

Faculté de philosophie, arts et lettres

Flat-Pack Words and How to Assemble Them

Analysis of the treatment of word-formation in the
New-Headway textbooks

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Table of contents

Acknowledgements.....	i
List of tables.....	v
List of figures.....	vi
List of abbreviations.....	vii
Introduction.....	1
Part 1: Literature Review.....	3
1. English Morphology and Word-Formation: Key.....	5
1.1 Morphology and the concept of “word”	5
1.2 Morphemes, bound versus free morphemes, and allomorphs.....	8
1.3 Root, stem and base.....	10
1.4 Word-formation versus inflection.....	10
1.5 Derivation, affixation and conversion.....	12
1.6 Compounding.....	14
1.7 Borderline cases and interim conclusion.....	15
2. Word-Formation and Vocabulary in Foreign Language Teaching and Learning.....	17
2.1 Morphological awareness, decomposition and cross-linguistic influence.....	17
2.1.1 Receptive and productive morphological knowledge.....	18
2.1.2 MA and morphological decomposition.....	21
2.1.3 MA and cross-linguistic influence in word-formation.....	23
2.2 Word-families and affix acquisition.....	24
2.3 Vocabulary and word-formation in EFL textbooks.....	26
2.3.1 Vocabulary in EFL textbooks.....	26
2.3.2 Word-formation in EFL textbooks.....	30
Part 2: Case Study.....	33
1. Research questions, methodology and data	35
1.1. Research questions.....	35
1.2. Methodology and data.....	35
2. General Observations	41

3.	Conversion.....	47
4.	Compounding	51
4.1.	Quantitative Analysis.....	51
4.2.	Qualitative Analysis.....	56
	a. Elementary level.....	56
	b. Pre-Intermediate level.....	57
	c. Intermediate level.....	62
	d. Upper-Intermediate level.....	64
	e. Advanced level.....	65
5.	Derivation.....	69
5.1.	Quantitative Analysis.....	69
5.2.	Qualitative Analysis.....	82
	a. Elementary level.....	82
	b. Pre-Intermediate level.....	86
	c. Intermediate level.....	92
	d. Upper-Intermediate level.....	99
	e. Advanced level.....	103
	Discussion.....	109
	Conclusion.....	113
	Bibliography.....	115
	Appendices.....	120

List of tables

Table 1: Properties of words (Plag 2003:8).....	8
Table 2: Additions to a word family at different levels of inflection and affixation (Bauer & Nation, 1993:254).....	25
Table 3: What is involved in knowing a word (Schmitt 2008:334).....	29
Table 4: Distribution between the three WF Processes across the five proficiency levels.....	43
Table 5: Distribution between contextualized and non-contextualized exercises across the five proficiency levels.....	44
Table 6: Compounding – Parts of speech of the left-hand and right-hand bases.....	53
Table 7: Compounding – Number of bases given for each compound.....	54
Table 8: Compounding – Contextualization – Distribution across the five proficiency levels.....	54
Table 9: Derivation – Origin of the affixes.....	72
Table 10: List of Affixes.....	73
Table 11: Affixes from Bauer & Nation (1993) which are not represented in the NH textbooks.....	76
Table 12: Distribution between the exercises in which the bases are given and those in which they are not.....	78
Table 13: Distribution between the exercises in which the affixes are given and those in which they are not.....	79
Table 14: Derivation – Number of parts provided in each exercise.....	80
Table 15: Derivation – Contextualization – Distribution across the five proficiency levels.....	81
Table 16: Derivation – Elementary level – Suffixes.....	82
Table 17: Derivation – Pre-intermediate level – Affixes.....	86
Table 18: Derivation – Intermediate level – Affixes.....	93
Table 19: Derivation – Upper-intermediate level – Affixes.....	100
Table 20: Derivation – Advanced – Affixes.....	103

List of figures

Figure 1: Total number of exercises and their distribution per WF process.....	41
Figure 2: Number of exercises without “*” per WF process.....	42
Figure 3: Sections of the textbooks – Student’s books.....	46
Figure 4: Sections of the textbooks – Workbooks.....	46
Figure 5: Compounding - Distribution of the exercises (between WB and SB) across the five proficiency levels.....	51
Figure 6: Number of exercises with each type of compounds (at each proficiency level).....	52
Figure 7: Distribution of the different combinations of types of compounds in each exercise.....	52
Figure 8: Distribution between each type of compound at each proficiency level.....	53
Figure 9: Derivation - Distribution of the exercises (between WB and SB) across the five proficiency levels.....	69
Figure 10: Derivation - Distribution between affixation and decomposition across each proficiency level.....	70
Figure 11: Derivation - number of exercises dealing with suffixation, prefixation and decomposition at each proficiency level.....	71
Figure 12: Derivation - Suffixation, prefixation and decomposition - Distribution between each combination	71
Figure 13: Derivation - number of exercises with each POS of the derivatives to find.....	77
Figure 14: Derivation - number of POS/exercise (Derivative).....	77
Figure 15: Derivation - number of POS/exercise (Bases).....	77

List of abbreviations

EFL	English as a foreign language
IO	Inside Out
MA	Morphological awareness
NH	New Headway
NIO	New Inside Out
SB	Student's book
SBA	Student's book Advanced
SBE	Student's book Elementary
SBI	Student's book Intermediate
SBPI	Student's book Pre-intermediate
SBUI	Student's book Upper-intermediate
WB	Workbook
WBPI	Workbook Pre-intermediate
WD	Word derivational

Introduction

How do learners deal with flat-pack words? This is the question asked, though differently, in many studies on morphological awareness and word derivational knowledge. Many of those studies focus on EFL learners' receptive and productive knowledge (i.e. their ability to recognise vs. their ability to produce complex words), while other studies try to understand how this type of knowledge (i.e. word derivational knowledge) interacts with the learners' reading and writing skills, or with their L1, depending on the study (Schmitt & Zimmerman 2002, 2005, Ebel & O'Sullivan 2004, Lardi re 2006, Bouwers & Kirby 2009, Balteiro 2010, Jeon 2011, Jiang et al. 2011, Callies 2015, Collins & Nation 2015, Schano 2015, Leontjev 2016, Leontjev et al. 2016, just to name a few). There are many facets to vocabulary learning, but most studies agree on the fact that morphological knowledge is primordial to the process of learning a language, as it becomes a valuable tool when learners encounter new words. Though research on the implications for teaching and learning is already existent, very few studies focus on the treatment of word-formation in English coursebooks. In other words, many studies include discussions on how word-formation should be presented in coursebooks/in class, but few focus on its actual treatment in the said textbooks. This is why the present study sets out to review the *New Headway* textbooks and their take on word-formation. The three word-formation processes focused on in the data, are derivation, compounding and conversion.

The case study also examines the different affixes covered in the exercises on derivation. They are discussed together with Bauer & Nation's (1993) graded set of affixes. This graded list was designed to go from more to less frequent affixes (from the English language) and from more to less regular affixes. The aim is to see (i) whether the textbooks cover the same affixes as in Bauer & Nation (ibid.), and (ii) whether the lower proficiency levels focus on affixes from the lower levels in Bauer & Nation (ibid.) (which are supposedly easier to master) and the higher proficiency levels, on affixes from the higher levels (which are supposedly more difficult to master).

The dissertation is structured in two parts. Part 1 is a literature review. It first sets out to present the terminology and main tendencies of the most common word-formation processes. Then it reviews the literature on morphology and vocabulary in language (L2) learning and teaching. The case study is discussed in Part 2. The first section is dedicated to exposing the research questions, the methodology and data. Then, some general observations are made, and these are followed by three sections, each focusing on one of the word-formation processes, namely conversion, compounding and derivation. The sections on compounding and derivation are divided into subsections for the quantitative and qualitative analyses. The main findings are discussed in the last section before the conclusion.

Part 1:

Literature Review

This literature review is organised into two main sections. The first section discusses English morphology and word-formation. The aim is to provide the reader with the necessary key concepts in this field. The second section sets out to review the literature on morphology and vocabulary in language learning and teaching.

1. English Morphology and Word-Formation: Key Concepts

This first section aims to discuss the key concepts of English morphology and word-formation. The main sources used for this overview are Andrew Carstairs-McCarthy's *An introduction to English Morphology: Words and Their Structure* (2002), Ingo Plag's *Word-Formation in English* (2003), Hans-Jörg Schmid's *English morphology and word-formation: An introduction* (3rd edition) (2016), as well as Laurie Bauer, Rochelle Lieber and Ingo Plag's *The Oxford Reference Guide to English Morphology* (2013).

1.1 Morphology and the concept of "word"

Morphology – from the Greek word *morphe* 'form, shape' (Carstairs-McCarthy 2002:16) – is the field of linguistics "concerned with the analysis and segmentation of words into their smallest meaningful parts", i.e. into their morphemes (Schmid 2016:14). The concept of "word", though not problematic in everyday language, can be quite ambiguous when discussed as a linguistic unit (Plag 2003:4). Here are some of the problems and possible meanings of the term "word", discussed by Plag (2003:4-9), Carstairs-McCarthy (2002:4-13) and Schmid (2016:23-28):

⇒ *The definition of "word" narrowed down to the **orthographic word**, i.e. an "uninterrupted string of letters preceded by a blank space and followed either by a blank space or a punctuation mark" (Plag 2003:4): this definition, though intuitive and straightforward, remains ambiguous in some cases. For example, are *Sophie's* and *word-formation* in*

sentence (1) each considered as one or two (orthographic) words? The answer will depend on whether the reader considers apostrophes and hyphens as punctuation marks or not.

(1) Sophie's thesis deals with word-formation.

Plag (2003:5) points out two other problems with this definition, namely the fact that orthography is often variable (e.g. *girlfriend*, *girl-friend* and *girl friend* are three possible spellings for this word), and the fact that our intuitions do not always coincide with this idea of the word only defined by its orthography. For example, *girlfriend* or *girl friend*, whether written in one or two orthographic words is still stored as a unit, as one word in our mental lexicon and the same goes for other compounds such as *apartment building*, *living room*, *real estate*, and so on. Such compounds can be difficult to distinguish from phrases. Plag (2003:5-6) suggests that stress patterns can help distinguish, to some degree, compounds from phrases, as in English, every word can only have one main stress (when spoken in isolation), and it seems that compounds follow this rule (e.g. *apártnent building* in which the main stress is only found in the first of the two orthographic words, instead of each having a main stress).

⇒ **Words as *Tokens* or *types*:** when counting the number of words in a sentence, text or corpus, it is important to distinguish between tokens and types. The former refer to each "instance or individual occurrence of a type" (Carstairs-McCarthy 2002:146), while the latter account for the number of different items or words (Plag 2003:50). For example, in (2), there are as many types as there are tokens (in this case, five words/types/tokens) since no item is repeated, while in (3) the number of tokens differs from the number of types, since the tokens *the* and *little* are repeated twice. The answer to the question "how many words are there in sentence (3)?" will therefore depend on whether it is the number of tokens, or types (in this case eight and six, respectively).

(2) The little boy is hungry.

(3) The little boy plays with the little girl.

⇒ **The integrity criterion:** the integrity criterion implies that no new material can be inserted within a word, as a word is an indivisible unit; new material can therefore only be added

at the edges of a word (Plag 2003:6). Though some exceptions can be found (e.g. *abso-bloody-lutely*), a vast majority of words seem to follow this rule, at least in English (Plag 2003:7).

- ⇒ *The semantic definition of “word”*: This definition, which states that “a word expresses a unified semantic concept” (Plag 2003:7) is not sufficient to distinguish words from non-words (e.g. phrases, sentences). Plag (2003:7) gives the example of *the smell of fresh rain in a forest in the fall*, which, though definitely not a word, could also account for a unified semantic concept.
- ⇒ *The word defined as a syntactic device*: words are usually considered to be the smallest units in a sentence and belong to different syntactic classes (i.e. parts of speech or word classes such as nouns, articles, verbs and adverbs). The idea with this syntactic definition is to determine whether a word is a word by observing how it acts syntactically. For example, if an item follows the syntactic rules of a noun, it should be considered as a noun, and therefore as a word. Mobility in the sentence can also help determine “wordhood”, as no smaller units than words can be moved to a different position (Plag 2003:8). In Carstairs-McCarthy (2002:13) words are reduced to the (intentionally) vague definition that “[words] are building-blocks out of which phrases and sentences are built”.
- ⇒ **Lexemes and word-forms**: Bauer (2004:8) defines the difference between word-forms and lexemes as follows: “[the term] ‘word-form’ refers to a phonological/orthographic shape irrespective of meaning [while lexemes are] an abstraction over one or more word-forms that convey the same lexical meaning.” For example, in (4), *watches* and *watching* are two word-forms of the lexeme WATCH. The answer to the question “how many words are there in (4)?” will depend on whether *watches* and *watching* are considered as word-forms (i.e. two different words) or as a lexeme (i.e. one word).

(4) Jack watches movies all the time and he is watching one now.

To summarize, Schmid (2016:24) points out that “texts always consist of word-forms” and that lexemes are “theoretical constructs on the level of the language system [...] and therefore units abstracted from actual use”. Lexemes are also polysemous, i.e. they can have several meanings (Schmid 2016:25).

Though no unambiguous definition can be found for the term and concept of “word”, some key attributes of words are listed in Plag (2003:8) and Schmid (2016:26). Table 1 shows the properties selected by Plag (2003:8). Schmid (2016:24) also adds the semantic criterion (i.e. unity in meaning), and the orthographical attribute (i.e. the orthographic word) as key properties of what he calls “typical words”.

Table 1: Properties of words (Plag 2003:8)

- words are entities having a part of speech specification - words are syntactic atoms - words (usually) have one main stress - words (usually) are indivisible units (no intervening material possible)

1.2 Morphemes, bound versus free morphemes, and allomorphs

According to Bauer et al. (2013:14), a morpheme is “classically defined as the smallest meaningful unit of morphological analysis”. For example, the word *friend* cannot be broken down into smaller meaningful units, and is therefore monomorphemic, i.e. has only one morpheme. The word *unfriendly*, on the other hand, can be broken down into *un-*, *friend* and *-ly*, i.e. 3 morphemes, and is therefore polymorphemic. Another term for a polymorphemic words is “complex word” (Plag 2003:10).

The formal (i.e. phonetic or graphic) realizations of morphemes are called “morphs” (Plag 2003:21). When several morphs coexist for a same morpheme, they are called allomorphs, and the phenomenon, allomorphy (Plag 2003:27). For example, in the words *cats*, *dogs* and *horses*, the plural suffix *-s* is realized in three different ways by its allomorphs [s], [z], and [ɪz] respectively.¹ Allomorphy can occur in affixes (e.g. *ir-*, *in-*, *il-*, *im-* all allomorphs of the prefix *in-*) but also in roots (e.g. *decide/decis-* for the morpheme *decision*, or *wive-*, the allomorph of *wife* when put in the plural, i.e. *wives*) (Schmid 2016:45, Carstairs-McCarthy

¹ Example taken from Carstairs-McCarthy (2002:141).

2002:23). The distribution of allomorphs will usually depend on phonological factors (Plag 2003:27).

Morphemes can be free or bound. In other words, some morphemes can occur on their own and are considered independent units (i.e. free morphemes), while others only occur when attached to another morpheme (i.e. bound morphemes). Examples of free morphemes are *read, talk, horse, swim, dark, large*, while affixes (e.g. *-able, -ity, -ly, -ed, re-, in-*), or morphs like *wive-* (as in *wives*), *leg-* (as in *legible*), *cran-* (as in *cranberry*), are examples of bound morphemes.

Morphemes are not always easy to identify. Definitions usually imply that morphemes carry meaning. However, in some words, though their structure resembles a prefix-root² structure, the potential root does not carry meaning in modern English (Carstairs-McCarthy 2002:24). Consider the words in (5)³. The problem is to determine whether such words should be treated as monemes (i.e. monomorphemic words) or complex words. Carstairs-McCarthy (2002:25) argues that the words in (5) should be considered as complex words despite the lack of meaning of the roots, as they seem to trigger similar derivation and allomorphy processes across derivatives (see example (6)⁴). Though he agrees to the possible morphological relevance of those strings (e.g. *-fer, -duce, -volve*), Plag (2003:25-26) still warns not to confuse morphology and etymology: “Even though a morpheme may have had a certain meaning in the past, this does not entail that it still has this (or any other) meaning and can thus be considered a morpheme in today’s language” (ibid., p.25). The opposite also happens occasionally. The word *hamburger*, for example, which originally referred to the city of Hamburg, was later reinterpreted as the compounding of *ham* and *burger*, giving the latter a new morphological status and allowing for new words like *cheeseburger* or *fishburger*. This process can be referred to as libfixing (Hamans 2017:10-13).

(5) Refer	prefer	confer	defer	transfer	infer
Reduce		conduce	deduce		induce

² A root could be said to be the core of a word, i.e. the part that remains when a word is stripped from all its affixes (Bauer 1983:20).

³ Taken from Carstairs-McCarthy (2002:24-25).

⁴ Examples from Carstairs-McCarthy (2002:24-25) and Plag (2003:25).

reserve	preserve	conserve	deserve	
revolve			devolve	involve

- (6) *-duce_V* → *-duct_N*: *reduce, deduce, conduce* → *reduction, deduction, conduction*
-volve_V → *-volu_N*: *revolve, devolve, involve* → *revolution, devolution, involution*
-(f)er_V → *-ence_N*: *refer, prefer, confer* → *reference, preference, conference*

1.3 Root, stem and base

In Plag (2003:11), a base is said to be the part of a word to which an affix is attached (e.g. *friendly* would then be the base for *unfriendly*). The root is also a base but stripped down of all its affixes (e.g. *friend* would then be the root and base of *friendly*, which itself would be the base of *unfriendly*). The term “base” can also be used for compounds (e.g. *boy* and *friend* as the bases of the compound *boyfriend*) (Plag 2003:12). Just like morphemes, roots can be free or bound (i.e. in *talkative*, *talk* is a free root, while *cran-* in *cranberry* is a bound root as it cannot occur on its own)⁵ (Bauer et al. 2013:17). The term “stem” is usually used when dealing with bases of inflections (e.g. *played*, in which *play* is the stem of the inflectional suffix *-ed*) (Plag 2003:11).

1.4 Word-formation versus inflection

Word-formation is the branch of morphology which studies “the ways in which new complex words are built on the basis of other words or morphemes” (Plag 2003:13). In Plag (2003:1), inflection is said to be the other branch of morphology. Unlike word-formation, inflection does not help create new words, only “new word-forms from known lexemes” (Bauer et al. 2013:28). Inflection is, for example, the *-s* at the end of a word to indicate its plural, or the *-ed* added to a verb to convey the past simple. In brief, inflection (i) encodes grammatical categories, (ii) is relevant to syntax, (iii) has no influence on the part of speech of

⁵ When a morpheme (like *cran-*) occurs in only one lexeme, it can also be called a “cranberry morph(eme)” (Carstairs-McCarthy 2002:19-20).

a word, (iv) is rarely semantically opaque and (v) is always suffixational in English (Plag 2003:17). More could be said about inflection, but as it is not the focus of this study, I will leave it to that.

The next paragraphs will focus on several word-formation processes, namely affixation and conversion – which can both be considered as parts of the larger process called derivation – and compounding. There are other word-formation processes, some of which are listed and briefly defined in (7). As they are not included in the analysed textbooks, they will not be further discussed in this dissertation.

