed as an interim solution — until a lasting and optimal solution to the problem is agreed on.

The rest of the exposition will be organized into three parts, thus: English lexical affixes and their properties will be defined and illustrated in Section 2; in Section 3, focusing on its five central aspects, a detailed account of the new model of acquiring affixal properties will be given; and in Section 4, a summary with an appraisal of the achievements of this model, alongside an anticipation of possible future dictionaries of English lexical affixes will round off the discussion.

2.   Properties of English lexical affixes: theoretical considerations

By 'English lexical affixes' in this paper are meant derivational prefixes and suffixes in present-day English, synchronically separable sequences of phonemes and fully-fledged morphemes, in which a particular phonological form is systematically associated with at least one particular content and one particular function, irrespective of the affix's origin (cf. Prćić 1999, 2005, 2008, 2019; for alternative views, see Bauer 1983; Bauer and Huddleston 2002; Bauer et al. 2013; Dixon 2014; Lieber and Štekauer 2014; Miller 2014; Štekauer and Lieber 2005); for example, *re-* is a prefix in *replay*, but not in *repeat*, and *-ish* is a suffix in *Finnish*, but not in *finish*, because the latter members of both pairs of these examples are synchronically monomorphemic, unanalysable, words. This triadic conception of the morpheme and, by extension, of the affix is in keeping with the sign-oriented approach to word formation, developed by Marchand (1969), and, ultimately, with the principles of Saussurean structuralism (De Saussure 1916).

Before turning to identifying, describing and exemplifying the properties of English lexical affixes, two vitally important things need to be pointed out (cf. Prćić 1999, 2019). Firstly, affixes have a contributory role in word formation and their properties should be construed mostly in terms of what they contribute graphologically, phonologically, morphosyntactically, semantically and stylistically to properties of the base, in deriving (new) morphologically complex words — either prefixations or suffixations; for example, the actual contribution of the prefix *re-* to the base *play* in the prefixation *replay* or of the suffix *-ish* to the base *Finn* in the suffixation *Finnish*.

Secondly, affixal properties constitute a systematic and predictable contribution in form, content and function to any eligible base, with the same set of modifications involved in all words derived from a certain class of bases. That is why contributions of affixes are considered word-independent — as long as those words are compositional formations, i.e. morphologically and semantically analysable, and therefore predictable in form and content. For example,

the contribution of the prefix *re-*, in the sense 'again', to bases in words like *replay, readjust, reappear, reelect, reread, revisit* is always the same. However, in formations going through, or having gone through, the process of idiomatization, or lexicalization, gradual changes in form and/or content may in time take place, or have already taken place, within words as wholes. Such modifications, affecting original properties of affixes and bases, are non-systematic and unpredictable, and are considered word-dependent, because they have developed uniquely within particular words. For example, in the semantically idiomatized word *rewrite*, which means 'to write again in a better way', the prefix *re-* still means 'again', but the word itself conveys more meaning than is available on the surface, since it carries the added component 'in a better way'. Due to the working of idiomatization, the morphological and semantic analysability of words thus altered progressively decreases, their compositionality blurs and their predictability lessens (for extensive accounts of idiomatization, see Bauer 1983; Bauer and Huddleston 2002; Hohenhaus 2005; Lieber and Štekauer 2014; Lipka 2002; Prćić 2001, 2016; Quirk et al. 1985). In consequence, any attempt at compiling an inventory of properties of English lexical affixes should concentrate on their contributory role and their systematic contribution to the base, and leave the effects of idiomatization to the treatment of particular idiomatizations.

Affixal properties — or, distinctive properties, in full — define an affix's identity, its place in the lexicon and its relationship with other comparable affixes in that lexicon. In order to be able to put together a comprehensive picture of affixal and interaffixal properties, a two-tier descriptive model composed of two sets will be employed (cf. Prćić 2019). The first consists of essential properties that capture individual form- and content-based behavioural traits of affixes at all levels of linguistic analysis. The second, supplementary, set consists of relational properties, that capture paradigmatic and syntagmatic relations established, or establishable, between individual affixes. Both sets of properties will now be elaborated, with definitions and examples drawing on those in the original proposition (Prćić 2019).

2.1   Essential properties of English lexical affixes

Relevant to all affixes, i.e. prefixes and suffixes, and reflecting affixal individuality, essential properties comprise the identifying characteristics of an affix in isolation and its contribution to a base or a class of bases. According to the descriptive model adopted here, there are six essential properties, all governed by various levels of linguistic analysis:

(1) **Spelling**. In the domain of graphology, this property concerns the realization of an affix in writing. Graphologically, the affix contributes to bases the letter sequence that represents it in isolation, like *-ship*, and within words, like *friendship*. Additionally, where applicable, there are **Spelling Niceties**, referring

to, firstly, variants of the letter sequence, as in *-ize* vs *-ise*; secondly, orthographic changes to the base, including dropping of a silent final *-e* before a suffix beginning with a vowel, as in *driv[e]* + *-er* > *driver*, or vacillation between dropping and non-dropping of a silent final *-e* before a suffix beginning with a vowel, as in *lov[e]* + *-able* > *lovable* vs *love* + *-able* > *loveable*; and thirdly, indication of prefix/base hyphenation to distinguish an unanalysable homograph from an analysable one, like *recover* vs *re-cover*, or to signify separate articulations of two identical adjacent vowel letters, like *co-occur* or *re-elect*.

(2) **Pronunciation**. In the domain of phonology, this property concerns the realization of an affix in speech, provided in standard IPA script. Phonologically, the affix contributes to bases the sound sequence that represents it in isolation, like /ʃɪp/, and within words, like /ˈfrendʃɪp/. Additionally, relevant to suffixes, there is **Stress Placement**, referring to the influence of the affix on the stress pattern of the word (cf. Jones 2006; Wells 2008), which may either remain unchanged, with stress-neutral suffixes, as in *-ship*: /⁽⁾frend > ˈfrendʃɪp/, or it may shift, with stress-imposing suffixes, as in *-ese*: /dʒɜˈpæn > ˌdʒæpəˈniːz/, when the primary stress falls on the suffix itself, or *-ic*: /ˈætəm > əˈtɒmɪk/, when it is placed on the penult, or *-ity*: /kriˈeɪtɪv > ˌkriːeɪˈtɪvɪtɪ/, when it is on the antepenult.

(3) **Attachability**. In the domains of morphosyntax and semantics, this property concerns the ability of an affix to attach to a base, or a class of bases, of a certain part of speech and to derive words of a certain part of speech (cf. Bauer 1983; Bauer and Huddleston 2002; Quirk et al. 1985). Morphosyntactically, the affix contributes to bases the part of speech of the derived word, which may be either the same as that of the base, with class-maintaining affixes, like *dis-* + *connect*$_v$ > *disconnect*$_v$, or different from that of the base, with class-changing affixes, like *develop*$_v$ + *-ment* > *development*$_n$. Additionally, where applicable, there is **Subcategorization**, referring to a finer specification of the base, mostly semantically and/or pragmatically determined, like transitivity of verbal bases to which the suffix *-able*, in the sense 'that can be', typically attaches, as in *wash*$_{v/tr}$ + *-able*.

(4) **Descriptive Meaning**. In the domain of semantics, this property concerns the basic, denotative, or systemic, meaning of an affix (cf. Cruse 2010; Lipka 2002; Prćić 2016). Semantically, the affix contributes to bases a set of diagnostic features, spelled out within a brief definition, well-balanced between generality and specificity, like the prefix *re-*, meaning 'again, repetition', as in *reread*, or the suffix *-ish*, meaning 'around, approximately', as in *sixish*.

(5) **Associative Meaning**. In the domain of stylistics, this property concerns the additional, connotative, meaning of an affix (cf. Cruse 2010; Leech 1981; Prćić 2016). Stylistically, the affix contributes to bases, where applicable, restrictions on the word's range of application, indicated most notably by four labels: firstly, dialect, like the suffix *-ize*, in *modernize*, which is world-wide English, vs

the suffix *-ise*, in *modernise*, which is mainly British English; secondly, attitude, like the suffix *-eer*, in *profiteer*, which is disapproving; thirdly, formality, like the suffix *-er*, in *adviser*, which is neutral, vs the suffix *-or*, in *advisor*, which is rather formal; and fourthly, register, like the suffix *-ide*, in *chloride*, which belongs to chemistry.

(6) **Productivity**. In the domains of morphosyntax and semantics, this property concerns the ability of an affix to be synchronically used in the derivation of new words (cf. Bauer 1983, 2001; Bauer et al. 2013; Kastovsky 1986; Lieber and Štekauer 2014). What the affix contributes to bases are the effects of its relative position on a three-zone scale of productivity, spanning from high to restricted to low, with affixes in the high zone having greater likelihood of being chosen in the creation of new words, like the suffix *-er*, deriving agent and/or instrument nouns from dynamic verbs, when it is of high productivity, as in $play_v$ + *-er* > $player_n$, or the suffix *-th*, deriving abstract nouns from adjectives, when it is of low productivity, as in $warm_{adj}$ + *-th* > $warmth_n$.