(7) **Blending:** the combination of “two (rarely three or more) words into one, deleting material from one or both of the source words” (Plag 2003:122). E.g. *brunch*, from *breakfast* and *lunch*, or *Franglish* from *Français* and *English*.

Truncation and clipping: “the shortening of a word by deletion of some of its phonological material” (Bauer et al. 2013:25). E.g. *Mag* for *Magali*, *Trish* for *Patricia*, *Andy* for *Andrew*, *lab* for *laboratory* or *phone* for *telephone*.

Back-formation⁶: “the deletion of a suffix or prefix in analogy to pairs of base and derivative that feature the affix in question” (Bauer et al. 2013:20). E.g. *administrate* from *administration*, *to peddle* from *peddler*, or *to edit* from *editor*.

Abbreviations: similar to blending and truncation, abbreviation involves loss of material, but unlike the former, it is orthography that is central in the process, rather than prosodic criteria (Plag 2003:126). According to Plag (2003:126), “abbreviations are most commonly formed by taking initial letters of multi-word sequences to make up a new word” but non-initial letters can also be incorporated. E.g. *BA* for *Bachelor of Arts*, *Inc.* for *Incorporated*, *USA* for *United States of America*, or *a.s.a.p./ASAP* for *as soon as possible*.

Acronyms: A type of abbreviation in which regular reading rules are being applied (i.e. an abbreviation which can be pronounced as a regular word). Acronyms must therefore conform to the phonological patterns of English. Some can even be homonymous to existing words (Plag 2003:127-128). E.g. *NATO* for *North Atlantic*

⁶ The distinction between affixation and back-formation will not be relevant in the case study, since the chosen approach is synchronic rather than diachronic, and as pointed out in Bauer et al. (2013:20) “once back-formation has occurred, it becomes invisible to speakers”.

Treaty Organization, START for Strategic Arms Reduction Talks, or radar for radio detection and ranging.

1.5 Derivation, affixation and conversion

Derivation, or derivational morphology, is described as followed in Schmid (2016:14-15):

Derivational morphology is concerned with the processes with the help of which the speakers of English have formed, and can form if the need arises, new words (e.g. *development*) from words already present in the language (*develop*) by the addition of morphemes (*-ment*). This involves the creation of new words with complex internal structure, so-called **complex lexemes**. For this reason we regard **derivational morphology** as an important field of **word-formation**, alongside other productive processes such as **compounding** (roughly the juxtaposition of two words as in *community care*) or **conversion** (i.e. the transfer from one word class to another without any visible changes in morphological form, as in the verb *to age* derived from the noun *age*).

In this description, derivation seems to be synonymous to the process of affixation, which consists in adding an affix at the beginning of a word (i.e. a prefix, as in *unhappy*) or at the end of it (i.e. a suffix, as in *terrorism*) (Plag 2003:10). Occasionally, an affix can occur in the middle of a morpheme (i.e. an infix, as in *abso-bloody-lutely*), but this is extremely rare in English (ibid., p.11). Affixes are bound morphemes that need to be attached to a root or a base and several affixes can combine in one lexeme (e.g. *untruthfulness* which contains one prefix (*un-*), and two suffixes (*-ful* and *-ness*)) (ibid., p.11-15).

Inflectional and derivational affixes differ in several ways. Firstly, the addition of a derivational affix to a base leads to the creation of a new lexeme, i.e. a derivative (Plag 2003:11), with a change in meaning (e.g. *pain* is not the same as *painful*) (Schmid 2016:33). Secondly, unlike inflectional suffixes, derivational suffixes may have an impact on the part of speech of the derivative (Schmid 2016:33, Plag 2003:17), like the noun-forming suffix *-ness* (e.g. *happiness, loneliness, consciousness*), the adverb-forming *-ly* (e.g. *happily, slowly, frequently*), or the suffixes *-ify* and *-ize* which form verbs (e.g. *exemplify, magnify, legalize, finalize*). Some suffixes like *-ish* (as in *bluish*), or *-hood* (e.g. *boyhood*), however, do not change the word class of their base. Prefixation, unlike suffixation, hardly ever changes the category of its bases (exceptions are for instance *be-* in *belittle* or *en-* in *enable*) and is rather used to

convey a semantic change (e.g. *legible* vs. *illegible*). Finally, for diverse reasons, derivational affixes are more restricted in their productivity (i.e. not all combinations of morphemes are possible) (Plag 2003:16). For instance, the combination of the verb *arrive* and the noun-forming suffix *-al* works perfectly to form the word *arrival*, but this “verb + *-al*” combination does not work with the verb *enter* (**enteral*). Another example of restriction in productivity is semantic blocking, i.e. “the phenomenon whereby the existence of a word (whether simple or derived) [...] inhibits the morphological derivation [...] of another word with precisely that meaning.” (Carstairs-McCarthy 2002:145). The non-adjective **ungood*, for example, is blocked by the existing adjective *bad*, or **despisement/despisal* blocked by the noun *contempt*.⁷ For more information on productivity, see Plag et al. (1999), Plag (1999), Bauer (2001), Carstairs-McCarthy (2002:85-99), Plag (2003:44-71), and Schmid (2016:111-120).

While derivational affixes like *-ly*, *-ness*, *-less*, or *un-* come from the native (i.e. Germanic) stock, others, like *in-*, *pre-*, *-ion*, or *-ist* are borrowed from Romance languages such as Latin, French or Greek (Lieber 2005:384). Nowadays, the two stocks of derivational affixes are not always as distinct, as some affixes of Germanic origin can attach to Latinate roots, and some affixes of Romance origin can attach to Germanic roots (Ibid.). In her article on word-formation processes, Lieber (2005) reviews a series of affixes and mentions for each what sorts of bases they can attach to (i.e. Germanic or Latinate roots).

In Schmid’s (2016:15) description of derivational morphology, it is unclear whether he considers conversion to be a part of derivation or not. In Carstairs-McCarthy (2002) and Plag (2003), conversion seems to be categorized as a branch of derivation. Plag (2003:107) defines this process “as the derivation of a new word without any overt marking”. For example, *the hammer* (noun) vs. *to hammer* (verb), or *rich* (adjective) vs. *the rich* (noun). Another name for conversion is zero-derivation (ibid., p.22). This term stems from the idea that there is an invisible and phonologically empty “zero suffix” (Carstairs-McCarthy 2002:48). Plag (2003:114)

⁷ Examples from Carstairs-McCarthy (2002:92).

does not seem to adhere to this assumption and seems to believe conversion to be a non-affixational process.

Conversion and affixation can both induce shift in the stress of the converted or derived word (e.g. *a tórment* vs. *to tormént*, *to gèt away* vs. *a gét away*, *sínify* vs. *significátion*, or *emplóy* vs. *èmployee*) (Plag 2003:79,110).

1.6 Compounding

In Plag (2003:132), compounding is said to be the most productive process in English. He (ibid., p.135) gives the following definition: “a compound is a word that consists of two elements, the first of which is either a root, a word or a phrase, the second of which is either a root or a word.” Words like *boyfriend*, *credit card*, *deep-fry*, *lifelong*, or *off-the-rack dress* are all examples of compounds.

Compounding usually relies on a modifier-head structure in which the left-hand element (i.e. the modifier) says something about the right-hand element (i.e. the head) (Plag 2003:135). The compound *beer bottle* for instance, refers to a type of bottle destined to contain beer (one could imagine the opposite combination (i.e. *bottle(d) beer*) which would then refer to a type of beer served in a bottle).

The head is described in Plag (2003:135) as the “most important unit in complex linguistic structures” (in this case, the compound). Plag (2003:135) also mentions that “the compound inherits most of its semantic and syntactic information from its head”. In *mobile phone*, for instance, the head is *phone*, meaning that a *mobile phone* is a type of phone and because the head is a noun, the word category of the compound is also a noun. There are different types of compounds, but not all can be analysed with this notion of headedness (Ibid., p.145). Morphologists usually distinguish between **endocentric** and **exocentric** compounds. The examples given so far were endocentric compounds, as in each, the head was “decisive both semantically and grammatically for the whole compound” (Schmid 2016:123). By contrast, compounds like *pickpocket* or *redneck* do not have their semantic head inside the compound since a *pickpocket* is a person and not a kind of pocket and a *redneck* is not a kind of neck. Those are called exocentric compounds (also called **bahuvrihi**-compounds) (Schmid

2016:125). Though the head in exocentric compounds is not semantically decisive, it still determines the grammatical category of the compound (Plag 2003:145-146). A third type of compound is called **copulative** (or **dvandva**) because both parts of the compound seem as important to its meaning and could then both be considered as the head (Plag 2003:146). Some examples given in Plag (2003:146) are *singer-songwriter*, or *poet-translator* (the person is as much a singer as he or she is a songwriter, and the same goes for *poet-translator*). The most productive pattern to form compounds is noun-noun combinations (Plag 2003:145).

When it comes to pronunciation, most compounds carry their main stress on the left-hand member (though it is not always the case, e.g. *apple pie*), which can on occasion help distinguish them from phrases (Carstairs-McCarthy 2002:59-60).

1.7 Borderline cases and interim conclusion

The previous paragraphs have tried to synthesize the main tendencies of each word-formation process. However, the borderline between those processes is not always clearcut. Consider neoclassical elements, also called combining forms (e.g. *poly-*, *astro-*, *-graphy*, *-logy*) (Plag 2003:74). Due to their form, the status of those bound morphemes borrowed from Greek and Latin is not obvious. Are they closer to affixes or bound roots? Do they help form derivatives or compounds? From Plag (2003:74), Schmid (2016:129) and Carstairs-McCarthy (2002:142), it seems that combining forms fit compounding better than derivation⁸, hence the term “neoclassical compound”. Complex words containing prepositions or particles (e.g. *download*, *outgoing*, *rip-off*, *afterbirth*) are also problematic to classify. Plag (2003:143-144) argues that some cases are the result of inversion (e.g. *to load down*_V → *download*_N), or conversion (e.g. *to break down* → *a breakdown*). Schmid (2016:128-129) is not as categorical on this matter and seems to leave such elements as the result of compounding. He (ibid., 129,157) also discusses the prepositions *out*, *over* and *under*, which in some cases seem to share similarities with affixes of degree (e.g. *overcrowd*, *outdo*, or *underperform*).

⁸ Combining forms can for example be combined with one another to form a new lexeme (e.g. *biography*, *biology*, *polygamous*), which is not the case with affixes (**pre-able*, **re-ize*) or bound roots (**bapt-prob*, **audi-magn*) (Plag 2003:156).

In his paper *Language change and morphological processes*, Hamans (2017) discusses how the evolution of a language can blur the distinction between morphological processes. He focuses on three tendencies, namely (i) a change from less to more bound elements (i.e. a part of a compound which becomes an affixoid⁹ or affix), (ii) a change from more to less bound elements (i.e. an affix or affixoid which becomes a free morpheme or lexeme), and (iii) libfixing (i.e. the “reinterpretation of opaque forms resulting in the “liberation” of elements.” (ibid., p.2)). Each phenomenon is respectively illustrated in (8), (9) and (10) with examples from Hamans (2017). Unfortunately, Hamans mostly uses Dutch and German examples.

- (8) OE *hād* ‘state, rank, character’ (free morpheme)
→ English *childhood* (suffix)
- (9) *Reuzegroot* ‘enormously big’ (affixoid)
→ *Ik voel me reuze*. ‘I feel great.’ (free lexeme)
- (10) *Landscape* (opaque word from Dutch *landschap*) reinterpreted as *land* and *scape*
→ *seascape, mindscape, moonscape*...etc.

This concludes Section 1. Of course, the field of English morphology is far more complex than has been shown in this brief overview, as Section 1 only aimed to present the terminology and main tendencies of the most common word-formation processes.

⁹ Examples of affixoids in English are *-free*, as in *sugar-free*, *-monger* as in *fish-monger*, or *-wise* as in *clock-wise* (Kastovsky 2009). Affixoids differ from affixes in that an affixoid is the affix-like bound form of a corresponding free lexeme (which is not the case for affixes). Affixoids, however, semantically differ from their corresponding free lexeme and are but the transitional phase between free lexemes and affixes (Hamans 2017:3-4). From this definition, affixoids seem to share similarities with combining forms. It would be interesting to investigate what differentiates them.

2. Word-Formation and Vocabulary in Foreign Language Teaching and Learning

The present section sets out to review the literature on morphology and vocabulary in language learning and teaching. Section 2.1 focuses on research on morphological awareness, decomposition and cross-linguistic influences in EFL contexts. Word families and affix acquisition are discussed in Section 2.2 while Section 2.3 addresses vocabulary and word-formation in EFL coursebooks.

2.1 Morphological awareness, decomposition and cross-linguistic influence

Morphological awareness (MA) can be defined as “[the] ability to decode the morphemic structure of words and further analyze them” (Oz 2014:98). Increasing interest for MA (in both L1 and L2) and its effects on language learning has led to various studies on the matter. Studies like Jeon (2011), Goodwin et al. (2013), Kieffer & DiFelice Box (2013), Zhang & Koda (2013) and Schano (2015) investigate how MA can contribute to better reading skills in L2 English. Other studies include focus on MA and writing skills in the L2 (Leontjev et al. 2016), on the learners’ receptive and/or productive derivational knowledge (Schmitt & Zimmerman 2002, Lardiere 2006, Collins & Nation 2015, Karlsson 2015, Yeh et al. 2015, Al-Homoud 2017), on affix acquisition (Bauer & Nation 1993, Mochizuki & Aizawa 2000, Ward & Chuenjundaeng 2009, Leontjev 2016), on MA and vocabulary acquisition and teaching (Silva & Clahsen 2008, Kieffer & Lesaux 2010, Sadeghi et al. 2011, Masrai 2016, Haomin & Bilü 2017, Rashtchi & Pirali 2017) and on cross-linguistic influence, i.e. the influence of the L1 on the L2 (Callies 2015, Balteiro 2011, Jiang et al. 2011). Finally, while research often focuses on the learners’ ability to identify and build new complex words in their L2, it also investigates their ability to decompose those complex words (Silva & Clahsen 2008, Gor & Jackson 2013, Kraut 2015). Directly linked to MA, morphological decomposition is defined in Kraut (2015:874) as “the resolution of a word into its individual morphemes (i.e. stems, prefixes and suffixes).”

The papers listed above usually agree that MA and word derivational (WD) knowledge are beneficial to learners and should be included in L2 vocabulary instructions: “[...] recent research reveals that learners with MA have better language performance as well as larger vocabulary and better comprehension” (Oz 2014:102). The following subsections are an attempt to sum up the literature on this topic.

2.1.1 Receptive and productive morphological knowledge

Receptive morphological knowledge is passive knowledge. It is closely linked to the learner’s reading and listening skills and refers to their ability to recognize a word, its morphemes and its derivatives. Receptive knowledge is acquired through listening and reading input. Conversely, productive knowledge, or active knowledge, refers to a learner’s ability to use a word and produce its derivatives. It is therefore closer to writing and speaking skills (Al-Homoud 2017:46). It is unclear whether receptive knowledge evolves into productive knowledge along a continuum, or not (Collins & Nation 2015:7). In his study on EFL learners’ productive and receptive knowledge, Al-Homoud (2017:49-50) asked 36 postgraduates from 10 different Saudi Universities to take two tests similar to Schmitt & Zimmerman’s (2002). The task meant to test the participants’ productive knowledge focused on 16 target words. The participants were asked to fill in sentences with the correct derivatives of the target words. To test their receptive knowledge, the students completed a translation task. Al-Homoud (2017:52-53) found that the learners’ receptive and productive derivational knowledge highly correlated and he therefore encourages teachers to introduce extensive input so learners can expand their receptive knowledge of affixes (which will in turn expand their productive knowledge). Lardiere (2006:73) further segments derivational knowledge into relational knowledge (i.e. the perception that two items are morphologically related, e.g. *depart* and *departure*), syntactic knowledge (i.e. knowing that in English, affixes can mark syntactic category, e.g. X-ize_V, X-ness_N) and selectional knowledge (i.e. knowing that not all combinations are possible, e.g. **swimness*, **quietation* vs. *quietness*).

Collins & Nation (2015) investigated EFL learners’ **receptive knowledge** of derivational affixes and how they deal with unknown members of word families. Based on previous

research, they argue that understanding the influence of an affix on the meaning of a word can lead to a better understanding of the sentence in which the word is encountered (ibid., p.6). The 20 participants were first-year Japanese university students and the study focused on 15 target words chosen for their variety of affixes and for the fact they were probably unknown to the participants (ibid., p.11). The students were first given explanations about a root word and were then asked to explain a derivative of this word, as well as the meaning of the whole sentence in which it was used. Their answers were ranked from “understood” to “completely off topic” (ibid., p.12). The participants also had to take a vocabulary size test (VST) and a reading speed/comprehension test to evaluate their reading speed in words per minute (WPM) (ibid., p.11). Results showed that participants with weaker WPM and percentage of comprehension usually also got weaker ratings on some of the target words. On the other hand, no correlation was found between larger vocabulary size and better grasp of the affixes (ibid., p.13). Collins & Nation (2015:15) also noticed that the learners had more difficulty moving from derivative to derivative (e.g. *historical* → *historian*) than from root to derivative (*history* → *historian*).

Studies like Schmitt & Zimmerman (2002) and Karlsson (2015) focus **on productive derivational** knowledge. In 2002, Schmitt & Zimmerman conducted a study to see whether the fact that learners know a member of a word family means that they are able to produce the other members of this word family. In other words, is a student who knows the word *stimulate* able to produce other members such as *stimulant* or *stimulative*? After assessing 106 ESL undergraduate and graduate students – mostly Asian, in order to avoid L1 influence and transfer (see 2.1.3) – as well as 36 native English speakers, they found that in general the L2 learners were unable to produce all 4 asked derivative forms (viz. verb, noun, adjective and adverb) of a word family. Even native speakers were not always able to produce them all. Results also showed that adjectives and adverbs were slightly more difficult to produce (ibid., p.162).

Karlsson (2015) compared Swedish university students’ mastery of suffixation in their L1 and in English. To do so, the informants (i.e. 12 female and 3 male students) were asked to complete two elicitation tasks (i.e. sentences with gaps, focusing on 50 target words), one in each language. She noticed that in some cases, the learners’ ability or inability to form

derivatives correlated in their L1 and L2 (ibid., p.44). She also noticed that frequency played an important role in the L2. Karlsson used *West's A general service list of English words* (1953) to determine the frequency of most of the word-pairs (ibid., p.33). High-frequency items seemed to be treated by learners as unseparated wholes, meaning that the students' knowledge of the words and their derivatives was deep enough to produce the correct forms, no matter how complex¹⁰ the suffixes were. On the other hand, with low-frequency items, students usually showed little knowledge of both the given words and their derivatives, leading to incorrect use of suffixes. In a third-case scenario, students sometimes showed knowledge of the stems but were uncertain on how to form the derivatives. Success depended on the frequencies of the stems and derivatives, the complexity of the suffixes and the relative frequencies of the stems and suffixes (ibid., p.45). Finally, the students' answers usually displayed syntactic knowledge, but sometimes lacked selectional knowledge (ibid., p.46).