2.2   Relational properties of English lexical affixes

Relevant to some affixes, i.e. prefixes and suffixes, only when certain content- and/or form-based conditions are met, and reflecting affixal companionability, relational properties comprise the interacting characteristics of an affix with another or others. According to the descriptive model adopted here, there are four relational properties, two governed by paradigmatics and two by syntagmatics.

Paradigmatic relations between affixes are perceived as interaffixal sense relations, established between individual meanings of affixes, which trigger two relational properties:

(7) **Interaffixal Synonymy**. In the domains of semantics and pragmatics, this property pertains to the fact that at least two affixes share the same descriptive meaning and morphosyntactic function (cf. Cruse 2010; Lipka 2002; Murphy 2003; Prćić 2016), and, as a result, are liable to derive synonymous words when attached to the same base, with all affixes being in the state of rivalry, or competition (cf. Bauer et al. 2013; Kastovsky 1982, 1986). Relationship of this kind can develop in three varieties:

— between prefixes, like *un-*, in *undress*, *de-*, in *destabilize*, and *dis-*, in *disconnect*, all in the sense 'to reverse', or, with the same base, *un-, im- (in-), non-, a-*, all in the sense 'not (concerned with)', in *unmoral, immoral, nonmoral, amoral*,
— between suffixes, like *-ness*, in *happiness*, *-ity*, in *creativity*, and *-th*, in *width*, all in the sense 'state of being', or, with the same base, *-er, -or, -ant, -ee*, all in the sense 'agent', in *cohabiter, cohabitor, cohabitant, cohabitee*,

— between prefixes and suffixes, like the prefix *en-*, in *enlarge*, and the suffixes *-ize*, in *normalize*, *-ify*, in *purify*, and *-en*, in *widen*, all in the sense 'to make'.

(8) **Interaffixal Antonymy**. In the domains of semantics and pragmatics, this property pertains to the fact that two affixes have opposite descriptive meanings but the same morphosyntactic function (cf. Cruse 2010; Lipka 2002; Murphy 2003; Prćić 2016), and, as a result, are liable to derive antonymous words when attached to the same base. Relationship of this kind can develop in two varieties:

— between prefixes, like *over-* and *under-*, in *overcook* and *undercook*, in the sense 'more than necessary' and 'less than necessary', respectively,
— between suffixes, like *-er* and *-ee*, in *interviewer* and *interviewee*, in the sense 'agent' and 'affected', respectively.

On the other hand, syntagmatic relations between affixes are perceived as interaffixal preferences, which trigger two relational properties:

(9) **Cooccurrencing**. In the domains of morphosyntax and semantics, this property pertains to the fact that two affixes cooccur in words, because one affix tends to attract another in derived words (cf. Bauer et al. 2013). Relationship of this kind can develop in three varieties:

— between suffixes, like the suffix *-ation*, deriving action nouns, typically gets attracted by the suffixes *-ize*, in *industrialization*, *-ify*, in *purification*, and *-ate*, in *hyphenation* (in the latter case, *-ation* overlaps with *-ate*), with some suffixes attracting at least two synonymous suffixes, hence open to rivalry, like the nominal suffixes *-ness* and *-ity*, of varying degress of frequency, both attracted by some adjectival bases in *-al*, as in *grammaticalness* and *grammaticality*,
— between prefixes, like the prefix *pro-*, deriving human nouns, in the sense 'deputy', typically gets attracted by the prefix *vice-*, in *pro-vice-chancellor*,
— between suffixes and prefixes, like the prefix *un-*, deriving negative adjectives, typically gets attracted by the suffix *-able*, in *uneatable*, whereas the prefix *in-*, in the same function, is typically attracted by the suffix *-ible*, in *inaccessible*, with some suffixes attracting at least two synonymous prefixes, hence also open to rivalry, like the negative adjectival prefixes *un-* and *a-*, of varying degress of frequency, both attracted by some adjectival bases in *-al*, as in *untypical* and *atypical*.

The relationship of cooccurrencing is recursive in nature, especially with certain sets of cooccurrent suffixes, among which regular intersuffixal chain attractions develop, as in *developmentally*, with three suffixes (*-ment, -al, -ly*), and *organizationally*, with four suffixes (*-ize, -ation, -al, -ly*).

(10) **Correlationing**. In the domains of morphosyntax and semantics, this property pertains to the fact that two affixes correlate in words, because an affix tends to replace another affix in derived words. Relationship of this kind can develop in two varieties:

— between suffixes, like the suffix *-ism*, in the sense 'a system of theory, methodology or practice', deriving human nouns, getting replaced with the suffix *-ist*, in the sense 'an adherent of a system of theory, methodology or practice', as in *structural[ism] > structuralist*; in some instances, the suffix *-ism*, or *-ist*, is replaced with the suffix *-ize*, in the sense 'to follow a system of theory, methodology or practice', deriving action verbs, as in *terror[ism]* or *terror[ist] > terrorize*,

— between suffixes, like the adjectival suffixes *-able* and *-ible*, getting replaced with their bound allomorphs, *-abil-* and *-ibil-* , before a derivation of state nouns, with the nominal suffix *-ity* attaching, can take place, as in *desirable: desirabil- + -ity > desirability* and *flexible: flexibil- + -ity > flexibility*.

To conclude this overview, a reminder that in handling polyfunctional affixes, in which several distinct, related or unrelated, meanings and distinct functions coincide in a single form, properties (3)-(6) and, where applicable, (7)-(10) need to be specified for each function separately; for example, for the prefix *un-* in words like *unhappy, unrest, untie, unsaddle*, where it means 'not', 'lack of', 'reversal' and 'removal', respectively, and for the suffix *-ish* in words like *childish, yellowish, fiftyish, Finnish*, where it means 'typical of', 'somewhat', 'about', 'coming from', respectively.

3.   Description of the new model

By the new model is meant the unity of two interlinked methods of acquiring the properties of English lexical affixes: the first is in the domain of language teaching and it adapts the **heuristic** approach to the acquisition of those properties; and the second method is in the domain of lexicography and it adopts an **inferential** approach to the presentation of affixal properties. The interlinkage of the two methods consists in the fact that acquisition and presentation have been conceived and realized so as to go hand in hand and to rely strongly on each other.

In what follows, the new model will be introduced in a detailed description, which will throw light on its five major aspects: pragmatic reasons (3.1), main objectives (3.2), underlying principles (3.3), instructional material (3.4) and real-life functioning (3.5).

3.1   Pragmatic reasons for the model

Working knowledge of affixal properties, as one type of lexical knowledge, is

of great potential utility for EFL students, including, naturally, EFL university students, in two significant respects: firstly, from a practical (communicative) viewpoint, essential affixal properties help students to understand compositional prefixations and suffixations, established and new alike, by decoding forms and interpreting their meanings (cf. Lehrer 2003; Metcalf 2002; Prćić 2001); later on, at a more advanced level of proficiency, to venture into creating their own new words by encoding meanings into forms. Secondly, from a theoretical ((meta)linguistic) viewpoint, essential and relational affixal properties can help students to understand better the networked organization and operation of (part of) the language system, its lexicon and, within the lexicon, its affixal word-formative module (cf. Bauer 1983; Dixon 2014; Marchand 1969; Miller 2014).

Information about affixal properties is normally included in general-purpose dictionaries, alongside information about words, and in specialized dictionaries of affixes. It is a well-known and easily verifiable fact that today's general-purpose dictionaries of English, both learner's and native-speaker ones, amid fierce competition between publishers and brands, excel at their treatment of words, using for their accurate portrayal ever-improving, corpus-driven and computer-assisted methods of electronic lexicography (cf. Fuertes-Olivera and Bergenholtz 2013; Gouws et al. 2013; Granger and Paquot 2012). In contrast, the treatment of affixes does not follow this, or any other identifiable methodology and, as a result, the picture of affixal properties in many general-purpose dictionaries is far from acceptable.

A study of the lexicographic treatment of two prefixes and two suffixes in four learner's dictionaries (Prćić 1999), known to the trade as the 'big four', has shown that there is much room for improvement in this area. Using the then current, 1995, print editions of *OALD*, *LDOCE*, *COBUILD* and *CIDE*, a comparative analysis of the treatment of four exemplary affixes was carried out — the prefixes *dis-* and *pro-*, and the suffixes *-ish* and *-or*, all selected because of their rich and diversified sets of properties, which pose a descriptive and, above all, lexicographic, challenge. The chief aim of the analysis was to try to identify the system and the method applied for the treatment of these affixes and, by extension, of affixes generally. The results obtained were quite eye-opening, even though not surprising, as it was ascertained that no firm system and no firm method was observed to be at work in any of the 'big four' dictionaries. Consequently, the information provided on affixal properties seems, by and large, to be fairly arbitrary, both in quantity and quality: as stated in the summing-up of the results (Prćić 1999: 274), the expected information may be lacking altogether, it may be given inconsistently and/or incompletely, it may be either under-refined or over-refined, or it may even be incorrect.