Other studies focus on learners' receptive and productive knowledge to link them to reading and writing skills. Leontjev et al.'s (2016) findings, for example, highlighted the relationship between word derivational knowledge and writing proficiency. The study consisted in two writing tasks and nine measures used to evaluate the 117 participants' WD knowledge (i.e. word segmentation task, grammar recognition task, meaning recognition task, affix elicitation task). Most of the WD measures (especially those concerned with syntactic and semantic aspects of WD knowledge) turned out to be good predictors of writing proficiency (ibid., p.79-82). They also examined whether the learners' ability to derive words (as their writing proficiency grows) increased steadily. They found it was not the case, as the biggest changes in learners' performances were found between the B1 and B2 proficiency levels (ibid., p.81).

Many studies can be found on the influence of MA and WD knowledge on L2 reading comprehension. Schano (2015) who reviews those studies summarizes them as follows:

In sum, the strength of the relationship between increased MA and better reading comprehension has been hard to generalize, due to the different language groups, age groups, proficiency levels and social contexts involved. However, this variety in the studies also strengthens the conclusion that there is a relationship between MA and reading comprehension: those students who are more aware of morphology in complex words tend to also be better readers. (Schano 2015:67)

¹⁰ The complexity of the suffixes was based on Bauer & Nation's (1993) framework, discussed in 2.2).

In other words, MA and morphological analysis can be considered as tools that can help learners deal with unfamiliar words and help them navigate through complex texts (Zhang & Koda 2013:911). It is however unclear whether the influence of MA on reading comprehension is direct or indirect (Schano 2015:68). Goodwin et al. (2012), who focused on Spanish learners in an ESL context, seem to believe that the influence of MA could be indirect. They argue that MA directly contributes to vocabulary depth and breadth, which in turn contributes to better reading comprehension. Vocabulary knowledge would then be the mediator between the two (Goodwin et al. 2012:1406-1407). This, of course, does not change the general stance that better MA contributes to better reading skills (Schano 2015:68).

2.1.2 MA and morphological decomposition

As mentioned earlier, the process of morphological decomposition refers to the “resolution of a word into its individual morphemes (i.e. stems, prefixes and suffixes)” (Kraut 2015:874). In the L1, this process is the result of MA use, become automatic overtime (ibid., p.873). Contrary to L1, research on morphological decomposition in the L2 has shown that, though learners do acquire this process as their proficiency grows, it does not become automatic like it does in the L1 (Silva & Clahsen 2008, Kraut 2015). This might explain the participants’ difficulty to negotiate between derivatives (or derivative affixes) in Collins & Nation’s (2015:16), as they would first need to decompose the words into their bases and affixes before they could find the other derivatives, but this is just a hypothesis.

Silva & Clahsen (2008) conducted a study on the priming effects¹¹ of inflected and derivational word forms among Chinese, German and Japanese EFL learners, and English native speakers. The masked priming experiments were meant to investigate the learners’ ability to decompose inflected verbs and derivatives with the suffixes *-ness* and *-ity*. The native speakers showed efficient priming in both situations, while the L2 learners showed no priming

¹¹ Priming experiments usually consist in exposing the subjects to a prime/stimulus (i.e. a picture, a word, a sentence) and then to a target word/picture/sentence and see how the former influences the processing of the latter. The research questions in Silva & Clahsen (2008) could be reformulated as such: (i) “Does the exposure to a prime (e.g. *madness* or *watched*) facilitate the processing of the target word (e.g. *mad* or *watch*)?” (ii) “Are the priming effects similar in L1 and L2?”

for inflected forms and reduced priming for derived word forms (ibid., p.257). Kraut (2015) also investigated L2 learners' ability to decompose inflected and derived word forms in English, compared to native speakers. Some of her results were similar to Silva & Clahsen's (2008), though evidence of priming effects for derived forms could not be found (Kraut 2015:881). She suspects this discrepancy in results might be due to cross-linguistic influence (ibid., p.884).

Besides the L2 learners' ability to decompose inflected and derived word forms in English, Kraut (2015:882-883) also tried to evaluate the learners' productive derivational knowledge through a paper and pencil test. She observed that in the L2 group, learners improved most between the intermediate and advanced group (ibid.). For this task, the learners were asked to produce the correct derived form of a given base, or on the contrary, to find the correct base of a given derivative. The items were varied so there would be orthographic change (e.g. *rely* → *reliable*), phonological change (e.g. *heal* → *health*), both (e.g. *deep* → *depth*), or neither. It was important to vary because those variables have an impact on the learners' ability to produce the correct forms (ibid., 882). The findings of both Silva & Clahsen (2008) and Kraut (2015) also seem to support the idea that L2 learners and native speakers do not rely on the same processing mechanisms and vocabulary storage. It seems L2 learners rely more on lexical storage when native speakers rely on morphological structure (Silva & Clahsen 2008:257).

Masrai (2016), who did not focus on decomposition itself, but who used decomposition tasks in order to determine which morphological process has the largest impact on vocabulary acquisition, found that knowledge of regular inflectional morphology had more impact than derivational knowledge on vocabulary acquisition, at least for Arabic L1 learners. However, he still encourages teachers to focus on both regular inflectional and derivational rules with their students (ibid., p.57).

2.1.3 MA and cross-linguistic influence in word-formation

Another important aspect of MA often cited in studies is the influence of the L1 on the target language. Callies (2015) studied the effects of crosslinguistic influence in word-formation. To do so, he used data from the *International Corpus of Learner English* (ICLE) and focused on data from 5 different L1s, namely Turkish, Spanish, German, Italian and Russian (Ibid., pp.134-135). Results showed that while all L1s share similar types of errors in the target language, some of the other types of errors are L1-specific. Errors such as the overgeneralization of a rule (e.g. overgeneralization of the use of the suffix *-ation* as in **solvation* instead of *solution*) or the use of back-formation (e.g. based on *application*, **applicated* instead of *applied*) are examples of errors shared by all L1s. On the other hand, what Callies (2015:136) calls foreignizing, which consists of adapting a word from one's L1 into the L2 (e.g. **refugiate* based on the Spanish verb *refugiarse*), seems to be specific to Romance L1s. This is a form of transfer from L1 to L2. Balteiro (2011) found a similar phenomenon in her study. Her study showed Spanish EFL learners can have difficulties with some prefixes of English, usually those of Romance origin. Since Spanish and English share many prefixes, the learners tend to produce lexical items that are quite similar in form to those in their L1, which can sometimes lead to mistakes (e.g. **desoriented* instead of *disoriented*, based on the Spanish adjective *desorientado*). The results suggested that learners acquire and learn words more easily when (i) the lexical items share the same prefix in their L1 and L2 due to positive transfer, and (ii) words with prefixes completely different from their L1 (Balteiro 2011:31).

The fact that the types of difficulties vary from one L1 group to another should be taken into account when teaching a language, as what might be easy to learn for a certain L1 group may be difficult for other L1 groups. Morphological congruency is a good example of such differences between L1s. The Morphological Congruency Hypothesis is based on the idea that two languages can be morphologically congruent or not. They are congruent when they “both grammaticalize and mark a meaning morphologically” (Jiang et al. 2011:942), meaning for instance that a morpheme in the L2 will be more easily mastered if an equivalent can be found in the L1. For example, in their study, Jiang et al. (2011) showed that Russian and English are congruent in the marking of plural, but not Japanese and English, meaning that Russian learners of English tend to notice more easily when the plural is missing than Japanese learners, because the marking of plural in Japanese is optional. Cross-linguistic influences and

morphological congruency might explain why it is such a challenge to make an efficient textbook for EFL/ESL purposes: each L1 should have to target different types of difficulties. This raises the question of whether it is possible to have one textbook designed for all types of L1s, or if it is even desirable.

2.2 *Word-families and affix acquisition*

Word families are directly linked to morphological and word-formation knowledge, as they refer to the link between a base and its derived and inflected forms. Bauer & Nation (1993:253) give the following definition:

From the point of view of reading, a word family consists of a base word and all its derived and inflected forms that can be understood by a learner without having to learn each form separately. So, *watch*, *watches*, *watched* and *watching* may all be members of the same word family for a learner with a command of the inflectional suffixes of English. As a learner's knowledge of affixation develops, the size of the word family increases. The important principle behind the idea of a word family is that once the base word or even a derived word is known, the recognition of other members of the family requires little or no extra effort.

Theoretically, the ability to recognize one member of a word family makes it easier to recognize the other derived forms of that same word family¹². This assumption can be linked to the belief that “*affixational* and word root information is organized separately in the mental lexicon”, which leads to storage economy, i.e. the fact that the speakers of a language do not need to store all the forms of the words of the said language (He & Deng 2015:44). Bauer & Nation's (1993) article is also based on the assumption that not all derivational affixes are acquired at the same time, hence the idea to organize inflectional affixes and derivational affixes into graded levels (seven, to be precise), with each level incorporating new members to the word family. The aim of the article was to use this graded set of affixes to provide “the basis for the staged systematic teaching and learning of these affixes for learners reading English” (ibid., p.254-255). Their framework has since been used in several studies, like Schmitt & Zimmerman (2002), Ward & Chuenjundaeng (2009), or Leontjev (2016). Table 2 gives an

¹² However, Ward & Chuenjundaeng's (2009:465) findings on suffix acquisition challenge the assumption that knowledge of a headword implies knowledge of the other members of the word family. They seem to be in favour of spending less time on morphological analysis in class, of treating complex words as unanalysed wholes and of spending more time on other methods (e.g. intensive and extensive readings, teaching how to use a dictionary) (ibid., p.467).

overview of the seven affix levels. In the first level, each form is considered as a different word. At Level 2, the forms with an inflectional suffix are added to the word family. For example, *develops* becomes a member of the word family of *develop*. From Level 3 to Level 7, derivational affixes keep being added to the list.

Table 2: Additions to a word family at different levels of inflection and affixation (Bauer & Nation, 1993:254)

Word families			
2	develop develops developed developing	wood wood's woods wooded	bright brighter brightest
3	developable undevelopable developer(s) undeveloped	woody woodiest woodier woodiness	brightly brightish brightness
4	development(s) developmental developmentally		
5	developmentwise semideveloped antidevelopment	wooden	brighten
6	redevelop predevelopment	anti-wood	

To set up the levels, Bauer & Nation (1993:255-256) relied on four main criteria, namely frequency, regularity, productivity and predictability, but with a total of eight criteria, as regularity is involved in five of them (i.e. regularity of (i) the written form of the base, (ii) the spoken form of the base, (iii) the spelling of the affix, (iv) the spoken form of the affix and (v) regularity of function). The lower levels are very strict on predictability and on the regularity of both the spoken and written forms of the bases and affixes. At the higher levels, the affixes become less predictable and the regularity of the bases and affixes (in their written and spoken forms) is also less predictable. The descriptions of the criteria and levels can be found in Appendix 1.

Leontjev's (2016) examined whether the teaching order proposed by Bauer & Nation (1993) reflects the learners' difficulty with derivational affixes. To do so, the participants (62

L1 Estonian and L1 Russian 10th graders in Estonian School) had to complete a word segmentation task in which the selected words were unknown to them (ibid., p. 232). The tested affixes came from Level 3 to 6 in Bauer & Nation (1993), with a total of twelve words per affix and six distractors that did not include derivational affixes. Results showed that affixes from the higher levels were harder for the learners to recognise (with the exception of the prefix *re-*, Level 6), which supports Bauer & Nation's order (Leontjev 2016:240). Leontjev (2016:242) believes Bauer & Nation's list to be a good starting point, but recommends caution, as previous studies on affix acquisition have shown heterogeneous types of results. In Mochizuki & Aizawa (2000:300-301) for example, the order of affix acquisition depended on the number of participants who knew the affixes (i.e. affixes known by more learners were considered to be acquired at earlier levels than affixes known by fewer learners). Both Leontjev (2016) and Mochizuki & Aizawa (2000) mention L1 transfer as a possible reason for biased results.

2.3 *Vocabulary and word-formation in EFL textbooks*

2.3.1 *Vocabulary in EFL textbooks*

Designing a reliable and useful coursebook is a challenging task and there are resources, like Nation & Macalister's (2010) *Language Curriculum Design*, which try to provide the steps to follow in order to build or adapt material used in class. Since word-formation and MA are usually linked to vocabulary acquisition, the selected articles and books reviewed here will focus on this aspect of textbooks.

Nation and Macalister (2010:41) suggest curricula should focus on high-frequency vocabulary, i.e. the 2,000 most frequent words in the academic word list (AWL). The *New General Service List (NGSL)* is another useful list intended for EFL learners. For this revision of the *GSL*, Brezina and Gablasova (2015:4) decided to use a system based on lemmas, instead of word families (as was the case in the *GSL*). This decision stemmed from the fact that not all learners would have the morphological skills to connect all members of a word family (as lemmas only take the inflectional variants of a word into account whereas word families also include derivatives). In his study, O'Loughlin (2012:1) investigated the vocabulary covered in

three proficiency levels of the coursebook series *New English Files* and found that together, the books covered about 1,500 of the most frequent words in English, instead 2,000 words, as suggested in Nation and Macalister (2010). Overall, O'Loughlin (2012:263-264) found that (i) some useful frequent words from the *GSL* (e.g. *provide, avoid, join*) were missing from the books, (ii) that some frequent words from the *GSL* covered in the books (e.g. *vessel, miner, coal, plough*) were not necessarily useful for learners, and (iii) that amongst the words which are not listed in the *GSL* and the *AWL*, some were useful and important for learners (e.g. *television, computer, online, bye, guys*), while others were deemed to be of little use for them (e.g. *boomerang, gatophobia, spire*). O'Loughlin (2012:267) concludes additional material, like graded readers or wordlists, is necessary for learners to become acquainted with sufficient vocabulary.

Nation and Macalister (2010:74) also state that vocabulary sequencing should preferably not be organized in lexical sets or rely on the grouping together of near synonyms or antonyms. In Riazi & Aryashokouh (2007) the opposite is quite true. Based on a study by Jullian (2000), Riazi & Aryashokouh (2007:18-19) explain that presenting vocabulary to students in semantic sets can help them become more active in their learning process as they are forced to research the nuances between near synonyms and therefore reach deeper knowledge of these words. In López Jiménez (2009:62) it is thematic sets¹³, rather than semantic sets, which are said "to produce more positive effects on the retention of the L2 vocabulary in long term memory".

Reda (2003) discusses the fact that EFL coursebooks tend to build their levels around the same "general interest" topics (e.g. travel, sports), starting with basic vocabulary in the lowest levels and expanding the number and types of words related to those topics in the higher levels. He argues that the vocabulary in textbooks which rely on prototyping (i.e. the method discussed above) tends to remain basic even in the higher levels (ibid., p.263). Reda's (2003:267-269) study points the influence of English as a world language on the design of EFL textbooks and since English as a world language is often considered as "English for a limited

¹³ Thematic sets are looser than semantic sets as they encompass all the words which can occur within a given topic. For instance, the thematic set « holiday » can include words like *sun, mountain, beach, train, plane, play* (López Jiménez (2009:62).

range of purposes”, it is no surprise the vocabulary present in such books should be limited as well, focusing on frequency/utility words.

López Jiménez (2009) and Riazi & Aryashokouh (2007) both focus on the types of exercises linked to vocabulary in EFL textbooks. López Jiménez (2009:68) classified the exercises found in the analysed textbooks in five categories, starting from mechanical exercises in which the student does not need to understand the lexical items to complete the task (e.g. find the missing vowel) to more open activities in which greater knowledge of the words is needed (e.g. give a definition), as well as communicative activities (e.g. use specific vocabulary to write an advertisement). She found most exercises were closed or open exercises, with very little communicative activities (ibid., p.71-72). She also observed that most vocabulary was presented in semantic sets and that vocabulary was more often recycled in the elementary and intermediate levels than in the advanced one (ibid., p.69-72).

Riazi & Aryashokouh (2007) analysed four levels of the *English Book* series with a focus on consciousness-raising (C-R) and non-consciousness-raising activities (non-C-R). C-R activities are defined by Willis and Willis (1996:63 cited in Riazi & Aryashokouh 2007:21) as “activities, which encourage [the learners] to think about samples of language and to draw their own conclusions about how the language works”. Exercises like identifying a pattern of words or building hypotheses on collocation restrictions could be examples of C-R activities, while non-C-R activities would consist of gap fillings, reordering of words or multiple choices, etc. (Riazi & Aryashokouh 2007:23). The results showed most vocabulary exercises present in the textbooks could not be considered as C-R (ibid., p.25). Riazi & Aryashokouh (2007:26) also regretted that focus was more often on grammar than lexis, and that vocabulary was mainly treated as individual words instead of focusing on “how words are used with other words or in what patterns they appear in sentences.”

Hamiloğlu & Karlıova (2009:53) also investigated vocabulary in EFL textbooks and found that, in the analysed textbooks, lexis was addressed in a more or less systematic way, namely by using headings or sub-headings like *Vocabulary*, *Word Building*, *Easily Confused Words*, and sometimes by adding wordlists at the end of the textbooks. Some coursebooks

(amongst which the *NH* series) were also found to put emphasis on both writing and pronunciation skills, which is necessary since learners need to be able to use both (ibid., p.53).

Learning the written/spoken forms and the meaning of a large number of words is not enough for students to really know these words. Vocabulary size must be accompanied with deeper vocabulary knowledge (Schmitt 2008:333). Table 3, taken from Schmitt (2008:334) and based on Nation (2001:27), shows the different aspects to word knowledge. Morphological knowledge is one of those aspects. Repeated exposure to lexical items (i.e. recycling) in many different contexts is also key to better vocabulary acquisition (Schmitt 2008:343, Hamiloğlu & Karlıova 2009:50, López Jiménez 2009:65).

Table 3: What is involved in knowing a word (Schmitt 2008:334)

<i>Form:</i>	Spoken	R	What does the word sound like?
		P	How is the word pronounced?
	Written	R	What does the word look like?
		P	How is the word written and spelled?
	Word parts	R	What parts are recognizable in this word?
		P	What word parts are needed to express this meaning?
<i>Meaning:</i>	Form and meaning	R	What meaning does this word form signal?
		P	What word form can be used to express this meaning?
	Concept and referents	R	What is included in the concept?
	Associations	P	What items can the concept refer to?
		R	What other words does this make us think of?
		P	What other words could we use instead of this one?
<i>Use:</i>	Grammatical functions	R	In what patterns does the word occur?
		P	In what patterns must we use this word?
	Collocations	R	What words or types of words occur with this one?
		P	What words or types of words must we use with this one?
	Constraints on use (register, frequency...)	R	Where, when and how often would we expect to meet this word?
		P	Where, when and how often can we use this word?

There are many facets to vocabulary acquisition. He & Deng's (2015) conclusion from their paper on the mental lexicon and vocabulary teaching in EFL contexts is a good way to summarize what has been said in this section:

The organization of the internal lexicon, as well as variables influencing lexical access, suggests that word lists alone cannot in general lead to the effective learning of words, or allow them to be easily retrieved from the mental lexicon. Moreover, introducing new words in contexts can provide learners with knowledge concerning the collocations and additional meanings of those words, not only their meanings in isolation.