Twenty years on, it would be rewarding to conduct a new, two-level analysis of the treatment of affixes, this time using the current online editions of the 'fabulous five' (cf. Prćić 2004), *OALD*, *LDOCE*, *COBUILD*, *CALD* and *MEDAL*, in order, firstly, to find out their provision for the four affixes under scrutiny, and, secondly, to compare and contrast the 'diachronic' provisions in

the now and the then editions — all this with the aim of detecting superficial and substantial signs of improvement, if any.

Meanwhile, until the new analysis is performed and its results ready, here are the findings of a different, recently completed, comparative analysis, involving as many as fifteen general-purpose dictionaries, as few as two lexical affixes and as few as four affixal properties. The properties — Stress Placement (taken from Pronunciation), Base Part of Speech and Word Part of Speech (both taken from Attachability), and Descriptive Meanings, have been selected because they are the most challenging for students to acquire. The affixes — the prefix *un-* and the suffix *-ee*, have been selected because they perfectly exhibit all distinct facets of the four properties. The dictionaries — the online editions of *OALD*, *LDOCE*, *COBUILD*, *CALD*, *MEDAL* (British, learners'), *MWLD*, *RHLD* (American, learners'), *ODE*, *CED*, *C21CD* (British, native speakers'), *RHUD*, *AHD*, *MWCD*, *WNWCD* (American, native speakers') and *Wiktionary* (global), have been selected because they are universally and deservedly considered to be among the most respected, consulted and trusted dictionaries of English.

The coverage of the four properties has been checked in these fifteen dictionaries with the following expectations:

— Stress Placement — for *un-*, indication of the syllable in the word bearing primary stress (the prefix is stress-neutral); for *-ee*, indication of the last syllable in the word, bearing primary stress under the influence of *-ee* (the suffix is stress-imposing).
— Base Part of Speech — for *un-*, indication of adjective, adverb, noun or verb, as appropriate; for *-ee*, indication of verb, adjective or noun, as appropriate (both affixes are class-changing in some functions and class-maintaining in others).
— Word Part of Speech — for *un-*, indication of adjective, adverb, noun or verb, as appropriate; for *-ee*, indication of noun.
— Descriptive Meanings — for *un-*, indication of four meanings (not, lack of, reversal, removal); for *-ee*, indication of three meanings (affected, agent, one involved in).

The findings are summarized in Table 1, where the letter 'Y' stands for 'yes, provision is given', the letter 'N' for 'no, provision is not given' and the letter 'P' for 'partial provision is given', all implying variably fulfilled expectations; for the meanings, if provision is below the total expected, a figure appears to denote the number of meanings covered; the best two overall provisions are highlighted.

		OALD	LDOCE	COBUILD	CALD	MEDAL	MWLD	RHLD	ODE	CED	C21CD	RHUD	AHD	MWCD	WNWCD	Wiktionary
un-	Stress Placement	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
	Base Part of Speech	N	N	Y	Y	Y	N	P	Y	P	Y	P	N	Y	P	P
	Word Part of Speech	Y	Y	P	N	N	N	P	N	P	P	P	N	Y	N	P
	Descriptive Meanings	3	3	2	2	2	3	Y	Y	Y	3	Y	Y	Y	Y	Y
-ee	Stress Placement	N	N	/	N	N	N	N	N	N	N	N	N	N	N	N
	Base Part of Speech	N	N	/	Y	Y	N	Y	P	N	P	P	N	N	N	P
	Word Part of Speech	Y	Y	/	P	Y	Y	Y	Y	Y	Y	Y	N	Y	N	N
	Descriptive Meanings	2	Y	/	2	2	2	Y	2	2	2	Y	Y	Y	Y	Y

Table 1:   Coverage of selected properties of selected affixes in selected dictionaries

The tabulated data clearly shows that the word best capturing the lexicographic treatment of affixes and their properties, both in learner's and native-speaker's dictionaries, both British and American, is — **inconsistency**. As can be noticed, one dictionary leaves out the suffix entirely; not a single dictionary regards stress placement as important enough for inclusion; contrariwise, around a half have quite adequate provision for the meanings (8 prefixal vs 7 suffixal), although not all are neatly presented and defined; however, the most inconsistency mars surveys of base and word parts of speech. Needless to say, an in-depth examination of the information retrieved from the fifteen dictionaries would require a full-length paper, to demonstrate empirically the quantity and the quality of the coverage of affixal properties. What can already be asserted with confidence is that inconsistency seems generally to be a strong and prevailing trend — and for no obvious reason.

The conclusion, reached two decades ago, that affixes are, on the whole, treated "as nothing more than poor relations of words and phrases" (Prćić 1999: 274), sadly, remains valid today and, to all intents and purposes, is likely to persist. In consequence, it would be both pointless and useless to recommend to students, especially EFL university students, general-purpose dictionaries, containing bafflingly erratic sketches of affixes, as sources of information about the properties of English lexical affixes.

In order to lessen the effects of this state of affairs the simplest solution is a repurposing of dictionaries. More specifically, considering the fact that general-

purpose dictionaries are highly reliable in their treatment of words, the self-same dictionaries should *somehow* be made usable for extracting information about affixes from the information they provide about words. That *somehow*, the driving force behind the new model of exploring affixal properties, will be elucidated in the following sections.

3.2   Main objectives of the model

The new model, intended especially for EFL university students, has been continuously tried and tested for over a decade with third-year undergraduates attending a course in Lexical Morphology at the Department of English, Faculty of Philosophy, University of Novi Sad. The objectives of this model are threefold:

— to provide students with an efficient, effective and user-friendly way of familiarizing affixal properties;
— to provide students with an intriguing and stimulating teaching aid, that will guide them through the intricacies of English lexical affixes and thus allow them a fuller and more consistent insight into affixal properties than is presently available;
— to devise and compile a novel **bare-bones inferential dictionary** of English affixes (henceforward, **BBID**), a hybrid between a teaching aid and a dictionary, or, more precisely, a teaching aid in the shape of a dictionary, in which two systems for gaining information are deployed: supplying users with information in the dictionary itself and directing users to look for information elsewhere, in English learner's and/or native-speaker general-purpose dictionaries.

3.3   Underlying principles behind the model

From a theoretical point of view, underpinning this model are the definition of the affix, the determination of the nature of its properties and their classification into essential and relational ones, as outlined in Section 2.

From a methodological point of view, underpinning this model is the heuristic approach to teaching and learning (cf. Kumaravadivelu 2003; Sale 2015; Seliger 1975; Takimoto 2008), whereby students are guided step by step, by appropriately given prompts in BBID, to actively discover, or infer, information and/or gain knowledge on their own, rather than being simply their passive recipients. In this particular case of self-study, the heuristic builds around two key lexical objects — target affix and source word.

Occupying central position in the model is the **target affix**, a prefix or a suffix, whose properties are there to be discovered, like the prefix *un-* and the suffix *-ee*. Closely connected with the target affix is the **source word**, one or more of them, depending on the number of meanings and functions involved,

like *1 un.happy, un.English, un.beaten, un.caring, 2 un.rest, 3 un.tie, 4 un.saddle*$_V$, for the prefix, and *1 employ.ee*$_N$*, pay.ee*$_N$*, 2 escap[e].ee*$_N$*, 3 absent.ee*$_N$, for the suffix. Source words are representative of the entire set of affixal properties and they play a dual role: firstly, they provide a natural surroundings for the target affix and contextualize its available meaning(s) and function(s); and, secondly, and much more importantly, source words contain target-affix properties to be discovered and exhibit them in a clear and prototypical form, as systematic and predictable contributions in compositional formations.

The required properties can be inferred in two complementary ways, interconnected with the provision of two complementary types of information that students are supposed to discover, collate and organize into a coherent whole: the first is by reading immediate information off the source words themselves, mostly relating to form and partly function, thereby inferring **obvious information**, explicitly given and just waiting to be recognized and registered; and the second way is by exploiting information, offered in English learner's and/or native-speaker general-purpose dictionaries, *about* the source words and, by implication, the target affixes, mostly relating to content and partly function, thereby inferring **hidden information**, implicitly signalled and prompted to be sought and found elsewhere.

The affixal properties deemed necessary and sufficient for EFL undergraduates address their passive knowledge of the processes of English derivation and their concrete results, and therefore equip students to understand, interpret or decode derived words — established and new alike. Out of the two sets of essential and relational properties discussed in Section 2, at the end of their work based on the model being outlined, what is exactly expected from students is familiarity with essential affixal properties, except for Subcategorization and Productivity, which, alongside relational properties, belong rather to the active knowledge of postgraduates. According to this model, the following seven properties are to be mastered by students and, for this reason, are regarded as core affixal properties: (1) Spelling, the only property presumed to be known by students and therefore dispensable from this checklist, (2) Spelling Niceties, (3) Pronunciation, (4) Stress Placement, (5) Parts of Speech, (6) Descriptive Meaning, and (7) Associative Meaning.

3.4   Instructional material for the model

This model is meant to be realized with the support of uncommonly modest instructional material, in the form of a single handout, taking up a mere two A4 pages. This information-packed handout — containing, in fact, the full BBID — offers all that is to be known and done about becoming familiar with the core properties of English lexical affixes. BBID adopts two earlier created lists of prefixes and suffixes (cf. Prćić 2005, 2008), which constitute English synchronic prefixes and suffixes, frequent and necessary enough to warrant inclusion into an EFL university students' teaching aid of this kind. The dictionary's structure

will now be explained and exemplified (for theoretical, methodological and practical aspects of structuring dictionaries, see Atkins and Rundell 2008; Fontenelle 2008; Hartmann 2001; Hartmann and James 1998; Landau 2001; Svensén 2009); for greater ease of reference, in Appendix 1 and 2, typographically reflown contents of the original handout are reproduced in their entirety.

As it can be seen in the reproductions, the macrostructure of this dictionary is organized around two numbered alphabetical lists of affixes, populated with altogether 100 prefixes and 113 suffixes. After brief initial notes on the top, the lexicographic treatment of these affixes is divided between four structural features, like this:

— acting as headwords, placed at the beginning of their lines and printed in bold are target prefixes and suffixes, followed or preceded, respectively, by a hyphen, as in (elements under discussion are emphasized by shading):

prefix:
6.   **be-**: 1 be.friend$_V$, be.little$_V$ | 2 be.spectacled

suffix:
68.   **-ish**: 1 child.ish$_{ADJ}$ | 2 yellow.ish$_{ADJ}$ | 3 fifty.ish$_{NUM}$ | 4 Finn.ish$_{ADJ/N}$;

— acting as form- and content-related comment, continuing on the same line and printed in ordinary type are numbered source words, one or more of them, mirroring the meanings and functions of an affix, with a dot inside showing the boundary between a base and an affix, as in:

prefix:
6.   **be-**: 1 be.friend$_V$, be.little$_V$ | 2 be.spectacled

suffix:
68.   **-ish**: 1 child.ish$_{ADJ}$ | 2 yellow.ish$_{ADJ}$ | 3 fifty.ish$_{NUM}$ | 4 Finn.ish$_{ADJ/N}$;

— acting as between-entry one-way cross-references, placed at the beginning of their lines, printed in italics and directed to by the prompt 'see', are allomorphs of affixes cross-referred to their canonical forms, where they receive full treatment, as in:

prefixes:
24.   *em-* see *en-*
25.   **en-**: 1 en.large$_V$ | 2 en.throne$_V$; **em-**: 1 em.power$_V$ | 2 em.body$_V$

suffixes:
44.   *-et* see *-ette*
45.   **-ette**: 1 disk.<u>ette</u>$_N$ | 2 leather.<u>ette</u>$_N$ | 3 usher.<u>ette</u>$_N$, Paul.<u>ette</u>$_N$;
        -et: 1 baron.et$_N$ / baron.<u>et</u>$_N$, falcon.<u>et</u>$_N$;

— only in the suffix segment, acting as within-entry two-way cross-references, placed at the very end of the same lines, printed in italics and

directed to by the prompt 'see also', are suffixes cross-referred to formally and/or semantically related suffixes, and vice versa, as in:

1. **-able**: 1 wash.able_{ADJ}, pay.able_{ADJ} | 2 change.able_{ADJ} | 3 fashion.able_{ADJ}; see also *-ible*

    ...

54. **-ible**: 1 digest.ible_{ADJ}; see also *-able*.

Provision of concrete core properties in BBID is based on its notation, specially devised to be simple, self-explanatory and easy-to-remember. The role of the notation is twofold: to convey obvious, readily recognizable, information about the properties of affixes, as given in the dictionary, and to convey hidden information, indirectly prompting users to look for it in another dictionary. In the following paragraphs, explanations will be given of the types of notation used to introduce specific pieces of obvious, hidden and mixed information about the seven core affixal properties:

(1) Spelling:
— (obvious information) provided for all target affixes is the written form of an affix in isolation, printed in bold, with prefixes followed by a hyphen and suffixes preceded by a hyphen, to show their bound nature: e.g. **equi-, -ness**,
— (obvious information) provided for all source words containing target affixes is the written form of an affix within the source word, with the dot to be ignored here: e.g. **equi**.distant, kind.**ness**_N,
— (obvious information) if two forms of a target affix or a source word are separated by a slash, it indicates written and/or spoken variants: e.g. **deca-/deka-**, lion.**ess**_N / lion.**ess**_N,
— (obvious information) if a letter or a sequence of letters, with or without morphemic status, in a source word is enclosed within square brackets, it indicates omission of that letter or sequence: e.g. happ[**y**]i.**ness**_N, particip[**ate**].**ant**_N,
— (obvious information) if an additional consonant letter, preceded by a plus sign, is inserted into the source word, it indicates doubling of that letter: e.g. hat+t.**er**_N.

(2) Spelling Niceties:
— (obvious information) if a target prefix is followed by two hyphens, it indicates that the prefix and its base may occur hyphenated in words: e.g. **micro--**.

(3) Pronunciation:
— (hidden information) to be discovered by checking the pronunciation of a target affix within the source word: e.g. **quasi-- quasi**.scientific, **-ish** child.**ish**_{ADJ}.

(4) Stress Placement:
   — (mixed information) provided for all source words containing stress-imposing target suffixes is an underline at the syllable bearing primary stress, to be exactly discovered by checking the pronunciation of the source word: e.g. con<u>tempt</u>.**uous**_{ADJ}, a<u>tom</u>.**ic**_{ADJ}, employ.**<u>ee</u>**_N,
   — (mixed information) if no underline is provided, it indicates that primary stress of the source word agrees with that of its base, to which a stress-neutral target affix has attached, to be exactly discovered by checking the pronunciation of the source word: e.g. **mis**.spell, wash.**able**_{ADJ}.

(5) Parts of Speech:
   — (obvious information) provided for all source words containing class-changing target prefixes and all target suffixes is a subscript after a source word showing its part of speech: e.g. **be**.friend_V, gold.**en**_{ADJ},
   — (obvious information) if no subscript is provided after a source word, it indicates that its part of speech agrees with that of the base, to which a class-maintaining target prefix has attached: e.g. **co**.author,
   — (hidden information) to be discovered for all target affixes is the part of speech of the base by checking the source word while ignoring the affix and foregrounding the base: e.g. **ante**.date, **de**.ice_V, usher.**<u>ette</u>**_N.

(6) Descriptive Meaning:
   — (hidden information) to be discovered for all target affixes by checking the descriptive meaning of the source word: e.g. **un**.saddle_V, reader.**ship**_N.

(7) Associative Meaning:
   — (hidden information) to be discovered for all target affixes by checking the associative meaning of the source word: e.g. profit.**<u>eer</u>**_N.

As it can be gathered, the central structural feature of BBID, which is responsible for conveying some of the obvious information and all of the hidden information, is its triple cross-referential system. It is meant to work on two levels — internally, when handling obvious information, provided in this dictionary, and externally, when handling hidden information, provided in other dictionaries. Internal cross-references can be twofold: the within-entry type operates bidirectionally and is announced by the prompt 'see also', while the between-entry type operates unidirectionally and is announced by the prompt 'see'. In contrast, external cross-references always operate unidirectionally, have no announcing prompts, but their specific notation, directing users to sources beyond BBID.

3.5   Real-life functioning of the model

It will shortly become apparent that this unusual, if not peculiar, self-study

model is proving both usable and useful, bringing tangible benefits for students, since the slightly roundabout route to exploring the properties of English lexical affixes by exploiting the resources of English general-purpose dictionaries is in several respects superior to the seemingly quick direct route of checking affixal entries in dictionaries only to be faced with inconsistent and incomplete information for which hardly any use can be found.

With the objectives formulated and the accompanying instructional material prepared, the new model is put into actual practice. This process comprises four phases:

— Setting the task in class by the teacher, which involves explaining to the students, with the aid of an instruction sheet and concrete examples, firstly, the affixal properties to be found out; secondly, the organization and use of BBID; thirdly, the method of finding out affixal properties step by step; fourthly, a list of English learner's and native-speaker dictionaries to be consulted (comprising the fifteen titles mentioned in Section 3.1); and fifthly, the reasons for taking this circuitous, heavily cross-referential, route over the well-trodden path to looking up affixes alone.

— Doing the task by the students at home, which involves, firstly, checking source words and discovering the properties of target affixes; and secondly, putting together the information thus obtained into a profile of each affix — this phase is expected to be completed within three weeks.

— Discussing the students' findings in class, which involves, firstly, analysing the results achieved by reviewing their affix profiles; secondly, resolving points of difficulty and/or uncertainty, preferably student-to-student or, as a last resort, teacher-to-students; and thirdly, eliciting student feedback on their conducting research in this particular way.