Teachers should be mindful of sense relations in order to encourage students to cultivate their own mental semantic networks, which in turn should facilitate quick access to and retrieval of words. The memorization of lexical items in the context of other words has been shown to be effective (Schmitt & McCarthy, 2002); thus, teachers should expose learners repeatedly and frequently to new words in order to consolidate their vocabulary knowledge for those words. Integrating the morphological method into vocabulary teaching can also help students learn and retrieve words more quickly, easily, and accurately. (He & Deng 2015:44)

2.3.2 Word-formation in EFL textbooks

Most of the studies discussed above mention word-formation, but none of them focused on its treatment in EFL textbooks. Tahaine (2012) is one of the only studies found that did. He investigated the *Action Pack* textbooks (8th and 9th grades) and looked for explicit instructions and exercises on morphology and word-formation processes. Unfortunately, only one exercise on derivation was found. According to Tahaine (2012: 1111), morphology tends to be left out of EFL coursebooks due to new communicative approaches (i.e. communication as the only purpose of language). Also, the learners' knowledge of word-formation processes and morphology in the L2 seems to be taken for granted. The case study in Van Lint (2016) on word-formation in the *IO* and *NIO* textbooks seemed to confirm this assumption, as the exercises analysed were almost never accompanied by theoretical instructions on word-formation processes. Enesi (2017) noticed the same tendency (i.e. exercises without theory) in the *New Proficiency PassKey* series. She selected two exercises on word-formation and had them completed by 30 students.¹⁴ The results showed that 60% of the students could only find 1 to 5 correct answers (on 10).

Section 2 aimed to review the literature on MA and WD knowledge and their role on language teaching and learning. This topic was approached in various ways depending on the study (e.g. productive vs. receptive knowledge, MA and writing, MA and reading, MA and cross-linguistic influences). Most of the studies discussed in Section 2 agree that MA and WD knowledge are interesting tools for learners. I also attempted to find a bridge between MA and word-formation in EFL textbooks through articles on vocabulary in textbooks. The lack of

¹⁴ In the article, it is unclear whether she only found two exercises or whether she found more but selected two.

literature linking the two seems to confirm that research on the treatment of word-formation and MA in EFL textbooks is needed.

Part 2:

Case Study

1. Research questions, methodology and data

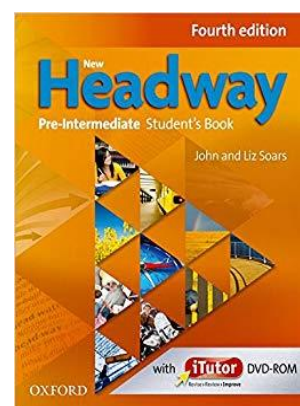
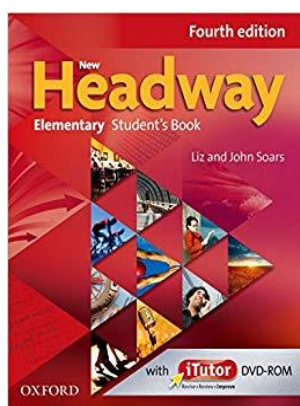
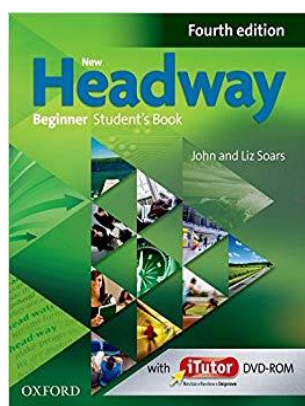
1.1. Research questions

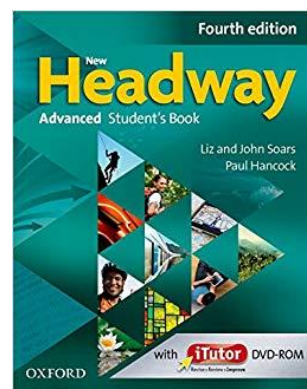
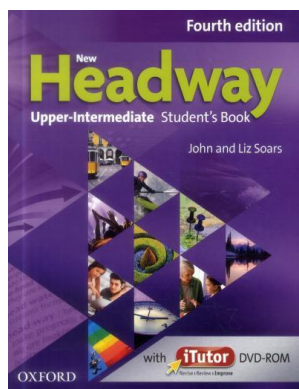
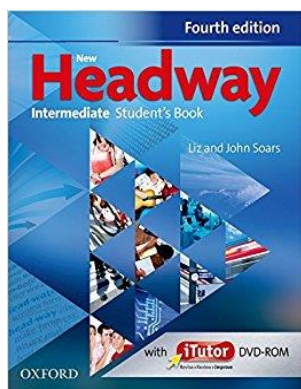
The main aim of this thesis is to see how word-formation is represented in the 4th edition of the EFL textbooks *NH* (Soars & Soars 2000). Second, this study aims to link the affixation exercises with Bauer & Nation's (1993) graded set of affixes. Those aims can be formulated as the following research questions:

1. How does the *NH* series deal with word-formation? Do the textbooks provide both theory and practice? On which word-formation processes do they focus? What type of exercises do they offer?
2. In the exercises on affixation, do the lower proficiency levels focus on affixes from the lower levels in Bauer & Nation (1993), and the more advanced proficiency levels on affixes from the higher levels?

1.2. Methodology and data

The choice to analyse the *NH* textbooks stemmed from their popularity. Published by Oxford University Press, this series is described on the *OUP's* website as the “world’s best-selling English course” (Oxford University Press 2019). The complete series is divided into six levels, namely beginner, elementary, pre-intermediate, intermediate, upper-intermediate and advanced.





At each level the students are provided with a student's book and a workbook, which include theory and exercises respectively, and the teacher with a teacher's book. Digital resources are also available, but they were not included in the analysis. I chose not to include them mainly because I did not have access to all of them. Also, the books, which, I suppose, are the main material in class, already provided sufficient data. The series seems to be built around the student's book, which is organised in units, themselves divided into sections (i.e. *Language Input, Vocabulary, Spoken English, Reading, Writing, Listening, Speaking*) and subsections with different topics, or grammar points depending on the unit. At the end of the book, the students have access to "Grammar References", a series of lists (i.e. vocabulary from each unit, irregular verbs, phonetic symbols), tapescripts of the tracks from the CD, used for listening exercises, and other extra material. The teacher's book follows the structure of the student's book and provides the teacher with instructions on how to proceed in class (i.e. what might be difficult for the students, what they should insist on, if they need to prepare something in advance). The workbook also follows the structure of the student's book, at least at the unit level, and the exercises are usually presented as additional material.

The approach used to analyse the *NH* series is similar to the one I used for my bachelor thesis (Van Lint 2016). I first manually retrieved any content related to word-formation in the workbooks, student's books and teacher's books and then divided the two main types of data into theory (i.e. any explanation provided on word-formation or word-formation processes) and exercises. The former will only be included in the qualitative analysis while the latter will be used for both the qualitative and quantitative analyses. Once identified, I manually encoded the 83 exercises found in an Excel file. The database is a revised version of the one I

used in Van Lint (2016), and is organised as follows: Spreadsheet 1 gives general information about each exercise from the workbooks, i.e. unit, page, Id in the database, category in the book (e.g. vocabulary, grammar, listening), word-formation process involved, whether similar content can be found in the same unit in the other books, etc. Spreadsheet 2 does the same but with the exercises from the student's books. In the books, if two or more exercises were linked (e.g. the answers from the first exercise are used in the second one), they were encoded as one in the database (see *Exercise 1*).

Exercise 1: Derivation - two exercises encoded as one in the database (WBPI Id 6).

1 Complete the chart. Underline the stressed syllable.

Noun	Person	Adjective
1 history	<u>historian</u>	<u>historical</u>
2 politics	_____	_____
3 art	_____	_____
4 music	_____	_____
5 chemistry	_____	_____
6 science	_____	_____
7 economics	_____	_____
8 photography	_____	_____

2 Complete the sentences with a word from exercise 1.

- 1 Van Gogh didn't show any artistic talent until he started painting in his twenties.
- 2 When water turns into steam, there is a _____ reaction.
- 3 Marie Curie was a Polish _____, famous for her work on radioactivity.
- 4 Mozart showed great _____ talent from an early age.
- 5 Margaret Thatcher was a British _____.
- 6 The _____ of *homo sapiens* began in Africa about 80,000 years ago.
- 7 The world is experiencing serious _____ problems at the moment.

Some of the exercises are encoded with an asterisk in their Id. They are listed on Spreadsheets 4 (derivation) and 6 (compounding) and are what I considered to be “bonus”, or “additional” exercises. They are exercises that did not explicitly focus on the form or on the students' ability to form compounds/derivatives but were still considered to deal with word-formation in a way or another (e.g. listening exercise, focus on word stress in compounds). For example, in *Exercise 2*, the exercise implicitly draws on the students' morphological knowledge that the suffix *-ly* forms adverbs and not adjectives. When several of these exercises occurred on the same page, I chose to encode them under one common Id. As some of them did not fit the framework chosen to analyse the “regular” exercises quantitatively (discussed on the next page), I chose to discuss them in the qualitative analysis and to include none of them in the quantitative analysis.

Exercise 2: Derivation - “bonus”/additional exercise (Id SBE-8*)

- 2** Are the words in *italics* adjectives or adverbs?
- 1 a Smoking is a *bad* habit.
b We lost the match because we played *badly*.
 - 2 a Please listen *carefully*.
b Jane’s a *careful* driver.
 - 3 a It’s a *hard* life.
b I work *hard* and play *hard*.

Spreadsheets 3, 5 and 7 provide the data for the quantitative analysis and focus on one word-formation process each, namely derivation, compounding and conversion, in order to adapt the criteria used to analyse the exercises. The following criteria are common to the three processes:

1. Is the exercise contextualised or not? I.e. are the word-forms to find isolated or does the exercise provide sentences/definitions/pictures to help the students find them? (see *Exercises 3 and 4*).

Exercise 3: Derivation - Not Contextualized (WBPI Id 5)

- 3** Write the antonym of the adjectives using the prefix *un-*, *im-*, or *in-*.

Adjective	Antonym with a prefix
1 tidy	<u>untidy</u>
2 polite	_____
3 expensive	_____
4 happy	_____
5 interesting	_____
6 correct	_____
7 intelligent	_____
8 possible	_____

Exercise 4: Compounding – Contextualized (SBA-3)

1 Complete the sentences with a compound noun formed from *up* at the end of the words in the box below.

back	slip	shake	hold
------	------	-------	------

1 *something used for support if the main one fails*
At the end of a day's writing, I make a copy of my work as a _____.

2 *a careless mistake that spoils a plan*
There was an administrative _____, and the emails weren't sent in time.

3 *a situation in which a lot of changes are made*
There's been a big _____ at work. They've fired six managers and restructured the whole company.

4 *a delay*
Sorry for the _____ – we're having a few technical hitches with our software today.

2. Is the exercise linked to a reading or listening exercise?
3. Are some of the word parts given? (i.e. the bases, the affixes)
4. What are the parts of speech (POS) of the bases?
5. What are the POS of the resulting derivatives/compounds/converted words?
6. Is the exercise a multiple choice?

For conversion, one additional criterion was added, namely whether the exercises were linked to pronunciation or not, as it plays an important role in this process. Indeed, conversion often occurs with a shift in word stress (e.g. *cónstruct*_N vs. *to constrúct*_V, or *prógress*_N vs. *to progréss*_V).

The most complex word-formation process to analyse was derivation. In the first version of the database, I attempted to identify whether derivation happened from root to derivative (e.g. *friend* → *friendly*), from derivative to root (e.g. *friendly* → *friend*), or from derivative to derivative (e.g. *friendliness* → *friendly*). As the approach of this study does not involve etymology and in general, I found it was not always easy to determine this direction. I then chose to think in terms of “what is the student asked to do?” or “what is the exercise focusing on?”, which led to the version adopted in the final version of the database. If the student was asked to add something (or if the exercise focused on what is being added) I used the term

“affixation”. The term “decomposition” was used when students were asked to identify the different word-parts of an item, or asked to remove something from it, either to go back to its base (e.g. from *musicality*, find *musical*) or to substitute what was removed with something else (e.g. from *musical*, find *musician*). In the latter case, the exercise would be encoded as focusing on both affixation and decomposition. In some cases, neither happened (e.g. cases of suppletion¹⁵ like *good* → *well*). In cases of affixation, a distinction was made between prefixation and suffixation, and between affixes of Romance and Germanic origins. Finally, the affixes used in the exercises were encoded, as well as their corresponding levels in Bauer & Nation (1993).

General observations are discussed in the next section. After that, the following sections are organised by word-formation process. Each process is analysed quantitatively, then qualitatively. The proficiency levels are analysed individually but also compared with the other levels in order to investigate the coherence of the series as a whole.

¹⁵ Suppletion is “the phenomenon whereby one lexeme is represented by two or more different roots, depending on context” (Carstairs-McCarthy 2002:146) (e.g. *go* → *went*). Cases of suppletion occurred in one or two exercises but were not frequent enough to make a systematic distinction with derivation.

2. General Observations

Before delving more in depth into each word-formation process and level, here are some general observations regarding the data.

It is clear from Figure 1 that the exercises on derivation make up the majority of the data (58%), followed by compounding (36%) and conversion (6%).

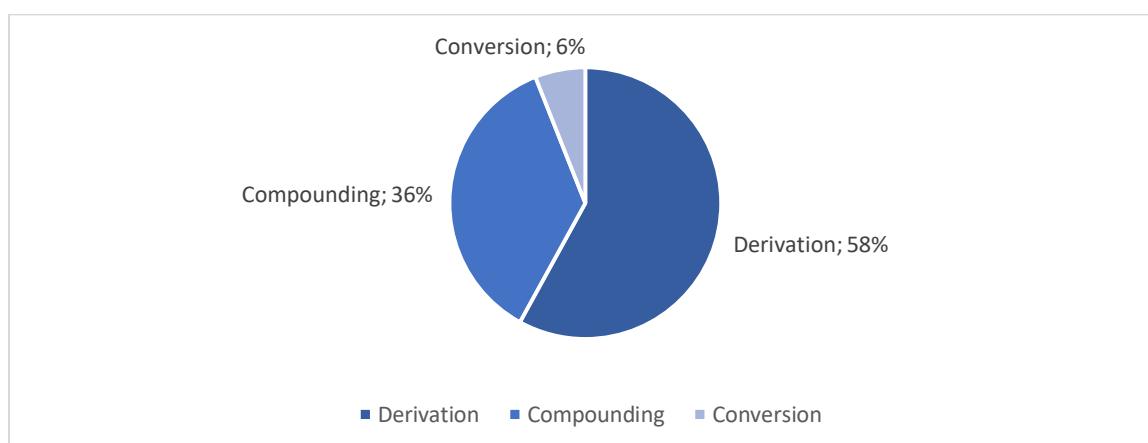


Figure 1: Total number of exercises and their distribution per WF process

Figure 1 includes all 83 exercises from the database, and therefore also includes the 17 “bonus” exercises (encoded with an asterisk in the excel file). As explained in the previous section, those exercises do not make up the core of the data and are not included in the quantitative analyses because they are related to word-formation only indirectly/implicitly (e.g. exercise on *-ed* adjectives right before the theory on *-ed* and *-ing* adjectives, only the emphasis on form is not there yet).

Once those exercises removed, as in Figure 2, the proportions between the three word-formation processes remain similar with 59% for derivation, 33% for compounding 8% for conversion. In the following sections, it is the data from Figure 2 which will be used for the quantitative analyses.

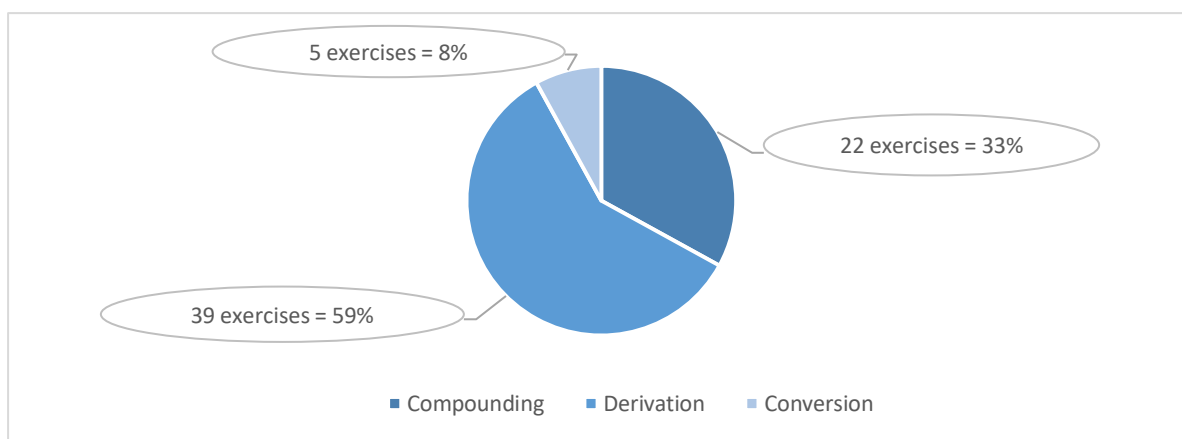


Figure 2: Number of exercises without “*” per WF process

Table 4 shows the distribution of the 66 exercises between the three word-formation processes across the five proficiency levels¹⁶. The numbers in bold show the total numbers of exercises, while the numbers between brackets indicate the distinction between the number of exercises from the workbooks and student’s books respectively (i.e. WB+SB). Interestingly, the exercises are usually evenly distributed among the workbooks and student’s books, unlike the exercises from the *IO* series analysed in Van Lint (2016), which were only provided in the workbooks.

The highest numbers of exercises are found at the three intermediate levels, with 16 exercises at the pre-Intermediate level, 14 at the intermediate level and 17 at the upper-intermediate level. The elementary and advanced levels only have 9 exercises each. This slightly differs from Van Lint (2016), in which the advanced level displayed the highest number of exercises on word-formation. For compounding and conversion, the highest numbers of exercises are found at the pre-intermediate and upper-intermediate levels, respectively, while for derivation, it is the intermediate level, with 12 exercises; however, the two other intermediate levels follow closely with 9 exercises at the pre-intermediate level and 7 at the upper-intermediate level. In his book *Learning vocabulary in another language*, Nation (2000:427) considers the lower-intermediate level to be the best time to start approaching L2 affix teaching and learning in more depth, and the data from Table 4 seem to reflect this idea.

¹⁶ There are five proficiency levels instead of six, because no exercise on word-formation was found at the beginner level.

Table 4: Distribution between the three WF Processes across the five proficiency levels

Levels	WF Process			Total
	Derivation	Compounding	Conversion	
Elementary	6 (3+3)	3 (1+2)	0	9 (4+5)
Pre-Intermediate	9 (5+4)	7 (4+3)	0	16 (9+7)
Intermediate	12 (6+6)	3 (0+3)	0	15 (6+9)
Upper-Intermediate	7 (2+5)	5 (3+2)	5 (3+2)	17 (8+9)
Advanced	5 (2+3)	4 (2+2)	0	9 (4+5)
Total	39 (18+21)	22 (10+12)	5 (5+2)	66 (33+35)

Table 5 shows that throughout the series, contextualized exercises (i.e. words provided with sentences/definitions/pictures) are favoured over non-contextualized ones (i.e. isolated words), with a total of 36 against 18 exercises respectively. The remaining 12 exercises are partially contextualized. They are usually exercises organised in more than one step, meaning for example that additional information, or what is here referred to as “context” (e.g. sentences with gaps, pictures or drawings) is only presented in the second half of the exercise, as in *Exercise 6* on the next page. When looked at individually, each of the five proficiency levels displays a higher number of contextualized exercises than non-contextualized ones. Presenting words in context seems indeed more interesting, as students will most likely encounter those words in texts, during conversations, on television, etc. *Exercises 5 to 7* are here to illustrate the different levels of contextuality.