— Testing the students' knowledge, which involves, firstly, tackling different example words either in isolation or in texts, in follow-up exercises, mock exams and the end-of-course exam; secondly, evaluating the students' level of affixal proficiency; and thirdly, reassessing the merits and demerits of this model, with a view to constantly improving its efficiency — theoretically, methodologically and practically.

4.   Summing up, appraising and looking ahead

In this paper, a viable interim solution to acquiring the properties of English lexical affixes by EFL university students has been presented. The solution involves a new model of heuristic self-study of affixal properties, which builds around a novel BBID, intended to guide students on their discoveries. Without doubt the most important advantage of this model is that the results obtained by students are, on aggregate, the same or very similar, regardless of the dictionary, or dictionaries, consulted. In this way, all students have come to share

roughly the same working knowledge of affixes and their properties, which has resulted in the majority being able to apply with aplomb their newly-acquired knowledge to other derived words, established and new, arising in concrete situations. This objective, and the prime motive for initiating this project, has apparently been accomplished, alongside the other objective, that an appropriate teaching aid in the shape of a dictionary be conceived and produced.

Judging by the students' spontaneous reactions, they see the relative merits of this model in the following: they can work undistracted, at their own pace; they can gain knowledge through their own individual research; they can freely exploit the dictionaries they already have or browse on the web, with no extra expenses incurred; they can recognize affixal properties in different words of the same types; they can understand and interpret established and new words containing prefixes and/or suffixes. As relative demerits of this model the students have singled out the following: time-consuming and never-ending task; dauntingly large number of affixes and their properties to be dealt with; problems with first discovering and then identifying and formulating definitions of the meaning(s) of some affixes. An additional cautionary note from the teacher may be of interest: over the years, it has become known that a few students are put off by BBID and choose to quietly perform their research in the conventional manner, looking up affixes proper and inevitably achieving limited success; still more frustratingly, very few students are put off by self-study and choose to abandon the research completely.

The students' opinions on BBID have always started from an initial sense of dismay and disappointment with the novel dictionary's austere appearance and lack of information found in typical, normal, dictionaries. Then, after explanations which helped them to grasp the system behind BBID and its expected use, and further clarifications of the unique role of the source words and the hidden, cross-referential information, there ensued a gradual swing of opinion towards liking the dictionary and growing to appreciate the wealth of information it offers explicitly and implicitly. However, one student remarked wryly that she had enjoyed discovering about affixal properties very much but she would have preferred to have a print or online dictionary with all the information they had had to dig up for themselves. Not surprisingly, this remark met with overwhelming approval of her fellow students.

Echoing the title of the renowned *Longman Language Activator* (Summers 2004), the purposefully designed innovative BBID, by its function perhaps best designated *English Affix Activator*, offers all that is necessary for students' heuristic self-study process — explicit information and implicit instructions for discovering information about the properties of English lexical affixes in general-purpose dictionaries. Although it has proved to be an efficient teaching aid in its current form, BBID could be expanded in scope, by the inclusion of indications for the properties of Subcategorization and Productivity, from the set of essential properties, and internal two-way cross-references for Interaffixal Synonymy and Interaffixal Antonymy, from the set of relational properties. These

additions would turn BBID, a (highly) minimalist dictionary, into an enlarged and more informative reference work, an (almost) optimal dictionary, with an educational role.

Lastly, in order to make this optimal dictionary into a full-fledged, comprehensive dictionary of affixal properties, all properties, both essential and relational, discussed above should be included in full, with an effective presentation and fine exemplification, where silent source words are promoted into telling examples. In this way, dispensing with implicitly given information, which prompts users to some activity, and concentrating solely on explicit information, a genuinely useful piece of lexicography, preferably in electronic form, entitled provisionally *An Advanced Learner's Dictionary of English Lexical Affixes* (or, *ALDELA*, for short), could be produced, drawing on the strong (and not so strong) theoretical and methodological points underpinning *Collins COBUILD English Guides 2: Word Formation* (Sinclair 1991), *Word Parts Dictionary: Standard and Reverse Listings of Prefixes, Suffixes, and Combining Forms* (Sheehan 2000), *Ologies and Isms: A Dictionary of Word Beginnings and Endings* (Quinion 2002) and *Affixes: The Building Blocks of English*, its online variety — and, especially, *A Dictionary of English Affixes: Their Function and Meaning* (Stein 2007).

Such a dictionary would be a significant step in the right direction and would greatly reduce the need for acquiring the properties of English lexical affixes by relying on BBID and prompting users to turn to general-purpose dictionaries for a substantial and valuable assistance. However, discussion of this dictionary of the future and its kindred predecessors lies outside the scope of the present paper.

Acknowledgements

References

A.   Dictionaries

Printed

Jones, D. 2006. *Cambridge English Pronouncing Dictionary.* Seventeenth edition. Edited by Roach, P., Hartman, J. and J. Setter. Cambridge: Cambridge University Press.

Quinion, M. 2002. *Ologies and Isms: A Dictionary of Word Beginnings and Endings.* Oxford: Oxford University Press.

Sheehan, M.J. 2000. *Word Parts Dictionary: Standard and Reverse Listings of Prefixes, Suffixes, Roots and Combining Forms.* Jefferson/London: McFarland.

Sinclair, J. (Ed.). 1991. *Collins COBUILD English Guides 2: Word Formation.* London: HarperCollins.

Stein, G. 2007. *A Dictionary of English Affixes: Their Function and Meaning.* Munich: Lincom Europa.

Summers, D. (Ed.). 2004. *Longman Language Activator.* Second edition. Harlow: Pearson Education.

Wells, J.C. 2008. *Longman Pronunciation Dictionary.* Third edition. Harlow: Pearson Education.

Online

Affixes: The Building Blocks of English: http://www.affixes.org/.

The American Heritage Dictionary of the English Language, the (AHD): https://ahdictionary.com/.

Cambridge Advanced Learner's Dictionary and Thesaurus(CALD): https://dictionary.cambridge.org/.

Chambers 21st Century Dictionary (C21CD): https://chambers.co.uk/.

COBUILD Advanced English Dictionary (COBUILD): https://www.collinsdictionary.com/.

Collins English Dictionary (CED): https://www.collinsdictionary.com/.

Longman Dictionary of Contemporary English (LDOCE): https://www.ldoceonline.com/.

Macmillan English Dictionary for Advanced Learners (MEDAL): http://www.macmillandictionaries.com/.

Merriam Webster's Collegiate Dictionary (MWCD): https://www.merriam-webster.com/.

Merriam Webster's Learner's Dictionary (MWLD): http://learnersdictionary.com/.

Oxford Advanced Learner's Dictionary (OALD): https://www.oxfordlearnersdictionaries.com/.

Oxford Dictionary of English (ODE): https://en.oxforddictionaries.com/.

Random House Learner's Dictionary of American English (RHLD): http://www.wordreference.com/definition/.

Random House Unabridged Dictionary (RHUD): https://www.dictionary.com/.

Webster's New World College Dictionary (WNWCD): https://www.yourdictionary.com/.

Wiktionary, the Free Dictionary: https://en.wiktionary.org/.

B.   Other literature

Atkins, B.T.S. and M. Rundell. 2008. *The Oxford Guide to Practical Lexicography.* Oxford/New York: Oxford University Press.

Bauer, L. 1983. *English Word-Formation.* Cambridge: Cambridge University Press.

Bauer, L. 2001. *Morphological Productivity.* Cambridge: Cambridge University Press.

Bauer, L. and R. Huddleston. 2002. Lexical Word Formation. Huddleston, R. and G.K. Pullum (Eds.). 2002. *The Cambridge Grammar of the English Language:* 1621-1721. Cambridge: Cambridge University Press.

Bauer, L., R. Lieber and I. Plag (Eds.). 2013. *The Oxford Reference Guide to English Morphology.* Oxford: Oxford University Press.

Cruse, A. 2010. *Meaning in Language: An Introduction to Semantics and Pragmatics.* Third edition. Oxford: Oxford University Press.

Dixon, R.M.W. 2014. *Making New Words: Morphological Derivation in English.* Oxford: Oxford University Press.

Fontenelle, T. (Ed.). 2008. *Practical Lexicography: A Reader.* Oxford: Oxford University Press.

Fuertes-Olivera, P.A. and H. Bergenholtz (Eds.). 2013. *e-Lexicography: The Internet, Digital Initiatives and Lexicography.* London: Bloomsbury Academic.

Gouws, R.H., U. Heid, W. Schweickard and H.E. Wiegand (Eds.). 2013. *Dictionaries: An International Encyclopedia of Lexicography. Supplementary Volume: Recent Developments with Focus on Electronic and Computational Lexicography.* Berlin/New York: De Gruyter Mouton.

Granger, S. and M. Paquot (Eds.). 2012. *Electronic Lexicography.* Oxford: Oxford University Press.

Hartmann, R.R.K. 2001. *Teaching and Researching Lexicography.* Harlow: Longman / Essex: Pearson Education.

Hartmann, R.R.K. and G. James. 1998. *Dictionary of Lexicography.* London/New York: Routledge.