Table 5: Distribution between contextualized and non-contextualized exercises across the five proficiency levels

Levels	Contextualized or not?			Total
	contextualized	Partly contextualized	Not contextualized	
Elementary	7	0	2	9
Pre-Intermediate	8	2	6	16
Intermediate	8	3	4	15
Upper-Intermediate	7	5	5	17
Advanced	6	2	1	9
Total	36	12	18	66

Exercise 5: Derivation – Elementary SB (Id SBE-5) – Contextualized

3 Complete each sentence with the correct adjective.

- excited exciting**
Life in New York is very _____.
It's my birthday tomorrow. I'm really _____.
- tired tiring**
The marathon runners were very _____.
That game of tennis was very _____.
- annoyed annoying**
The child's behaviour was really _____.
The teacher was _____ because nobody did the homework.
- worried worrying**
We were very _____ when we heard the news.
The news is very _____.

Exercise 6: Derivation – Intermediate SB (Id SBI-4) – Partly Contextualized

3 Work in two groups. Make new words with the base words using the suffixes and/or the prefixes. Which group can make the most words?

PREFIX	BASE WORD	SUFFIX
un- im- re- dis- mis- in-	agree arrange conscious expense happy help kind polite react success understand use	-ness -ment -ion -ful -less -able -ive

4 Complete the sentences with a word from exercise 3.

- Bob and Jan don't get on at all. They dis_____ about everything.
- Money doesn't always lead to h_____ness.
- My aunt says today's kids are all rude and im_____.
- Thanks for your advice, it was really h_____ful. I really appreciate your k_____ness.
- My dad is u_____less at fixing his computer. I always have to help him.
- Please don't mis_____ me. I didn't mean to be un_____. I'm really sorry.
- Timmy fell off his bike and hit his head. He was un_____ for a few hours.
- What was your wife's re_____ion when she heard you'd won the lottery?

Exercise 7: Compounding – Upper-Intermediate SB (Id SBUI-3) – Not contextualized

- 5** How many compounds can you make using a word from **A** and a word from **B**? There is sometimes more than one option for each word in **A**.

A	B
book	pill
tea	line
computer	way
sleeping	case
air	bell
door	light
junk	air
open	house
food	bag
fire	software
head	escape
	office
	poisoning
	pot
	step
	rest
	alarm
	shelf
	port
	program
	food
	conditioning

The *NH* student's books are organised into Units, themselves divided into sections such as *Vocabulary*, *Grammar*, *Listening*, *Reading*, *Writing*, *Speaking*, *Pronunciation*, *Everyday English*, etc. The workbooks are also organised into units, but the titles of the subsections are not always as systematic as in the student's books. So, while the vocabulary section is clearly favoured in the student's books, with 28 exercises out of 34 found under titles like *Vocabulary*, *Vocabulary and Speaking*, *Vocabulary and Listening*, or *Vocabulary and Pronunciation*, just under half of the exercises from the workbooks, i.e. 15 out of the 31, follow this trend. The other 16 exercises are usually found in sections with titles more specific to the types of exercises (e.g. *Adjectives*, *Nouns in Group*, *Pronunciation*, *Participles*, *Something/no one*) or on the contrary, under rather vague titles (e.g. *Just for fun*, *Practice*, *Language Focus*). The distributions between sections are shown in Figure 3 and 4 for the student's books and workbooks respectively. When put together, over two thirds of the exercises (i.e. 44 out of 66) are put in sections directly linked to vocabulary, which supports the standpoint discussed in the literature review that morphological knowledge and vocabulary learning are strongly linked.

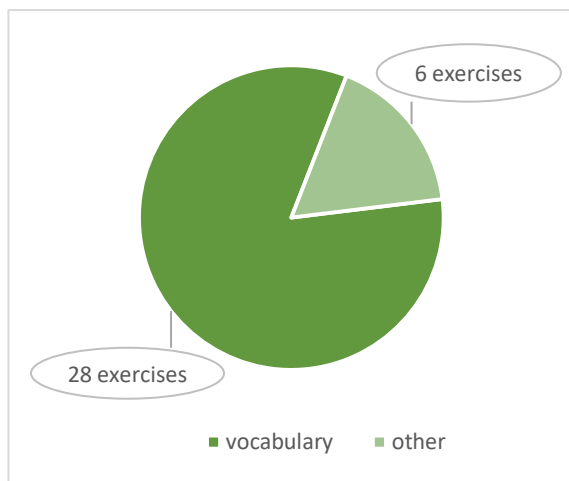


Figure 3: Sections of the textbooks – Student's books

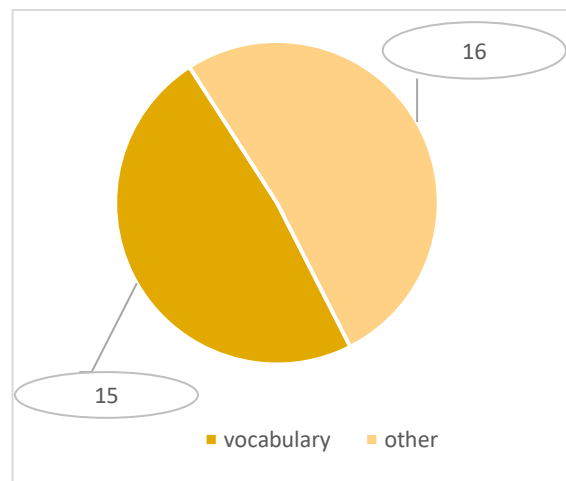


Figure 4: Sections of the textbooks – Workbooks

To conclude this section, the data already indicate that the textbooks from the *NH* series provide a substantial amount of exercises on word-formation. Hopefully, the balance between exercises from the student's books and workbooks (see Table 4) will be synonymous of similar content covered in both books (as well as in the teacher's book), so they can complement each other. However, Table 4 already confirms that it is not always the case, since no exercise on compounding can be found in the workbook at the intermediate level, while the student's book has three. The qualitative analyses will tell whether the opposite also happens (i.e. exercises from the workbooks which are not directly linked to material from the student's books). The next section covers the exercises on conversion. Section 4, on compounding and Section 5, on derivation, cover more exercises and will therefore be divided into subsections for the quantitative and qualitative analyses.

3. Conversion

The data on conversion, which consist of 5 exercises, are too narrow to be organised into subsections. Moreover, those 5 exercises all come from the upper-intermediate level.¹⁷

It was mentioned in the section on methodology that pronunciation is an important feature of conversion, as different word stresses indicate different parts of speech. It is therefore nice to see that the majority of the exercises (4 out of 5) include this feature. The importance of pronunciation is reflected in the titles under which most of the exercises are found, such as *Vocabulary and Pronunciation*, or simply *Pronunciation*. The only exercise that does not deal with this aspect is a gap filling exercise from the workbook in which the students have to use parts of the body (e.g. *elbow, foot, hand, shoulder*) as verbs (e.g. *to elbow your way through a crowd*) in given sentences (see *Exercise 8*).

Exercise 8: Conversion – Upper-Intermediate WB (Id 7)

- 2 Complete the sentences with the parts of the body in the box, used as verbs.

arm	elbow	eye	foot	hand	head	shoulder	thumb
-----	-------	-----	------	------	------	----------	-------

- 1 The teacher _____ out the exam papers and told the class to begin writing.
- 2 I managed to _____ my way to the front of the crowd, so I got a good view of the procession.
- 3 I haven't read the magazine yet, I just _____ through it to see if there were any interesting pictures.
- 4 We all _____ the new member of class with curiosity. We were eager to see what she was like.

The remaining 4 exercises (from Unit 6 in both the student's and workbook) use tracks from the CD provided with the textbooks, for the student to hear the different pronunciations. The 2 exercises from the student's book are organised in three steps. First, the students listen to the pronunciation of a series of words and pay attention to any change in word stress

¹⁷ Originally, two exercises from the pre-intermediate level were wrongly included in the database. Those exercises dealt with homonymy and some cases were mistaken for conversion (e.g. *a watch* vs. *to watch*, *a fine* vs. *to be fine*). They have since been removed from the database.

depending on their part of speech. Then, the students practice saying those words with a partner. Finally, they use those words in sentences, or to answer questions (see *Exercise 9* right below). *Exercise 9* focuses on nouns and verbs. The other exercise (not illustrated here) adds adjectives to the list (e.g. *invalid*, *content*, or *present*).

Exercise 9: Conversion – Upper-Intermediate SB (Id SBUI-8)

- 1 T 6.5** Listen and repeat these words, first as nouns and then as verbs. How does the word stress change?

a export	c decrease	e progress	g refund	i permit	k insult
b import	d increase	f record	h produce	j transport	l protest

- 2** Practise the words with a partner. Give instructions like this.



- 3** Complete the sentences with one of the words in its correct form. Read the sentences aloud.

- Scotland _____ a lot of its food from other countries. Its _____ include oil, beef, and whisky.
- I'm very pleased with my English. I'm making a lot of _____.
- Ministers are worried. There has been an _____ in the number of unemployed.
- But the number of crimes has _____, so that's good news.
- How dare you call me a liar and a cheat! What an _____!
- There was a demonstration yesterday. People were _____ about blood sports.
- He ran 100m in 9.58 seconds and broke the world _____.
- Don't touch the remote! I'm _____ a film.
- Britain _____ about 40% of the EU's oil.

- T 6.6** Listen and check.

Finally, I chose to split the last exercises from the workbook into two exercises, though they could have been considered as one exercise in several steps, as they partly cover the same words (which also happen to be the words from the exercises in the student's books). In *Exercise 10*, the students first listen to some words and have to indicate whether they are pronounced as nouns or verbs. Then, some of these words are put in a short text which the students read aloud as practice. The text is available on the CD, so the students can check their pronunciation. The last exercise consists of a text similar to this in *Exercise 10*, but here the students are asked to mark the stress on specific words.

Exercise 10: Conversion – Upper- Intermediate SB (Id 4)

12 Words with variable stress

1  Listen to the pronunciation of the words. Write **N** for noun and **V** for verb.

- | | |
|--------------------------------------|-------------------------------------|
| 1 ☐ refuse | 7 ☐ permit |
| 2 ☐ transport | 8 ☐ record |
| 3 ☐ produce | 9 ☐ contract |
| 4 ☐ decrease | 10 ☐ desert |
| 5 ☐ progress | 11 ☐ present |
| 6 ☐ insult | 12 ☐ content |

2 Read this news item aloud. Pay attention to the shifting stress on words that are both verbs and nouns.

'Good evening. Here is the news. Oil imports continued to increase in the last quarter. The cost of transport fuel is already at record levels, and the Prime Minister refuses to rule out further increases. Members of the Transport Workers' Union insist that they will protest against any future price rises. They presented a report maintaining that present fuel price increases are due to a decrease in investment in railway transport by the government.'



 Listen and check. Practise reading the text again.

Conversion – Interim conclusion

The fact that the *NH* textbooks include exercises on conversion (though the term “conversion” is never used) is a positive thing, as is the fact that they link it with pronunciation. Indeed, conversion is rather frequent in English, and knowing the correct stress patterns can really help improve both the learners’ listening skills and fluency. The material on this word-formation process is covered across the three books (i.e. workbook, student’s book and teacher’s book) in a coherent way and keeps it to the essential. It is however a bit disappointing that conversion is only covered in one of the proficiency levels. It could be interesting to introduce this word-formation process earlier on in the series, through simple exercises, like *Example 7* but with easier/more frequent words/expressions (e.g. *a smile_N* vs. *to smile_V*, *a drink_N* vs. *to drink_V*, or *an email_N* vs. *to email_V*). This would allow the students to become familiar with conversion, and it would allow to recycle some material and introduce more complex cases and pronunciation at the higher levels.

4. Compounding

4.1. Quantitative Analysis

The data on compounding consist of 22 exercises (10 from the workbooks and 12 from the student's books) across the five proficiency levels (see Figure 5). Another 8 “bonus” exercises (encoded with an asterisk in the database) complete the data for the qualitative analysis. Figure 5 shows that the exercises are distributed evenly between workbook and student's book in each proficiency level, except for the intermediate level, in which compounding is only covered in the student's book (and teacher's book). The pre-intermediate level leads with 7 exercises, followed by the upper-intermediate level (5 exercises), the advanced level (4 exercises), and the elementary and intermediate levels with 3 exercises each.

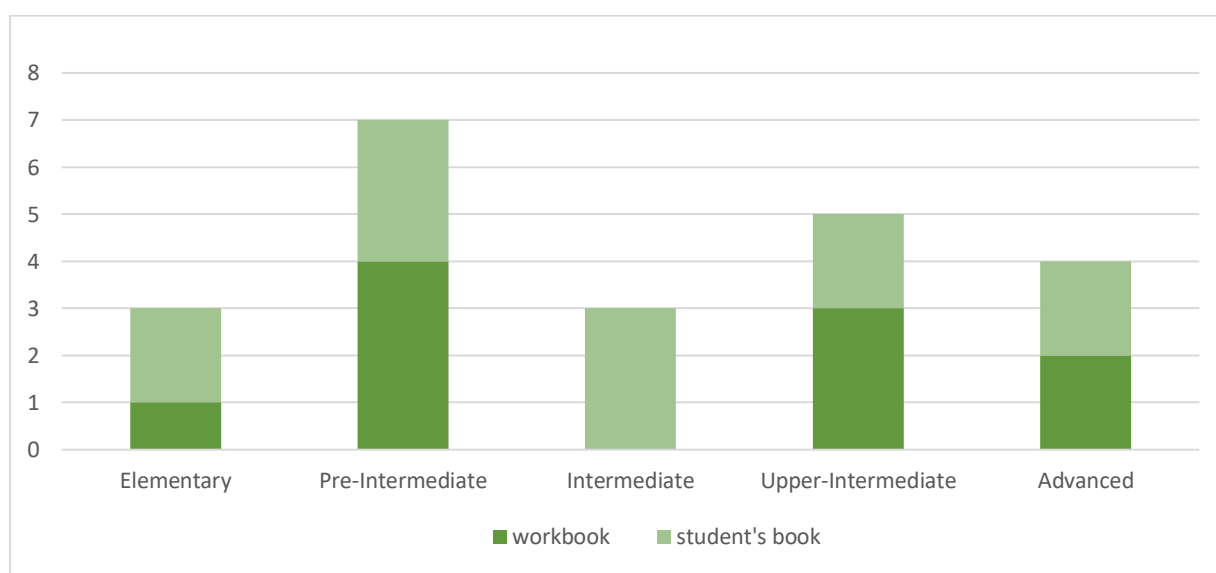


Figure 5: Compounding - Distribution of the exercises (between WB and SB) across the five proficiency levels

Five types of compounds are covered in the series, namely nouns, adverbs, adjectives, pronouns and conjunctions. Figure 6 clearly shows that compound nouns are the most covered type in the *NH* series, with a total of 15 exercises. They are also the only type covered at all five proficiency levels. Compound adverbs and pronouns are both found in 5 exercises, distributed between the pre-intermediate, upper-intermediate and advanced levels. Then, the three intermediate levels each comprise 1 exercise with compound adjectives. Finally, one case of compound conjunction (viz. *wherever*) is found at the advanced level.

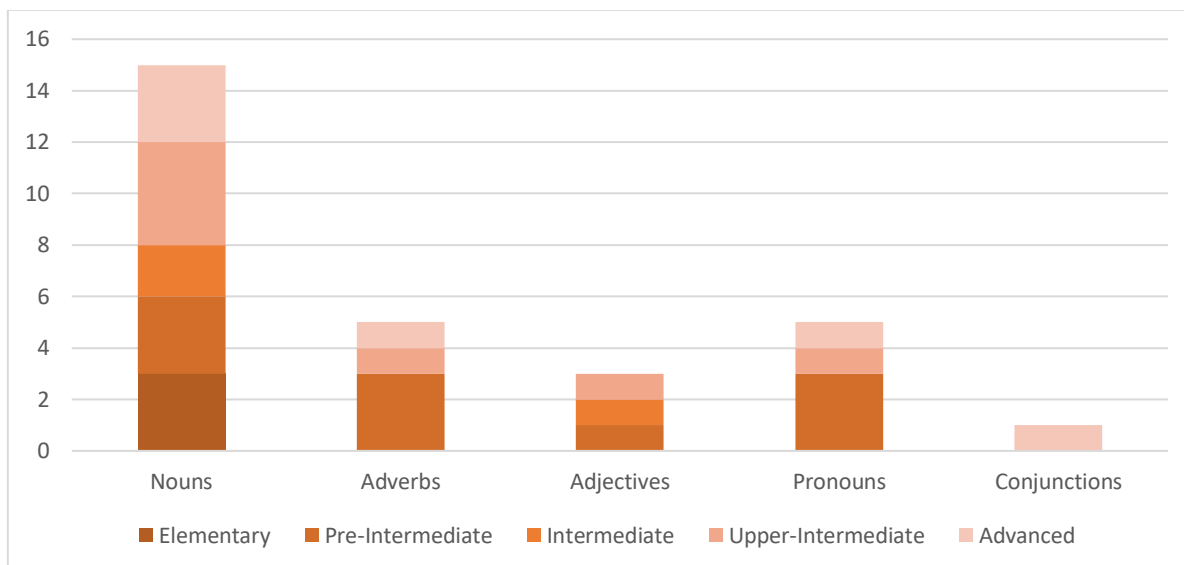


Figure 6: Number of exercises with each type of compounds (at each proficiency level)

Most of the exercises deal with one type of compound at a time (16 of them), but some others deal with either two (in 5 exercises), or three types (in 1 exercise). The combinations are shown in Figure 7. Compound nouns are mostly dealt with on their own, while adverbs and pronouns are dealt with together (we will see why in the qualitative analysis).

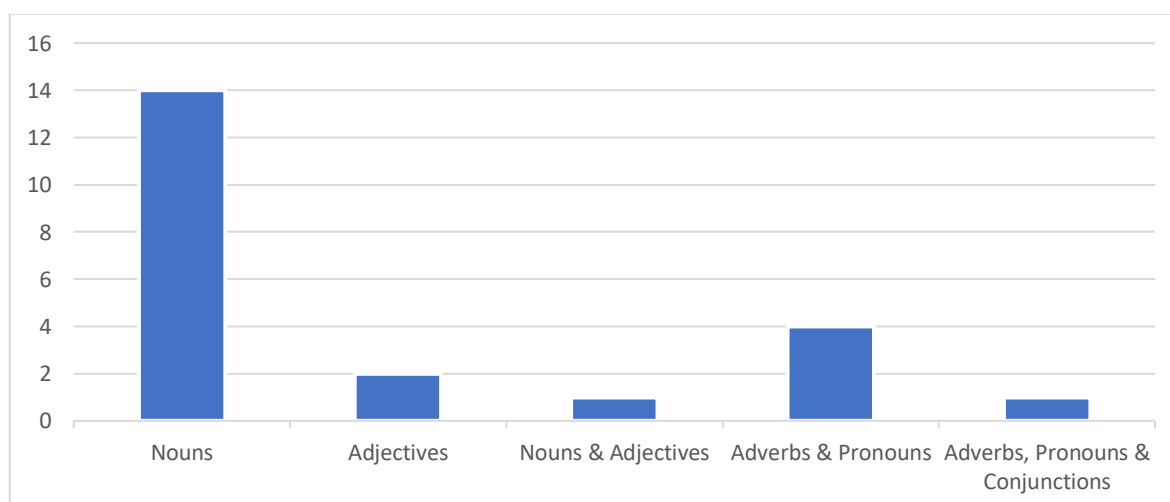


Figure 7: Distribution of the different combinations of types of compounds in each exercise

Figure 8 provides the same information to Figure 6, but displays more visually the distribution of each type of compound within each proficiency level. Nominal compounds are

usually dominant in each level, except for the pre-intermediate level, in which nouns, adverbs and pronouns are equally covered with 3 exercises each.

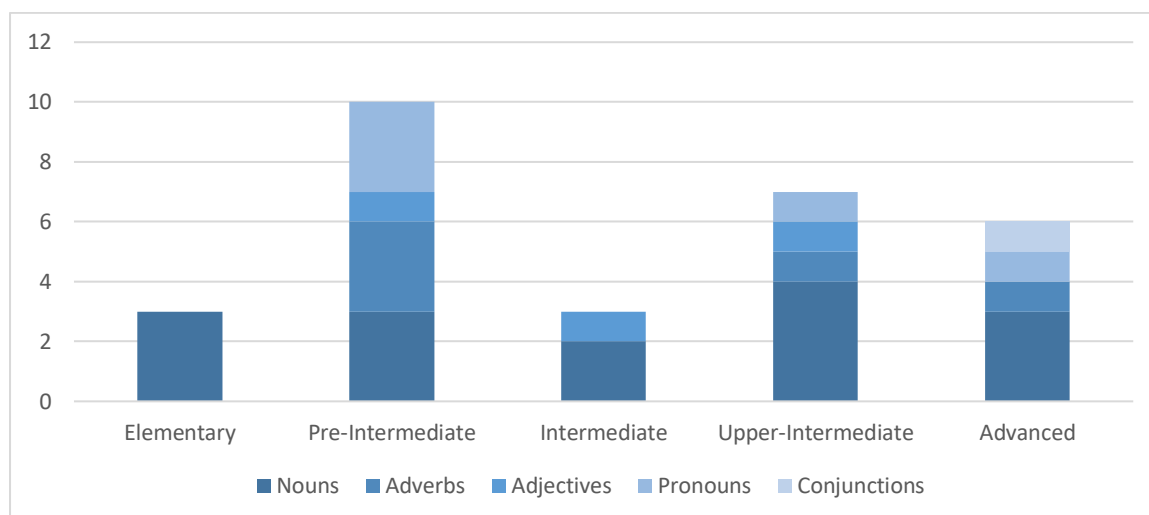


Figure 8: Distribution between each type of compound at each proficiency level

The parts of speech of the bases are more varied. They are listed in Table 6, with the number of exercises in which they occur given between brackets. Once again, nouns are the most commonly used parts of speech for both the left-hand and right-hand bases with 13 and 18 exercises respectively. Also, in about two-thirds of the exercises, the part of speech of at least one of the two bases is consistent throughout the whole exercise (e.g. all the compounds of the exercise have a nominal left-hand base, while the right-hand bases may vary).

Table 6: Compounding – Parts of speech of the left-hand and right-hand bases

Bases	Parts of Speech
Left-hand base	noun (13); adjective (5); adverb (2); preposition (2); pronoun (1); ordinal number (1); verb (4)
Right-hand base	noun (18); adjective (4); adverb (5); preposition (3); pronoun (4); verb (3)

In 16 of the exercises, both bases are provided (see Table 7). Most of these exercises consist of the student matching words from a list A with words from a list B in order to form the compounds. From the pre-intermediate level on, the students are slightly challenged with at least one exercise per level providing only one of both bases. Surprisingly, the only exercise in which neither bases are provided (*Exercise 16*, p.57) comes from the elementary level. In this exercise, the students write a short conversation with a partner, in which they include compounds. This exercise comes right after two other exercises on compounding, which probably leads the students to select words from those two exercises for their conversation, however, they are not restricted in their choice.

Table 7: Compounding – Number of bases given for each compound

	Number of bases given for each compound?			Total
	Both	1 of them	None	
Elementary	2	0	1	3
Pre-Intermediate	6	1	0	7
Intermediate	1	2	0	3
Upper-Intermediate	4	1	0	5
Advanced	3	1	0	4
Total	16	5	1	22

Finally, out of the 22 exercises, 12 are contextualized, 4 are partly contextualized and 6 are not contextualized (see *Exercises 11 to 13* on the next page). Table 8 shows that except for the upper-intermediate level, which has the same number of contextualized and non-contextualized exercises, all the other levels display a higher number of contextualized exercises. The next section provides more details about each type of exercise.

Table 8: Compounding – Contextualization – Distribution across the five proficiency levels

Levels	Contextualized or not?			Total
	contextualized	Partly contextualized	Not contextualized	
Elementary	2	0	1	3
Pre-Intermediate	5	1	1	7
Intermediate	0	1	2	3
Upper-Intermediate	2	1	2	5
Advanced	3	1	0	4
Total	12	4	6	22

Exercise 11: Compounding – Upper-Intermediate WB (Id 3) – Contextualized

- 1 Complete the sentences with a combination of these words.

some
any
no
every

+

one / body
thing
where

- 1 I don't care where we go on holiday as long as it's _____ hot.
- 2 Does _____ want a cup of tea?
- 3 I've looked for my contact lens, but I can't find it _____.
- 4 **A** What do you want for dinner, Harry?
B Oh, _____, I don't mind!
- 5 This sale is fantastic. There's 50% off _____ in the shop.
- 6 It's really boring at Auntie Martha's, there's absolutely _____ to do.
- 7 I'm a very sensitive person. _____ understands me.
- 8 There was _____ for me to sit on the train so I had to stand.

Exercise 12: Compounding – Advanced WB (Id 5) – Partly contextualized

7 Compound nouns formed with prepositions

- 1 Match words in A and B to make **compound nouns**. Sometimes more than one is possible.

A under over fall spin
break out down set
up pile hang off
B wear over out spring all
shot come off through up
back patient ground pour

underwear

 Listen and compare.

- 2 Complete the crossword. The answers to the clues are all compound nouns from exercise 1.



Across

- 2 The Metro in London is called the ...
- 4 Parents often have problems with their teenage ...
- 7 I didn't stay overnight in hospital. I was an ...
- 9 There was a significant ... in the peace talks.
- 11 After a nuclear explosion the ... can last for many years.
- 12 I'll never drink again. It's the worst ... I've ever had.
- 13 There was a terrible ... on the motorway, involving six cars and a lorry.

Down

- 1 My white ... went grey in the wash.
- 3 We got soaked in that sudden ...
- 4 I have to wear an ... when I work in the garage. It's dirty work.
- 5 The movie is just a ... from the original TV programme.
- 6 The ... of all his troubles was that he emigrated.

Exercise 13: Compounding – Intermediate SB (Id SBI-12) – Not contextualized

5 Put one word in each box to form three compound nouns.

1	dining waiting changing	5	brush dresser cut
2	lights warden jam	6	news travel estate
3	antique second-hand shoe	7	way bike racing
4	Spider- post chair	8	wrapping toilet wall

4.2. Qualitative Analysis

For simplicity, this section will simply discuss each proficiency level in their original order, namely elementary, pre-intermediate, intermediate, upper-intermediate and advanced. Naturally, links between levels will be made when necessary.

a. Elementary level

The exercises from the workbook and student's book are directly linked. They are covered in both books in the same unit (Unit 5), in a subsection that deals with "words that go together", in this case, *nouns + nouns*. Moreover, the instructions of the exercise from the workbook directly refer the students to the compounds covered in the student's book. They are illustrated in *Exercises 14* and *15*. An additional listening exercise (encoded as one of the bonus exercises in the database) follows *Exercise 14* in the student's book. The students listen to three conversations and try to spot *noun + noun* compounds. The last exercise (see *Exercise 16*) was already mentioned in the previous section (i.e. writing a conversation including *noun + noun* compounds). As expected, the teacher's book does indeed suggest that the students use the previous exercises to help them come up with new conversations and compounds.

Exercise 14: Compounding –Elementary SB (Id SBE-1)

1 Match a noun in A with a noun in B.
Do we write one word or two?

post office *businessman*

A	B
book	room
motor (x2)	shop/store
sun	station (x2)
living	park
bus	way
hand	bike
railway	lights
car	stop
traffic	glasses
petrol	bag

2 Test the other students on the nouns that go together.

This is where we buy books. A book shop.

Exercise 15: Compounding –Elementary WB (Id 1)

8 Noun + noun

Answer the questions with a noun + noun combination from the Student's Book on page 44.

- Where do trains stop?
railway station
- Where can you buy petrol?

- What do you wear when it's a sunny day?

- Where can you drive fast between one city and another?

- Where does a woman carry her purse, hairbrush, lipstick ... ?

Exercise 16: Compounding – Elementary SB (Id SBE-3)

4 With a partner, write a short conversation. Include some noun + noun combinations. Act your conversation to the class.

The teacher's book provides the teacher with additional instructions on how to proceed with the exercises. For example, they suggest focusing on spelling, so the students can notice that some compounds are written in one word (e.g. *businessman*), while others are written in two (e.g. *post office*). It is also suggested that the teacher works on pronunciation and word stress with the students.

As nominal compounds and *noun + noun* combinations are very common in English, it seems logical they should be the first type covered with the students. Though scarce, those exercises can be a nice introduction to compounding.

b. Pre-Intermediate level

The pre-intermediate level deals with compounding in three units, namely Unit 2 in the workbook and Units 4 and 10 in both the workbook and student's book.

The exercise from Unit 2 (see *Exercise 17*) deals with compound nouns in which the left-hand base is an *-ing* form (e.g. *sleeping, washing, driving*)¹⁸. *Exercise 17* comes together with another exercise on gerunds and *-ing* forms and both are indicated in the teacher's book as extra material. Gerunds are indeed not discussed per se in this unit in the student's book, but the students might need them to formulate their answers to some of the exercises. Otherwise, *Exercise 17* is the typical exercise in which students match words from box A with words from box B and then use the compounds in sentences.

Exercise 17: Compounding – Pre-Intermediate WB (Id 1)

2 Make a compound noun with an *-ing* form in A and a noun in B.

A		B	
swimming	parking	bag	list
sleeping	driving	machine	licence
shopping	washing	costume	ticket

- 1 I parked on a double yellow line and got a £40 parking ticket.
- 2 I don't have a car because I haven't got a _____.
- 3 Put all your dirty clothes in the _____.
- 4 I always write a _____ before I go to the supermarket.
- 5 Don't forget to bring a _____ when we go camping next weekend.
- 6 Let's go for a swim. Have you got your _____?

The three exercises from Unit 4 focus on compounds like *anyone, someone, somebody, anybody, everywhere, nowhere, something, everything*, etc.¹⁹ The choice to discuss those compounds together explains why pronouns and adverbs occur in the same exercises.

¹⁸ Those words can be nouns or participles depending on the situation. In doubt, I chose to encode them as verbal nouns in the database.

¹⁹ On a side note, the title of the subsection from the workbook in which the exercise occurs (i.e. *Pronouns – someone...*) is a bit misleading as it does not acknowledge the fact that *everywhere* and *somewhere* are adverbs and not pronouns.

9 Pronouns – *someone* ...

Look at the possible combinations.

some	+	one
any		thing
no		where
every		

Exercise 18 consists of a multiple choice in which the students choose between two compounds to fill in a blank in a sentence. The two other exercises are similar to *Exercise 18*, without the multiple choice. In other words, the student fill in the blanks with the correct combination of *some, any, no, every* + *one, thing, where* (see *Exercise 19*).

Exercise 18: Compounding – Pre-Intermediate WB (Id 2)

- 1 Complete the sentences using the words in bold once only.

someone **anyone**

- 1 There's **someone** on the phone for you.
2 Did **anyone** ring me last night?

everything **nothing**

- 3 She has _____ – a rich husband and a big house.
4 He has _____ – not a penny to his name.

somewhere **everywhere**

- 5 I can't find my keys! I've looked _____.
6 I want to go away on holiday – _____ hot.

anyone **no one**

- 7 'Who did you speak to at the party?'
'_____. I just stayed for ten minutes, then I left.'

Exercise 19: Compounding – Pre-Intermediate SB (Id SBPI-3)

4 Complete the lines with the correct word.

some	any
every	no

+

thing	one/body
where	

1 'Did you meet _____ nice at the party?'
'Yes. I met _____ who knows you!'

2 'Ouch! There's _____ in my eye!'
'Let me look. No, I can't see _____.'

3 'Let's go _____ hot for our holidays.'
'But we can't go _____ that's too expensive.'

4 'Where are my glasses. I can't find them _____.'
'What are they on the top of your head?'

Two of the exercises from Unit 10 are interesting for different aspects (and the third exercise simply consists in making as many compound nouns as possible with bases from two sets of words).

In the exercise from the workbook, the students are asked to form compound nouns but are not provided with both bases. For each base to find, the students are given three bases (e.g. *ache*, *lights*, *phones*) and need to find one word that can be combined with all three (e.g. *head* for *headache*, *headlights* and *headphones*). In some cases, the three words stand for the left-hand base, in others, for the right-hand base (see *Exercise 20*). The rest of the exercise consists in writing some of those compounds under the correct picture and using them to answer questions.

Exercise 20: Compounding – Pre-Intermediate WB (Id 10)

1 Write a word to make three compound nouns.

post

1 business

fire

➔

man

2 _____

➔

ache

3 _____

➔

lights

4 _____

➔

phones

pop

3 rock

film

➔

5 return

parking

single

➔

6 _____

➔

cut

7 petrol

railway

bus

➔

2 Write a compound noun from exercise 1.



1 petrol station



2 _____



3 _____



4 _____



5 _____



6 _____

The second exercise is interesting because it is the first to deal with compounds other than nouns. Instead, it focuses on compound adjectives; more specifically on the combination *adverb + adjective* (see *Exercise 21*). Other than that, the exercise simply consists in combining the adjectives from a box with either *well-* or *badly-* and using them in the correct sentence. In the teacher's book, there are also instructions regarding pronunciation and stress: it is suggested that the teacher read the examples aloud and point out that both parts are usually stressed.

Together with an exercise from the intermediate level, they are the two only exercises from the data dealing exclusively with compound adjectives.

Exercise 21: Compounding –Pre-Intermediate SB (Id SBPI-9)

Adverb + adjective

The adverbs *well-* and *badly-* can combine with past participles to form adjectives.

well-known **badly-behaved**

- 5 Complete the sentences with an adjective formed with *well-* or *badly-* and a past participle from the box.

done	paid	written	equipped
behaved	dressed	known	

- 1 She has a wonderful job. She's very _____.
- 2 I didn't enjoy that novel. It was really _____.
- 3 You don't need to spend a lot of money on clothes to look _____.
- 4 Our office is really _____. We have all the latest machines.
- 5 I hope their children don't come. They're so _____.



- 6 Can I have my steak very _____, please?
I don't like it rare.
- 7 Surely you've heard of Elizabeth Taylor?
She was really _____.

T 10.8 Listen and check. Practise the sentences.

I also encoded an additional listening exercise in which the students pay attention to the pronunciation of compound nouns and try to spot which of the two bases is stressed (i.e. the first one). The exercise is preceded by a small “recap box” with examples and a reminder that nouns can go together to form compound nouns. Also, the last exercise from the section on “words that can go together” (i.e. answering questions and having a conversation with a partner/the class) recycles some of the compounds from the other exercises.

c. Intermediate level

There are only 3 exercises at the intermediate level. All three are found in the student's book and discussed in the teacher's book, so it is surprising that no equivalent material was found in the workbooks.

The exercise from Unit 6 is the second (and last) exercise dealing with compound adjectives exclusively. First, the students try to find some compounds adjectives in three adverts displayed on the same page, then they match words from box A with words from box B and try to find their opposite when possible (e.g. *well-dressed*, *badly-dressed*). Finally, they test each other on those compounds. Once again, the teacher's book also adds information on how to correctly stress each compound. Unlike the exercise from the pre-intermediate level (see *Exercise 21*, p.59), the left-hand base is no longer restricted to the adverbs *well-* and *badly-* (e.g. *good-looking*, *hard-working*, *second-hand*, *hand-made*, *brand-new*). This is a nice evolution to show the versatility of such compounds, and coherent since the students have been introduced to them at the previous level.

The two other exercises come from Unit 10. One is similar to the first part of *Exercise 20* (i.e. three words given [*brush*, *dresser*, *cut*], one word to find [*hair*] to form three compounds [*hairbrush*, *hairstylist*, *haircut*]). The other consists of using words from a box and finding compound nouns with these words, in the dictionary. Then the students work in group to have the other students guess their words (see *Exercise 22*). What is interesting here is that, unlike the other exercises in which only one base of both was provided, this one does not indicate for which half of the compound the word stands.²⁰

Exercise 22: Compounding – Intermediate SB (Id SBI-13)

6 Work with a partner. Use your dictionary to find some compound nouns made with one of these words.

hand foot finger fire air water

Describe them for the other students to guess.



They are used by the police. They put them round the wrists of prisoners.

Yes!

Handcuffs!

²⁰ At least technically. The possible answers in the teacher's book all put the words on the left-hand of the compound, even if compounds like *ring finger*, or *sparkling water* are also possible.

Additional exercises include practising word stress in compound nouns, and finding the odd one out in a list of four compounds (e.g. *sunglasses*, * *sunpool*, *suncream*, *sunset*).

Though there are not many exercises at this level, they are still surprisingly varied and coherent in the evolution of the types of exercises when compared to the two previous levels (i.e. only one base given instead of both, use of the dictionary, focus on compound adjectives, use of adverts)

d. Upper-intermediate level

There are 5 exercises at this level (three in Unit 1, and one in Unit 6 and 12 each). Most of them are similar to the exercises encountered at the other levels but there are still some interesting comments to make.

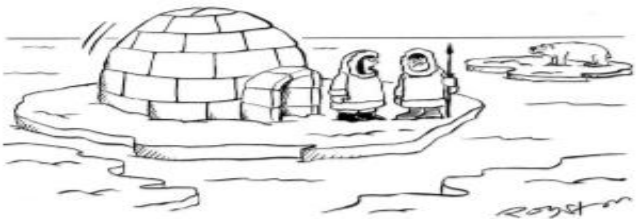
In Unit 1, the exercise from the workbook is like *Exercise 20* (p.19), but this time, focus on spelling is added explicitly in the instructions. Still in Unit 1, while one of the two exercises still deals with nouns exclusively, the other starts mixing compound nouns and adjectives together, making it the students' job to distinguish them from one another (see *Exercise 23*).

Exercise 23: Compounding – Upper-Intermediate SB (Id SBUI-2)

1 How many compounds can you make by combining the words in the circle with the words around it?

made work wife sick proud
coming home house page less
plant town bound warming grown

Which are nouns and which are adjectives? Use your dictionary to help with the meaning and the spelling.



"In the circumstances, I think we should skip the housewarming party."

Note1 : the exercise is preceded by another (one of the bonus exercises) in which the students are given compound nouns and compound adjectives and need to distinguish them.