Hohenhaus, P. 2005. Lexicalisation and Institutionalisation. Štekauer, P. and R. Lieber (Eds.). 2005. *Handbook of English Word-Formation:* 353-373. Dordrecht: Springer.

Kastovsky, D. 1982. Word-Formation: A Functional View. *Folia Linguistica* 16: 181-198.

Kastovsky, D. 1986. The Problem of Productivity in Word Formation. *Linguistics* 24: 585-600.

Kumaravadivelu, B. 2003. *Beyond Methods: Macrostrategies for Language Teaching.* New Haven: Yale University Press.

Landau, S.I. 2001. *Dictionaries: The Art and Craft of Lexicography.* Second edition. New York/Cambridge: Cambridge University Press.

Leech, G. 1981. *Semantics: The Study of Meaning.* Second edition. Harmondsworth: Penguin Books.

Lehrer, A. 2003. Understanding Trendy Neologisms. *Italian Journal of Linguistics* 15(2): 369-382.

Lieber, R. and P. Štekauer (Eds.). 2014. *The Oxford Handbook of Derivational Morphology.* Oxford: Oxford University Press.

Lipka, L. 2002. *English Lexicology: Lexical Structure, Word Semantics, and Word-Formation.* Third edition. Tübingen: Gunter Narr.

Marchand, H. 1969. *The Categories and Types of Present-Day English Word-Formation.* Second, completely revised and enlarged edition. München: C. H. Beck'sche Verlagsbuchhandlung.

Metcalf, A. 2002. *Predicting New Words: The Secrets of their Success.* Boston/New York: Houghton Mifflin.

Miller, D.G. 2014. *English Lexicogenesis.* Oxford: Oxford University Press.

Murphy, M.L. 2003. *Semantic Relations and the Lexicon: Antonymy, Synonymy, and Other Paradigms.* Cambridge: Cambridge University Press.

Prćić, T. 1999. The Treatment of Affixes in the 'Big Four' EFL Dictionaries. *International Journal of Lexicography* 12(4): 263-279.

Prćić, T. 2001. Interpreting Morphologically Complex Lexemes Revisited. Németh, T.E. and K. Bibok (Eds.). *Pragmatics and the Flexibility of Word Meaning:* 225-244. Oxford: Elsevier.

Prćić, T. 2004. Enter the 'Big Fifth' EFL Dictionary: *Macmillan English Dictionary for Advanced Learners. Lexicographica* 20: 303-322.

Prćić, T. 2005. Prefixes vs Initial Combining Forms in English: A Lexicographic Perspective. *International Journal of Lexicography* 18(3): 313-334.

Prćić, T. 2008. Suffixes vs Final Combining Forms in English: A Lexicographic Perspective. *International Journal of Lexicography* 21(1): 1-22.

Prćić, T. 2016. *Semantika i pragmatika reči.* 3., elektronsko, izdanje [*Semantics and Pragmatics of the Word.* Third, digital, edition]. Novi Sad: Filozofski fakultet. Accessed at: http://digitalna.ff. uns.ac.rs/sadrzaj/2016/978-86-6065-356-9 (30 March 2019).

Prćić, T. 2019, in press. Distinctive Properties of English Lexical Affixes: An Overall View. *Belgrade English Language and Literature Studies (Belgrade BELLS), Special Issue in Honour of Boris Hlebec.*

Quirk, R., S. Greenbaum, G. Leech and J. Svartvik. 1985. *A Comprehensive Grammar of the English Language.* London/New York: Longman.

Sale, D. 2015. *Creative Teaching: An Evidence-Based Approach.* Singapore: Springer.

Saussure, F. de. 1916. *Cours de linguistique générale.* Paris: Payot.

Seliger, H.W. 1975. Inductive Method and Deductive Method in Language Teaching: A Re-examination. *International Review of Applied Linguistics in Language Teaching (IRAL)* 13(1): 1-18.

Svensén, B. 2009. *A Handbook of Lexicography: The Theory and Practice of Dictionary-Making.* Cambridge: Cambridge University Press.

Štekauer, P. and R. Lieber (Eds.). 2005. *Handbook of Word-Formation.* Dordrecht: Springer.

Takimoto, M. 2008. The Effects of Deductive and Inductive Instruction on the Development of Language Learners' Pragmatic Competence. *The Modern Language Journal* 92: 369-386.

Appendix 1: A bare-bones inferential dictionary of English lexical prefixes

NOTE: Two hyphens following a prefix indicate that the prefix often attaches to the base with a hyphen.

1. **a-**: 1 a.typical | 2 a.shore$_{ADV}$ | 3 a.loud$_{ADV}$
2. **ante-**: 1 ante.date | 2 ante.chamber
3. **anti--**: 1 anti.democratic | 2 anti.bacterial, anti.pyretic | 3 anti.climax, anti.clockwise
4. **arch-**: 1 arch.duke | 2 arch.enemy | 3 arch.conservative
5. **auto--**: 1 auto.focus | 2 auto.suggestion
6. **be-**: 1 be.friend$_v$, be.little$_v$ | 2 be.spectacled
7. **bi--**: 1 bi.lingual | 2 bi.annual
8. **by--/bye--**: 1 by.product, by.road | 2 by(e).election
9. **centi-**: 1 centi.metre / centi.meter
10. **circum-**: 1 circum.navigate
11. **cis-**: 1 cis.alpine
12. **co--**: 1 co.author, co.produce | 2 co.pilot
13. **contra-**: 1 contra.indication | 2 contra.bassoon
14. **counter--**: 1 counter.attack | 2 counter.clockwise | 3 counter.part
15. **cyber-**: 1 cyber.talk
16. **de--**: 1 de.stabilize | 2 de.ice$_v$ | 3 de.verbal
17. **deca-/deka-**: 1 deca.gram / deka.gram
18. **deci-**: 1 deci.bel
19. **demi-**: 1 demi.god | 2 demi.semiquaver
20. **di-**: 1 di.syllabic
21. **dis-**: 1 dis.connect | 2 dis.similar, dis.agree | 3 dis.bud$_v$
22. **dys-**: 1 dys.functional
23. **e--**: 1 e.banking
24. *em-* see *en-*
25. **en-**: 1 en.large$_v$ | 2 en.throne$_v$; **em-**: 1 em.power$_v$ | 2 em.body$_v$
26. **endo-**: 1 endo.centric
27. **equi-**: 1 equi.distant
28. **ex--**: 1 ex.president
29. **exo-**: 1 exo.centric
30. **extra--**: 1 extra.marital | 2 extra.large
31. **fore-**: 1 fore.see | 2 fore.arm
32. **giga-**: 1 giga.hertz | 2 giga.byte
33. **half--**: 1 half.cooked | 2 half.Irish | 3 half.sister
34. **hecto-**: 1 hecto.litre / hecto.liter
35. **hemi-**: 1 hemi.sphere
36. **hetero-**: 1 hetero.sexual
37. **hexa-**: 1 hexa.decimal
38. **homo-**: 1 homo.sexual
39. **hyper--**: 1 hyper.sensitive | 2 hyper.market
40. **hypo-**: 1 hypo.allergenic

41. *il-* see *in-*
42. **ill--**: 1 ill.chosen, ill.fitting
43. *im-* see *in-*
44. **in-**: 1 in.expensive | 2 in.activity; **il-**: 1 il.legal; **im-**: 1 im.patient; **ir-**: 1 ir.regular
45. **infra-**: 1 infra.red
46. **inter--**: 1 inter.national | 2 inter.relate
47. **intra--**: 1 intra.galactic
48. *ir-* see *in-*
49. **kilo-**: 1 kilo.gram | 2 kilo.byte
50. **macro--**: 1 macro.organism | 2 macro.climate | 3 macro.biotic
51. **mal-**: 1 mal.nutrition, mal.treat
52. **maxi--**: 1 maxi.skirt
53. **Mc-**: 1 Mc.Book
54. **mega--**: 1 mega.store, mega.hit | 2 mega.ohm | 3 mega.byte
55. **meta-**: 1 meta.linguistics
56. **micro--**: 1 micro.organism, micro.chip | 2 micro.electronics | 3 micro.climate | 4 micro.ampere
57. **milli-**: 1 milli.second
58. **mini--**: 1 mini.bus
59. **mis-**: 1 mis.spell, mis.use | 2 mis.trust
60. **mono-**: 1 mono.chromatic
61. **multi--**: 1 multi.racial
62. **nano-**: 1 nano.second
63. **neo--**: 1 neo.classical, neo.Darwinism
64. **non--**: 1 non.alcoholic, non.English, non.aggression | 2 non.smoker, non.fiction | 3 non.skid$_{ADJ}$ | 4 non.entity
65. **omni-**: 1 omni.present
66. **out-**: 1 out.swim
67. **over-**: 1 over.cook, over.ambitious | 2 over.rule
68. **pan--**: 1 pan.African
69. **para-**: 1 para.normal | 2 para.medical | 3 para.gliding
70. **penta-**: 1 penta.syllabic
71. **pico-**: 1 pico.farad
72. **poly-**: 1 poly.syllabic
73. **post--**: 1 post.graduate | 2 post.alveolar
74. **pre--**: 1 pre.marital | 2 pre.shrunk | 3 pre.molar
75. **preter-**: 1 preter.natural
76. **pro--**: 1 pro.European | 2 pro.active | 3 pro.consul
77. **proto-**: 1 proto.language
78. **pseudo--**: 1 pseudo.science | 2 pseudo.intellectual
79. **quadri-**: 1 quadri.lateral
80. **quasi--**: 1 quasi.scientific | 2 quasi.official
81. **re--**: 1 re.write | 2 re.call
82. **retro-**: 1 retro.active
83. **self--**: 1 self.respect, self.taught | 2 self.propelling
84. **semi--**: 1 semi.circle, semi.quaver | 2 semi.automatic, semi.skilled | 3 semi.annual