Note 2: not shown here, but the second half of the exercise includes using the compounds in sentences with gaps to fill in.

Note3: *homeless* is a derivative rather than a compound.

The exercise in Unit 6 simply recycles what had been done at the pre-intermediate level on pronouns and adverbs like *something, somewhere, anything, anybody, somebody, nowhere, nobody*, etc. (see *Exercise 19*, p.59) and a grammar reference is available at the end of the book. Finally, the last exercise (Unit 12) focuses on ways to combine nouns, including cases of compounds. It is accompanied by a summary of the different ways to put nouns together (e.g. *the doctor's husband, cat food* vs. *the cat's food (is on the table), the floor of the living room* vs. *the living room floor, post office, headache*). The exercise is simply a gap filling exercise in which both bases are given.

Like for the other proficiency levels, pronunciation is usually also accounted for.

e. Advanced level

There are 4 exercises at this level, all covered by Unit 6, but in separate sections. Three of them deal with nouns formed from phrasal verbs (which they also call phrasal nouns in the workbook) (e.g. *backup, update, outbreak, spin-off, downpour*). The fourth exercise focuses on compounds with *-ever* (e.g. *whoever, whichever, however, wherever, whatever*).

The two exercises from the student's book (see *Exercises 24* and *25*) deal with compound nouns with *verb + preposition* and *preposition + verb* combinations.²¹ Notice the change in types of compounds when compared to the other proficiency levels: up to the previous level, the compound nouns were usually referring to concrete objects, people, places or situations (e.g. *sunglasses, sleeping bag, postman, firefighter, motorway, petrol station*). Here, the concepts conveyed by the compounds in *Exercises 24* and *25* are sometimes a bit more abstract. This might be why it was thought necessary to provide definitions as well as sentences. The exercise from the workbook on phrasal nouns is a crossword. The students match words from A with B and use them to complete the crossword.

²¹ Some authors (e.g. Lieber 2005) however discuss prepositions as prefixes when they precede the base words (e.g. *underwear, offspring*), which would fall under the domain of derivation rather than compounding.

Exercise 24: Compounding – Advanced SB (Id SBA-3)

1 Complete the sentences with a compound noun formed from *up* at the end of the words in the box below.

back slip shake hold

1 *something used for support if the main one fails*
At the end of a day's writing, I make a copy of my work as a _____.

2 *a careless mistake that spoils a plan*
There was an administrative _____, and the emails weren't sent in time.

3 *a situation in which a lot of changes are made*
There's been a big _____ at work. They've fired six managers and restructured the whole company.

4 *a delay*
Sorry for the _____ – we're having a few technical hitches with our software today.

Exercise 25: Compounding – Advanced SB (Id SBA-4)

2 Complete the sentences with a compound noun using the word in **bold** as the **first** word. Use the definitions to help.

out

1 *the final result of an election, or negotiations*
We are all waiting for the _____ of the meeting.

2 *a set of clothes worn together*
She bought a new _____ for the wedding.

3 *what is expected to happen in the future*
The _____ for tomorrow's weather is bleak.

4 *a shop or company through which products are sold*
Starbucks has retail _____ in all the major cities throughout the world.

take

5 *a meal you buy in a restaurant to eat at home*
Shall we eat out or get a _____?

6 *getting control of a company by buying most of its shares*
Business sections of newspapers are full of company mergers and _____.

down

7 *information obtained from the Internet*
For free _____, click here.

8 *failure or ruin following success*
She had a great career, but alcohol was her _____.

9 *a lot of rain that falls fast and heavily*
I got soaked in yesterday's _____.

The fourth and last exercise on compounding comes in a section dealing with ways of adding emphasis. One of this ways is to use compounds such as *whoever, whichever, however, wherever, whatever*, etc. Some of these can be used as more than one part of speech (i.e. adverbs, pronouns, conjunctions, as well as adjectives but there are no case in the exercise), which explains the one case of compound conjunction (i.e. *wherever you go...*). The exercise itself is similar to others: the students complete the sentences with the correct compound.

Compounding – Interim conclusion

Together, the five proficiency levels manage to cover different aspects of compounding (i.e. spelling, pronunciation, types of compounds) but there is, however, room for improvement. For example, the quantitative and qualitative analyses both showed that compound nouns are significantly more represented across the series than the other types of compounds, i.e. adjectives, adverbs, pronouns and verbs (the latter are not included at all). Nominal compounds are indeed more frequent in English (Bauer 1983:201),

so it seems logical that they should be highlighted throughout the series; the other types deserve nonetheless a bit more attention I believe. The exercises also missed to show the different possible combinations (e.g. *verb + noun*, *verb + verb*, *adjective + noun*, *adjective + adjective*) within each type of compounds. The possible combinations for each type can be found in Bauer (1983). Grammar references summarizing those combinations (or at least the most frequent ones) could be a useful addition to the student's book (with more or less compound types and combinations depending on the proficiency level). Otherwise, the exercises are rather varied and the evolution between levels seems coherent (i.e. from less to more abstract compounds, recycling of the material).

5. Derivation

5.1 Quantitative Analysis

The data on derivation consist of 39 exercises (18 from the workbooks and 21 from the student's books). Figure 9 shows how they are distributed across the five proficiency levels. The three intermediate levels display the highest number of exercises, with 12 exercises at the intermediate level, 9 at the pre-intermediate level, and 7 at the upper-intermediate level. The elementary level contains 6 exercises, and the advanced level is comprised of 5. Except for the upper-intermediate level, the exercises are usually evenly distributed between the workbooks and student's books. The data for the qualitative analysis is completed with an additional 9 “bonus” exercises (encoded with an asterisk in the database).²²

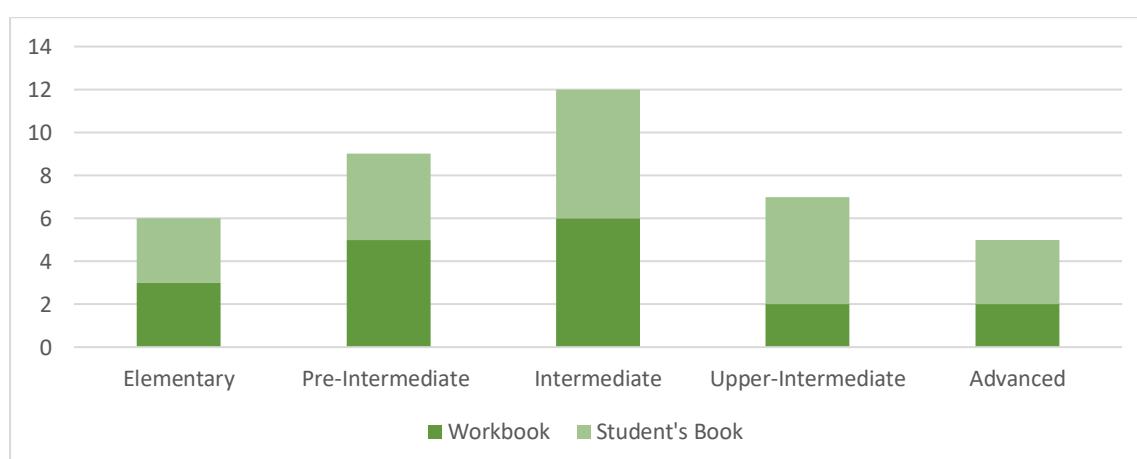


Figure 9: Derivation - Distribution of the exercises (between WB and SB) across the five proficiency levels

Figure 10 shows that each proficiency level mostly focuses on affixation (i.e. 5/6 exercises for the elementary level, 6/9 for the pre-intermediate level, 10/12 for the intermediate level, 3/5 for the advanced level, and all the exercises for the upper-intermediate level). This means that the exercises usually focus on what is being added to a word (i.e. usually one or several

²² As a reminder, those exercises were not included in the quantitative analysis because their relation to word-formation was considered to be indirect/implicit. They usually occurred right before or after the “regular” exercises, as introduction or extra material. For example, at the elementary level, the theory on *-ed/-ing* adjectives comes right after an exercise in which the students need to match feelings (i.e. *-ed* adjectives) to pictures. The *-ed* element is already there, but there is no focus yet on the form of those adjectives.

affixes). However, in other exercises (8 of them), the students also need to be able to recognise the parts that make up the derivative so they can remove the affix; either to go back to a root (e.g. *musician* → *music*) or to replace it with another affix (i.e. affix substitution) (e.g. *musician* → *musical*). In their study, Collins & Nation (2015) mentioned the fact that learners seem to have more difficulties moving from derivative to derivative than from root to derivative. Such exercises are therefore useful but most likely challenging for the students. Moreover, the exercises sometimes also include cases of stem allomorphy (e.g. *destruction* vs. *destroy*, *explanation* vs. *explain*, *application* vs. *apply*) and cases of suppletion (e.g. *good*_{Adj} vs. *well*_{Adv}).

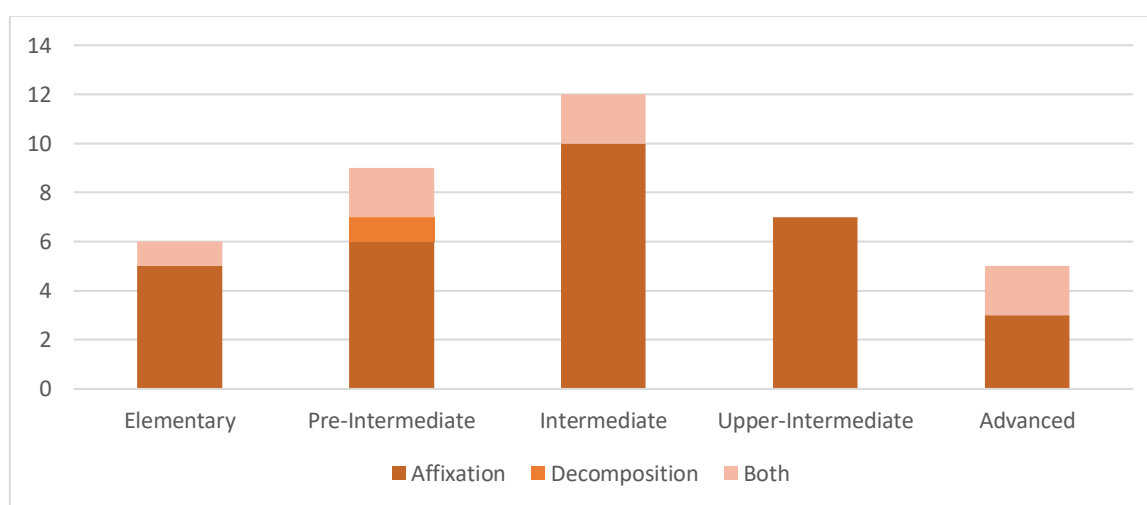


Figure 10: Derivation - Distribution between affixation and decomposition across each proficiency level

Figures 11 and 12 show that exercises on suffixation make up the majority of the data (both in general and at each proficiency level). A total of 7 exercises also include or focus on prefixation. Decomposition occurs in 8 exercises. While suffixation is dealt with at each of the five proficiency levels, prefixation and decomposition only occur in four of them. The former does not occur at the elementary level, and the latter is not found at the upper-intermediate level.

While 24 exercises deal with suffixation exclusively, for prefixation and decomposition it is only the case in 5 and 1 exercises respectively (see Figure 12).²³ The 5 exercises dealing

²³ The findings in Van Lint (2016) also showed that suffixation was predominant in the exercises of the *IO* and *NIO* textbooks.

exclusively with prefixation occur at the three intermediate levels, which is not too surprising since they display the highest numbers of exercises on derivation. Suffixation is dealt together with prefixation in 2 exercises, and with decomposition in 7 exercises.

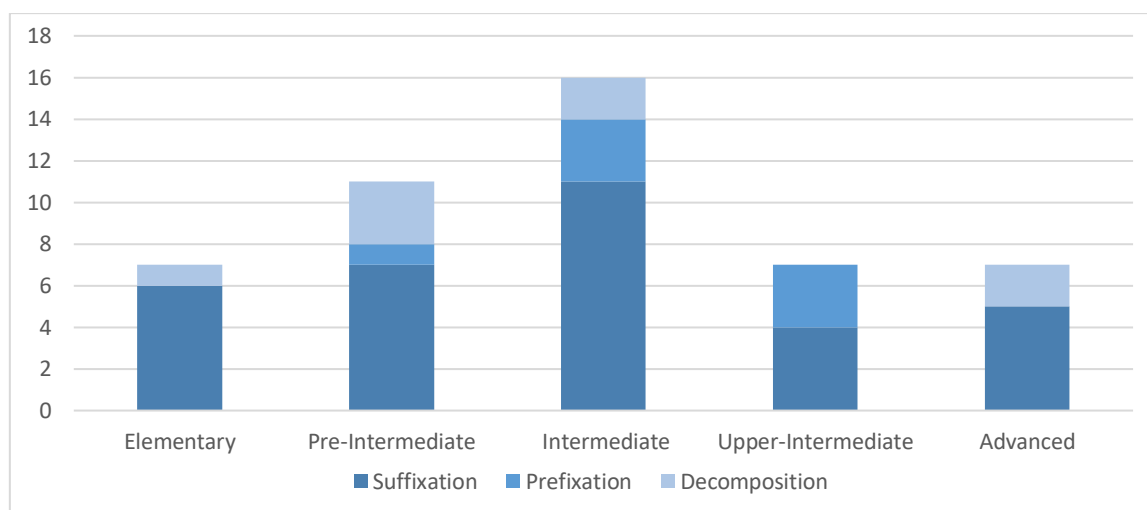


Figure 11: Derivation - number of exercises dealing with suffixation, prefixation and decomposition at each proficiency level

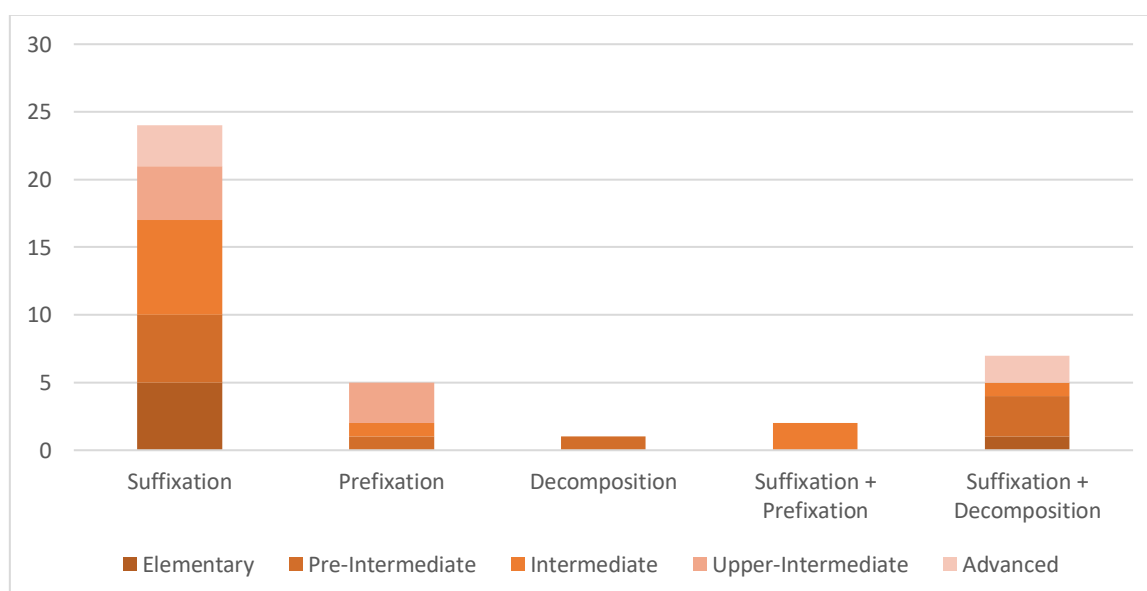


Figure 12: Derivation - Suffixation, prefixation and decomposition - Distribution between each combination

When it comes to the origin of the affixes, Table 9 shows that the exercises either cover affixes of Germanic origin exclusively, or together with affixes of Romance origin; there are no

exercises covering Romance affixes only.²⁴ The one “N/A” (i.e. non-applicable) in Table 9 refers to the exercise on decomposition, in which the students strip adjectives from their affixes.²⁵ The affixes are listed per level and origin in Table 10 on the next page. It also includes the number of exercises in which each affix occurs. It is important to note that this list only comprises (i) affixes explicitly mentioned in the textbooks and (ii) affixes that the students need to add to words; not those they need to take away from them. For example, in an exercise in which the students would be given the word *ambitious* to find the noun *ambition*, only the suffix *-ion* would be taken into consideration for the list.

Table 9: Derivation – Origin of the affixes

Proficiency level	Origin of the Affixes?				Total
	Romance	Germanic	Both	N/A	
Elementary	0	5	1	0	6
Pre-Intermediate	0	4	4	1	9
Intermediate	0	6	6	0	12
Upper-Intermediate	0	4	3	0	7
Advanced	0	3	2	0	5
Total	0	22	16	1	39

It is not always clear whether some affixes should be considered as variations of one another or as separate affixes. I usually tried to follow instructions from Bauer & Nation (1993) when possible, except for the affixes *in-*, *im-*, *il-*, and *ir-*, which are usually considered as allomorphs of the suffix *in-*. I chose to list them here separately because they are listed as such in the textbooks. Also, some clusters sometimes presented as suffixes in the textbooks are actually the missing part of the word (e.g. *activities* as *act* + *-ivities*, or *decision* as *deci(de)* + *-sion*). In those cases, I tried my best to extract the actual suffixes when possible and will discuss the problematic cases in the qualitative analysis. Finally, some affixes from Bauer & Nation’s list can occur at different levels (e.g. *-able* and *dis-*) depending on their meaning, the type of

²⁴ Though all the exercises comprise Germanic affixes, Table 10 shows that a majority of the affixes are actually of Romance origin. Sometimes the exercises only comprise 1 Germanic affix and several Romance affixes. The results in Table x can therefore be a bit misleading.

²⁵ To be exact, the exercise deals with nationalities and names of countries. The students are given the nationalities (adjectives) and need to find the countries (nouns) from which they are derived. I chose to consider the latter as roots/indivisible entities, hence the lack of affixes for this exercise.

derivative they form, the type of base they attach to, etc. The difference between them is not always clear, so when in doubt, I put a question mark next to the affix.