85. **step-**: 1 step.son
86. **sub--**: 1 sub.standard | 2 sub.section, sub.lease | 3 sub.editor | 4 sub.human | 5 sub.aquatic
87. **super--**: 1 super.intelligent | 2 super.market | 3 super.star, super.power | 4 super.sonic, super.natural | 5 super.impose
88. **supra-**: 1 supra.segmental
89. **sur-**: 1 sur.charge
90. **tele-**: 1 tele.kinesis | 2 tele.conferencing
91. **tera-**: 1 tera.watt | 2 tera.byte
92. **tetra-**: 1 tetra.meter
93. **trans-**: 1 trans.continental | 2 trans.national | 3 trans.alpine | 4 trans.form
94. **tri-**: 1 tri.partite
95. **uber-**: 1 uber.cool
96. **ultra--**: 1 ultra.modern | 2 ultra.violet
97. **un-**: 1 un.happy, un.English, un.beaten, un.caring | 2 un.rest | 3 un.tie | 4 un.saddle$_v$
98. **under--**: 1 under.cook | 2 under.secretary
99. **uni-**: 1 uni.directional
100. **vice--**: 1 vice.president

Appendix 2: A bare-bones inferential dictionary of English lexical suffixes

NOTE: Underlined syllables indicate the place of primary stress in words with stress-imposing suffixes.

1. **-able**: 1 wash.able$_{ADJ}$, pay.able$_{ADJ}$ | 2 change.able$_{ADJ}$ | 3 fashion.able$_{ADJ}$; see also *-ible*
2. **-aceous**: 1 curv[e].<u>ace</u>ous$_{ADJ}$; see also *-ous*
3. **-ade**: 1 block.<u>ade</u>$_N$ | 2 lemon.<u>ade</u>$_N$
4. **-age**: 1 cover.age$_N$ | 2 mile.age$_N$ | 3 post.age$_N$ | 4 orphan.age$_N$ | 5 patron.age$_N$ | 6 peer.age$_N$, sewer.age$_N$
5. **-aire**: 1 million.<u>aire</u>$_N$
6. **-al**: 1 e<u>motion</u>.al$_{ADJ}$, <u>magic</u>.al$_{ADJ}$, pa<u>rent</u>.al$_{ADJ}$, o<u>rigin</u>.al$_{ADJ}$ | 2 renew.al$_N$; **-ial**: 1 mana<u>ger</u>.ial$_{ADJ}$, profe<u>ssor</u>.ial$_{ADJ}$; **-ual**: 1 <u>fact</u>.ual$_{ADJ}$, a<u>spect</u>.ual$_{ADJ}$; see also *-ical*
7. **-alia**: 1 kitchen.<u>ali</u>a$_{N(PL)}$
8. **-an**: 1 Tibet.an$_{ADJ/N}$, Americ[a].an$_{ADJ/N}$ | 2 Chomsky.an$_{ADJ}$ | 3 republic.an$_{ADJ/N}$; **-ean**: 1 Europ[e].<u>ean</u>$_{ADJ/N}$, Carib+b.<u>ean</u>$_{ADJ/N}$ / Ca<u>rib</u>+b.ean$_{ADJ/N}$ | 2 <u>Keynes</u>.ean$_{ADJ}$, Shake<u>spear</u>[e].ean$_{ADJ}$; **-ian**: 1 Bra<u>zil</u>.ian$_{ADJ/N}$, <u>Austr</u>[ia].ian$_{ADJ/N}$, Hun<u>gar</u>[y].ian$_{ADJ/N}$ | 2 Di<u>ckens</u>.ian$_{ADJ}$, Shake<u>spear</u>[e].ian$_{ADJ}$ | 3 mathema<u>tic</u>.ian$_N$; see also *-ician*
9. **-ana**: 1 Americ[a].<u>ana</u>$_N$; **-iana**: 1 Mozart.<u>iana</u>$_N$
10. **-ance**: 1 import[ant].ance$_N$, brilli[ant].ance$_N$ | 2 assist.ance$_N$; **-ancy**: 1 pregn[ant].ancy$_N$, brilli[ant].ancy$_N$; see also *-cy*; see also *-ence*
11. *-ancy* see *-ance*
12. **-ant**: 1 contest.ant$_N$, particip[ate].ant$_N$ | 2 expect.ant$_{ADJ}$; see also *-ent*
13. **-ar**: 1 pol[e].ar$_{ADJ}$ | 2 see *-er*
14. **-ard**: 1 drunk.ard$_N$
15. **-arian**: 1 parliament.<u>ari</u>an$_N$, humanit[y].<u>ari</u>an$_{ADJ/N}$
16. **-arium**: 1 planet.<u>ari</u>um$_N$
17. **-ary**: 1 moment.ary$_{ADJ}$ | 2 revolution.ary$_{ADJ/N}$ | 3 dispens[e].ary$_N$
18. **-aster**: 1 critic.aster$_N$
19. **-ate**: 1 hyphen.ate$_V$ | 2 passion.ate$_{ADJ}$ | 3 doctor.ate$_N$ | 4 elector.ate$_N$ | 5 emir.ate$_N$
20. **-ation**: 1 expect.<u>ation</u>$_N$, uni[fy]fic.<u>ation</u>$_N$, demonstr[ate].<u>ation</u>$_N$; see also *-ion*
21. **-ative**: 1 <u>talk</u>.ative$_{ADJ}$, <u>connot</u>[e].ative$_{ADJ}$ / co<u>nnot</u>[e].ative$_{ADJ}$; see also *-ive*
22. **-atory**: 1 commend.atory$_{ADJ}$ | 2 observ[e].atory$_N$; see also *-ory*
23. **-cy**: 1 bankrupt.cy$_N$, accura[te].cy$_N$ | 2 baronet.cy$_N$ | 3 infan[t].cy$_N$, pira[te].cy$_N$; see also *-ancy*; see also *-ency*
24. **-dom**: 1 star.dom$_N$, free.dom$_N$ | 2 earl.dom$_N$ | 3 king.dom$_N$ | 4 official.dom$_N$
25. *-ean* see *-an*
26. **-ed**: 1 excit[e].ed$_{ADJ}$ | 2 talent.ed$_{ADJ}$, kind-heart.ed$_{ADJ}$
27. **-ee**: 1 employ.<u>ee</u>$_N$, pay.<u>ee</u>$_N$ | 2 escap[e].<u>ee</u>$_N$ | 3 absent.<u>ee</u>$_N$
28. **-eer**: 1 profit.<u>eer</u>$_N$ | 2 mountain.<u>eer</u>$_N$
29. **-eme**: 1 morph.eme$_N$
30. **-en**: 1 wid[e].en$_V$ | 2 gold.en$_{ADJ}$
31. **-ence**: 1 differ[ent].ence$_N$, consist[ent].ence$_N$ | 2 interfer[e].ence$_N$; **-ency**: 1 effici[ent].ency$_N$, consist[ent].ency$_N$; see also *-cy*; see also *-ance*
32. *-ency* see *-ence*

33. **-ent**: 1 resid[e].ent$_{N/ADJ}$ | 2 depend.ent$_{ADJ/N}$; see also *-ant*
34. *-eous* see *-ous*
35. **-er**: 1 teach.er$_N$, comput[e].er$_N$ | 2 hat+t.er$_N$ | 3 London.er$_N$ | 4 double-deck.er$_N$ | 5 rug[by]+g.er$_N$ | 6 disclaim.er$_N$ | 7 din[e].er$_N$; **-ar**: 1 li[e].ar$_N$; **-ier**: 1 cash.ier$_N$, cloth.ier$_N$; **-yer**: 1 law.yer$_N$; see also *-or*
36. **-erel**: 1 cock.erel$_N$
37. **-ern**: 1 north.ern$_{ADJ}$
38. **-eroo**: 1 switch.eroo$_N$
39. **-ers**: 1 preg[nant]+g.ers$_{ADJ}$, Rod[ney]+d.ers$_N$
40. **-ery**: 1 rob+b.ery$_N$ | 2 cook.ery$_N$ | 3 brew.ery$_N$ | 4 slav[e].ery$_N$ | 5 brav[e].ery$_N$, tomfool.ery$_N$ | 6 machin[e].ery$_N$; **-ry**: 1 dentist.ry$_N$ | 2 rival.ry$_N$ | 3 savage.ry$_N$ | 4 gadget.ry$_N$
41. **-ese**: 1 Japan.ese$_{ADJ/N}$ | 2 journal.ese$_N$
42. **-esque**: 1 Byron.esque$_{ADJ}$, pictur[e].esque$_{ADJ}$
43. **-ess**: 1 count.ess$_N$ / count.ess$_N$, lion.ess$_N$ / lion.ess$_N$
44. *-et* see *-ette*
45. **-ette**: 1 disk.ette$_N$ | 2 leather.ette$_N$ | 3 usher.ette$_N$, Paul.ette$_N$; **-et**: 1 baron.et$_N$ / baron.et$_N$, falcon.et$_N$
46. *-ey* see *-y*
47. **-fold**: 1 three.fold$_{ADJ/ADV}$ | 2 three.fold$_{ADV}$
48. **-ful**: 1 care.ful$_{ADJ}$ | 2 forget.ful$_{ADJ}$ | 3 spoon.ful$_N$
49. **-hood**: 1 child.hood$_N$ | 2 brother.hood$_N$ | 3 false.hood$_N$
50. **-i**: 1 Bengal.i$_{ADJ/N}$
51. *-ial* see *-al*
52. *-ian* see *-an*
53. *-iana* see *-ana*
54. **-ible**: 1 digest.ible$_{ADJ}$; see also *-able*
55. **-ic**: 1 atom.ic$_{ADJ}$, optimist.ic$_{ADJ}$, histor[y].ic$_{ADJ}$ | 2 Milton.ic$_{ADJ}$ | 3 Celt.ic$_{ADJ/N}$
56. **-ical**: 1 nonsens[e].ical$_{ADJ}$, histor[y].ical$_{ADJ}$; see also *-al*
57. **-ician**: 1 diet.ician$_N$, beaut[y].ician$_N$; see also *-ian 3*
58. **-ics**: 1 linguist[ic].ics$_N$ | 2 athlet[ic].ics$_N$
59. *-ie* see *-y*
60. *-ier* see *-er*
61. **-ify**: 1 solid.ify$_V$, simpl[e].ify$_V$, beaut[y].ify$_V$ | 2 speech.ify$_V$
62. **-ile**: 1 protract.ile$_{ADJ}$ | 2 infant.ile$_{ADJ}$
63. **-ine**: 1 hero.ine$_N$, Bernard.ine$_N$
64. **-ing**: 1 charm.ing$_{ADJ}$, prevail.ing$_{ADJ}$ | 2 read.ing$_N$, gather.ing$_N$ | 3 bank.ing$_N$ | 4 curtain.ing$_N$
65. **-ion**: 1 rebel+l.ion$_N$, connect.ion$_N$; **-ition**: 1 add.ition$_N$, compet[e].ition$_N$; **-sion**: 1 deci[de].sion$_N$; **-xion**: 1 conne[ct].xion$_N$; see also *-ation*
66. *-ious* see *-ous*
67. *-ise* see *-ize*
68. **-ish**: 1 child.ish$_{ADJ}$ | 2 yellow.ish$_{ADJ}$ | 3 fifty.ish$_{NUM}$ | 4 Finn.ish$_{ADJ/N}$
69. **-ism**: 1 cognitiv[e].ism$_N$, ideal.ism$_N$, Darwin.ism$_N$ | 2 sex.ism$_N$ | 3 hero.ism$_N$ | 4 critic.ism$_N$ | 5 colloqual.ism$_N$ | 6 alcohol.ism$_N$

70. **-ist**: 1 cognitiv[e].ist$_{N/ADJ}$, ideal.ist$_{N/ADJ}$, Darwin.ist$_{N/ADJ}$ | 2 sex.ist$_{N/ADJ}$ | 3 novel.ist$_N$ | 4 semantic.ist$_N$, zoolog[y].ist$_N$ | 5 violin.ist$_N$ | 6 cycl[e].ist$_N$, plagiar[ize].ist$_N$

71. **-ista**: 1 fashion.<u>ista</u>$_N$, Blair.<u>ista</u>$_N$

72. **-ite**: 1 Thatcher.ite$_{N/ADJ}$ | 2 Brooklyn.ite$_N$

73. *-ition* see *-ion*

74. **-itis**: 1 tonsil+l.<u>itis</u>$_N$ | 2 television.<u>itis</u>$_N$

75. **-ity**: 1 stu<u>pid</u>.ity$_N$, accept[able]a<u>bil</u>.ity$_N$, vis[ible]i<u>bil</u>.ity$_N$

76. **-ive**: 1 attract.ive$_{ADJ}$, creat[e].ive$_{ADJ}$; see also *-ative*

77. **-ize**: 1 modern.ize$_V$ | 2 critic.ize$_V$; **-ise**: 1 modern.ise$_V$ | 2 critic.ise$_V$

78. **-kin**: 1 lamb.kin$_N$

79. **-less**: 1 taste.less$_{ADJ}$ | 2 count.less$_{ADJ}$

80. **-let**: 1 book.let$_N$, pig.let$_N$ | 2 neck.let$_N$

81. **-ling**: 1 duck.ling$_N$ | 2 prince.ling$_N$, weak.ling$_N$

82. **-ly**: 1 slow.ly$_{ADV}$, gent[le].ly$_{ADV}$ | 2 mother.ly$_{ADJ}$ | 3 hour.ly$_{ADJ/ADV}$ | 4 poor.ly$_{ADJ}$

83. **-manship**: 1 brink(s).manship$_N$, games.manship$_N$; see also *-ship*

84. **-ment**: 1 develop.ment$_N$

85. **-ness**: 1 kind.ness$_N$, happ[y]i.ness$_N$

86. **-nik**: 1 peace.nik$_N$

87. **-o**: 1 comb[ination].o$_N$ | 2 cheap.o$_N$

88. **-ock**: 1 hill.ock$_N$

89. **-oid**: 1 human.oid$_{ADJ/N}$

90. **-or**: 1 invent.or$_N$, generat[e].or$_N$; see also *-er*

91. **-ory**: 1 advis[e].ory$_{ADJ}$, migrat[e].ory$_{ADJ}$ | 2 deposit.ory$_N$; see also *-atory*

92. **-ous**: 1 poison.ous$_{ADJ}$; **-eous**: 1 <u>gas</u>.eous$_{ADJ}$; **-ious**: 1 up<u>roar</u>.ious$_{ADJ}$; **-uous**: 1 con<u>tempt</u>.uous$_{ADJ}$; see also *-aceous*

93. *-ry* see *-ery*

94. **-s**: 1 banana.s$_{ADJ}$, Deb[orah].s$_N$

95. **-ship**: 1 professor.ship$_N$ | 2 Lord.ship$_N$ | 3 musician.ship$_N$, statesman.ship$_N$; see also *-manship* | 4 friend.ship$_N$ | 5 reader.ship$_N$ | 6 hard.ship$_N$

96. *-sion* see *-ion*

97. **-some**: 1 quarrel.some$_{ADJ}$ | 2 three.some$_N$

98. **-ster**: 1 young.ster$_N$ | 2 trick.ster$_N$

99. **-sy**: 1 cute.sy$_{ADJ}$ | 2 Pat.sy$_N$

100. **-th**: 1 warm.th$_N$ | 2 grow.th$_N$

101. **-ton**: 1 simple.ton$_N$

102. **-trix**: 1 avia[tor].trix$_N$

103. **-ty**: 1 certain.ty$_N$

104. *-ual* see *-al*

105. *-uous* see *-ous*

106. **-ure**: 1 fail.ure$_N$ | 2 prefect.ure$_N$

107. **-ward**: 1 east.ward$_{ADV/ADJ}$, wind.ward$_{ADV/ADJ}$; **-wards**: 1 east.wards$_{ADV}$

108. *-wards* see *-ward*

109. *-ways* see *-wise*

110. **-wise**: 1 clock.wise$_{ADV/ADJ}$ | 2 length.wise$_{ADV/ADJ}$ | 3 weather-wise$_{ADV}$; **-ways**: 1 length.ways$_{ADV/ADJ}$

111. *-xion* see *-ion*

112. **-y**: 1 milk.y$_{ADJ}$ | 2 green.y$_{ADJ}$ | 3 stick.y$_{ADJ}$ | 4 dog+g.y$_N$, night[dress].y$_N$, Tom+m.y$_N$ | 5 tough.y$_N$, town.y$_N$ | 6 modest.y$_N$ | 7 expir[e].y$_N$; **-ey**: 1 clay.ey$_{ADJ}$, dic[e].ey$_{ADJ}$ | 2 Charl[es].ey$_N$; **-ie**: 1 dog+g.ie$_N$, night[dress].ie$_N$, dear.ie$_N$, Sus[an].ie$_N$, Charl[es].ie$_N$ | 2 tough.ie$_N$, town.ie$_N$

113. *-yer* see *-er*