Table 10: List of Affixes

Affix levels	Affixes	Proficiency Levels					Number of exercises
		E	P-I	I	U-P	A	
LEVEL 2 (2)							
Germanic	-ed	4	1	4	3	1	13
	-ing	4	2	4	3	1	14
LEVEL 3 (8)							
Germanic	un-		1	3	3		7
	-er		2	2		1	5
	-ish	1				1	2
	-less		1	2			3
	-ly	1	1	3	1	2	8
	-ness		1	3			4
	-y		1				1
Romance	-able			2			2
LEVEL 4 (13)							
Germanic	-ful		1	2			3
Romance	il-			1	1		2
	in-		1	2	3		6
	im-		1	2	3		6
	ir-			1	1		2
	-al (+ -ical)		2	2			4
	-ation		(?)	1			1
	-ess			1			1
	-ist		2	1			3
	-ity		2	3			5
	-ize			1		1	2
	-ment		1	4			5
	-ous		2				2
LEVEL 5 (11)							
Germanic	un-				1		1
	mis-			1	1		2
	-dom			1			1
	-en			1		1	2

	-ly	1				1
Romance	-al			1		1
	-an	1	1			2
	-ant		1			1
	-ence/-ance		1			1
	-ese	1				1
	-ian	1	2	2	1	6
LEVEL 6 (9)						
Germanic	-th			1		1
Romance	pre-			1		1
	re-			2		1
	-able (?)		1			1
	-ic		1		1	2
	-ion/-ition/...		1	3	1	4
	-(i)fy			1	1	2
	-ive			3		3
	-ist (?)		2			2
LEVEL 7 (2)						
Romance	ab-			1		1
	dis- (?)		2	3		5
Others (5)						
Romance	extra-			1		1
	-arian			1		1
	-ate				1	1
	-or		1			1
	-tion?		1			1
Total number of different affixes per proficiency level						
(50)	7	27	33	12	13	/

Table 10 comprises 50 different affixes (12 prefixes and 38 suffixes). The six levels from Bauer & Nation (from Level 2 to 7) are represented. The pre-intermediate and intermediate levels display the highest number of different affixes, with 27 and 33 affixes respectively. This, again, seems to follow Nation's (2000) advice to start focusing on L2 affixes from the lower intermediate level on. As already shown in Figure 9, the first two intermediate levels deal with derivation in more exercises than the other proficiency levels. This might explain why they cover about twice as many affixes as in the upper-intermediate and advanced levels. It also

seems logical that the elementary level would cover the smallest number of affixes (i.e. 7 suffixes).

There are only two affixes at the second and seventh level each, namely *-ed* and *-ing* for the former, and *ab-* and *dis-* for the latter. According to Bauer & Nation (1993:262), the suffix *dis-* could also be put at Level 5 or Level 6, but as the exact conditions are not given in the article, I chose to consider it as one of the “very frequent English prefixes” (ibidem) from Level 7 and it is therefore listed as such in Table 10. The number of affixes is quite balanced between Levels 3 to 6, with 8 affixes at Level 3, 13 affixes at Level 4, 11 affixes at Level 5 and 9 affixes at Level 6.

The only three affixes dealt with at each proficiency level are the suffixes *-ed* and *-ing* from Level 2, as well as the suffix *-ly* from Level 3. When looking per affix level, the affixes from Levels 3 and 5 are distributed between the five proficiency levels. Meanwhile, the affixes from Level 4 are only covered by the three intermediate levels, and those from Level 6 are only dealt with at the pre-intermediate, intermediate and advanced levels. The two prefixes from Level 7 (i.e. *ab-*, *dis-*) are found at the intermediate and upper-intermediate levels. Finally, the five remaining affixes (i.e. *extra-*, *-arian*, *-ate*, *-or* and *-tion*) each occur in only one exercise; they are distributed between the pre-intermediate, intermediate and advanced levels.

Another observation is that the affixes from the lower levels (up to Level 4) are usually more often recycled across exercises and proficiency levels than the affixes from the higher levels. There are however some exceptions like the affixes *-ian* (Level 5), *-ion*, *-ive* (Level 6), and *dis-* (Level 7) which also occur in more than two exercises.

Even though affixes of Romance origin do not have their own exercises, there are still many of them (about 33 affixes) listed in Table 10, and from Level 4 on, they are even usually dominant.

With 50 affixes, the *NH* textbooks cover about half of the affixes listed in Bauer & Nation (1993). The affixes which are not represented in the textbooks are listed in Table 11.

Table 11: Affixes from Bauer & Nation (1993) which are not represented in the *NH* textbooks.

Affix levels	Affixes	Total
Level 3	-th, non-	2
Level 4	-ism	1
Level 5	-age, -ary, -atory, -eer, -en, -ent, -ery, -esque, -ette, -hood, -i, -ite, -let, -ling, -most, -ory, -ship, -ward, -ways, -wise, ante-, anti-, arch-, bi-, circum-, counter-, en-, ex-, fore-, hyper-, inter-, mid-, neo-, post-, pro-, semi-, sub-	37
Level 6	-ee, -y	2
Level 7	Ad-, com-, de-, ex-, sub-, (+classical roots and combining forms)	5
Total		47

Except for Levels 5 and 7, the other levels are rather well represented, as only one or two affixes are listed in Table 11. Most of the affixes missing from the textbooks belong to Level 5. In the article, it is the level with the longest list of affixes, but since those affixes are infrequent (though fairly regular in spelling/pronunciation), it seems logical that the exercises from the textbooks should focus on only a couple of them (i.e. 11 affixes, see Table 10).

Figure 13 shows the different parts of speech for the words to find (or derivatives). Adjectives are dealt with in a total of 29 exercises, followed by nouns (17 exercises), verbs (10 exercises), adverbs (8 exercises) and participles (3).²⁶ The fact that adjectives are the most common type of derivative across the series is partly due to the exercises on *-ed* and *-ing* adjectives, which represent almost a third of the data (i.e. 12 exercises out of 39).

²⁶ Most of the exercises dealing with *-ed* and *-ing* participles focus on adjectives (e.g. *an interesting book*). One of them also includes a case of *-ing* participle used as a verbal noun (e.g. *I do the cooking*). However, 3 of those exercises also include cases for which the line between inflection and derivation is not always clear. For example, in “*Breaking promises leads to lack of trust*”, *breaking* is a gerund, and gerunds usually act as nouns (together with its object, *breaking promises* acts as the subject of the sentence), but can it really be considered as derivation? I chose to use the term “participle” to convey this ambiguity (see *Examples 26 and xx*)

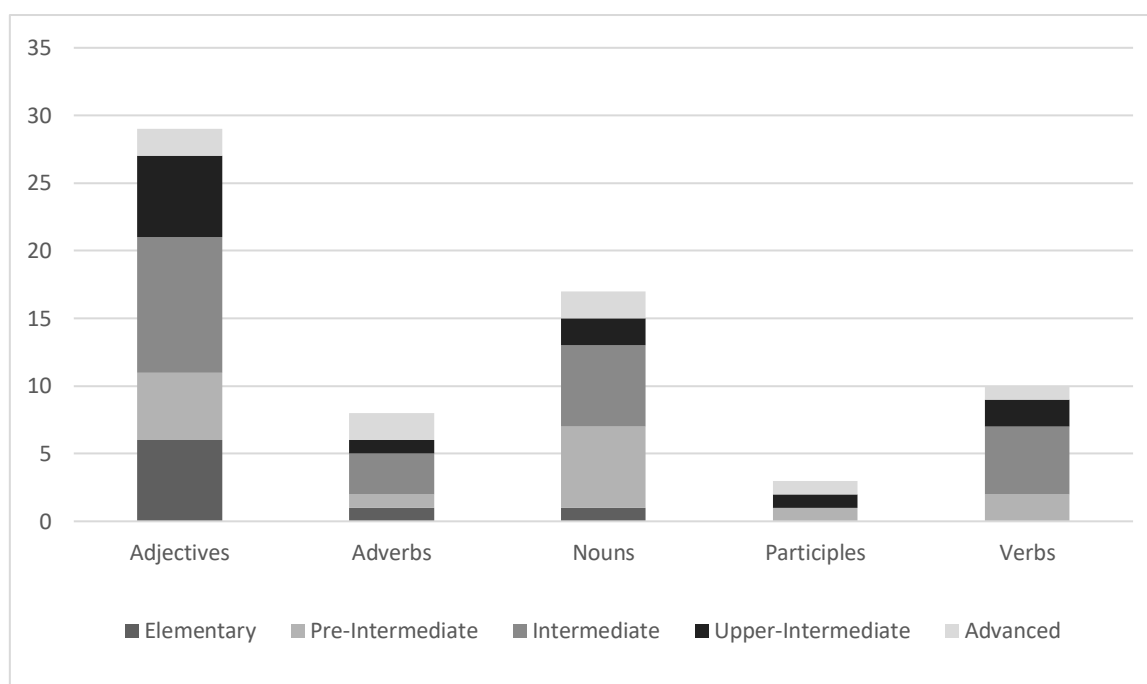


Figure 13: Derivation - number of exercises with each POS of the derivatives to find

When it comes to the number of different parts of speech per exercise, Figures 14 and 15 show that the tendencies are similar for the words to find (usually the derivatives) and the words provided (usually the bases). In both cases, the exercises usually focus on one part of speech, maybe two, and occasionally three. It is not shown here, but in 17 of the exercises, both the part of speech of the bases and that of the word to find are consistent throughout the whole exercise (e.g. all the bases are adjectives and all the words to find are nouns).

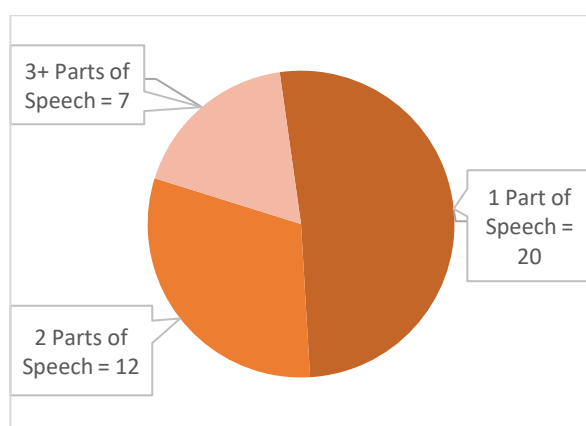


Figure 14: Derivation - number of POS/exercise (Derivative)

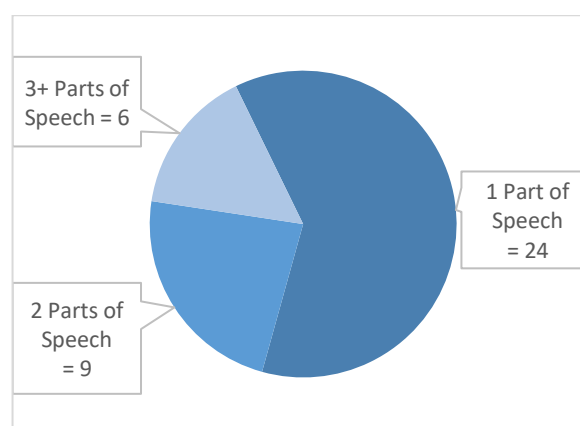


Figure 15: Derivation - number of POS/exercise (Bases)

Table 12 shows that in the vast majority of the exercises (35 out of 39) the bases are given (see *Exercise 26*). The two “N/A” refer to reading exercises in which the students are asked to spot adjectives in *-ed* and *-ing* or *-ly* adverbs (so in a sense, the base is provided within the text). The 2 remaining exercises do not provide the bases, and therefore provide the affixes (as there are no exercises in which neither is provided) (see *Exercise 27*). Those 2 exercises are found at the two highest proficiency levels, which seems logical since students should have acquired a larger vocabulary at this point.

Table 12: Distribution between the exercises in which the bases are given and those in which they are not

Proficiency level	Are the bases given?			Total
	Yes	No	N/A	
Elementary	5	0	1	6
Pre-Intermediate	9	0	0	9
Intermediate	12	0	0	12
Upper-Intermediate	5	1	1	7
Advanced	4	1	0	5
Total	35	2	2	39

Exercise 26: Derivation – Bases given – Affixes not given – Partly contextualized – Advanced WB (Id 4)

6 Verbs to nouns

1 Complete the chart. Use a dictionary if necessary.

VERB	NOUN
1 <u>conquer</u>	conquest
2 destroy	_____
3 _____	threat
4 attack	_____
5 _____	assassination
6 revolt	_____
7 _____	wound
8 survive	_____
9 _____	invasion
10 demolish	_____
11 _____	pacifist
12 complain	_____
13 _____	terrorist
14 lose	_____
15 _____	injury

Complete the sentences with a **verb** (in the right form) or a **noun** from the chart.

- The Roman _____ of Britain was about 43 AD under Emperor Claudius. However, prior to this Julius Caesar _____ already _____ the country twice in 55 BC and 54 BC.
- The French _____ started in Paris in July 1789 when an angry mob _____ the Bastille.
- My great-grandfather _____ badly _____ in WWII. He finally died of his _____ in 1945.
- My great-grandma never got over the _____ of her husband, but she brought up her family alone without any _____.

Exercise 27: Derivation – Bases not given – Affixes given – Contextualized – Upper-Intermediate SB (Id SBUI-11)

- 6 Complete each pair of sentences with the correct form of the same verb, once as a present participle (-ing) and once as a past participle.
- I hurt my leg _____ football.
Bridge is a card game _____ by four people.
 - It says _____ in Korea on my camera.
I have a job in a café _____ sandwiches.
 - I've spent the whole morning _____ an essay.
On the wall was some graffiti _____ in big letters.
 - Goods _____ in the sales cannot be refunded.
I've spent all my money _____ Christmas presents.
 - The police caught the burglar _____ into a house.
Careful! There's a lot of _____ glass on the floor.

Table 13, on the other hand, shows that the affixes are not as frequently provided as the bases (with only 27 exercises against 12), especially at the pre-intermediate, upper-intermediate and advanced levels, in which almost half of the exercises do not provide the affixes.

Table 13: Distribution between the exercises in which the affixes are given and those in which they are not

Proficiency level	Are the affixes given?		Total
	Yes	No	
Elementary	5	1	6
Pre-Intermediate	5	4	9
Intermediate	10	2	12
Upper-Intermediate	4	3	7
Advanced	3	2	5
Total	27	12	39

As is shown in Table 14, 24 exercises provide both bases and affixes (against 15 exercises which provide either the bases or the affixes, but not both). Among those 24 exercises, 8 are multiple choices. *Exercises 26 and 27* illustrate cases in which only the bases or only the affixes are given, respectively. *Exercise 28* illustrates the last case (i.e. both parts are given).

Table 14: Derivation – Number of parts provided in each exercise

Proficiency level	How many parts are given?		
	Both	Only 1	Total
Elementary	4	2	6
Pre-Intermediate	5	4	9
Intermediate	10	2	12
Upper-Intermediate	3	4	7
Advanced	2	3	5
Total	24	15	39

Exercise 28: Derivation – Both parts given – Not contextualized – Pre-Intermediate SB (Id SBPI-5)

3 Suffixes show the part of speech. Look at the suffixes in the box and complete the chart.

nouns	-tion -sion -ment -ness -ence/-ance -ility
adjectives	-y -ly -ous -ful -less -al

Noun	Verb	Noun	Adjective
_____	com'pete	fame	_____
_____	ex'plain	_____	'different
be'aviour	_____	'critic	_____
_____	in'vite	_____	am'bitious
'visitor	_____	suc'cess	_____
'student	_____	help	_____
_____	de'cide	_____	kind

The last criterion to discuss here is contextualization. As shown in Table 15, over half of the exercises (22 out of 39) are contextualized. The remaining 16 exercises are either partly contextualized (i.e. with additional information/context, like sentences or picture, being provided in a later phase of the exercise) or not contextualized, with 5 and 12 exercises respectively. *Exercise 28* above is a good example of non-contextualized exercise. *Exercise 27* is a good example of contextualized exercise and *Exercise 26* illustrates the third possibility (i.e. partly contextualized).

Table 15: Derivation – Contextualization – Distribution across the five proficiency levels

Levels	Contextualized or not?			Total
	contextualized	Partly contextualized	Not contextualized	
Elementary	5	0	1	6
Pre-Intermediate	3	1	5	9
Intermediate	8	2	2	12
Upper-Intermediate	3	1	3	7
Advanced	3	1	1	5
Total	22	5	12	39

Derivation (quantitative analysis) – Interim conclusion:

The quantitative analysis already gives some insight on what might be expected in the qualitative analysis, namely the fact that most of the exercises (i) focus on suffixation, (ii) provide the bases, (iii) are contextualized, (iv) the fact that the most represented parts of speech are adjectives (because of exercises on *-ed* and *-ing* forms), and (v) the fact that the affixes from Levels 2 to 4 are more often recycled, either within or between proficiency levels. Table 10 showed that the textbooks do not seem follow Bauer & Nation's (1993) suggested order to introduce affixes. Also, Table 11 showed that most of the missing affixes from Bauer & Nation (1993) were from Level 5 (and 7), which seems understandable as they are regular but infrequent affixes.

Though it was originally expected that the amount of material on word-formation would increase with each level (as in Van Lint 2016), the data suggest that it is not the case. The two lower intermediate levels display indeed more exercises and affixes than the other levels.

The qualitative analysis provides more information on how derivation is approached in the textbooks.

5.2 Qualitative Analysis

As for compounding, this section will be organised by proficiency level. It is important to mention that only a sample of the exercises will be illustrated here, as well as the fact that the exercises illustrated are not always shown in their totality.

a. Elementary level

At this proficiency level, derivation is covered in 6 exercises (3 in the workbook and student's book each), distributed between three units, namely Unit 5, Unit 6 and Unit 7. All the exercises deal with suffixation and only cover 7 different suffixes (see Table 16).²⁷ At this proficiency level, only the suffixes from Level 2 occur in more than one exercise.

Table 16: Derivation – Elementary level – Suffixes

Level	Affixes		Total
	Romance	Germanic	
Level 2		-ed, -ing	2
Level 3	-ish	-ly	2
Level 5	-an, -ian, -ese,		3
Total	4	3	7

It is surprising that more affixes from Level 3 are not included at this level. They are discussed in Bauer & Nation (1993:258) as the most frequent and regular derivational affixes in English. They are therefore the perfect candidates to first introduce the students to derivation.

The 4 Romance affixes are dealt with in the exercise from Unit 5 in the workbook (see *Exercise 18*). This exercise focuses on the names of countries (i.e. nouns) and their nationalities (i.e. adjectives). The pre-intermediate and advanced levels also have exercises on this topic. Unfortunately, the student's and teacher's books from this proficiency level do not provide

²⁷ Four of these suffixes (i.e. -an, -ian, -ish and -ly) are similar to those found at the elementary level in the *IO* and *NIO* workbooks in Van Lint (2016).

further material on it. *Exercise 29* is the very first exercise on derivation and the students are already expected to be able to move from both noun to adjective and adjective to noun, without being provided with the affixes. This might be due to the fact that nationalities and origins are a popular subject when first learning a language (it was also the case in the *IO* textbooks [Van Lint, 2016]) and chances are the students will already have encountered both forms when reaching this exercise (this might however mean that the students have learned those words as wholes instead of complex words that they can decompose).

Exercise 29: Derivation – Elementary Unit 5 WB (Id 2)

II Vocabulary
Complete the chart.

Country	Nationality
Spain	<u>Spanish</u>
<u>China</u>	Chinese
Italy	_____
Russia	_____
_____	French
Japan	_____
_____	German
America	_____
Mexico	_____
_____	Swedish

The 4 exercises from Unit 6 come from both the workbook and the student's book. They deal with adjectives in *-ed* and *-ing*. One of the exercise consists in completing conversations with the correct adjectives, two of the exercises are a multiple choice (see *Exercise 30*), and the last one is a reading exercise (i.e. the students try to spot *-ed* and *-ing* adjectives in a text). Those exercises are preceded by another exercise already focusing, though implicitly, on *-ed* adjectives. They are also preceded by examples given in a box and a sentence informing the students of the existence of *-ed* and *-ing* adjectives. The teacher's book provides additional information on their meaning (i.e. the fact that "[*-ed* adjectives] often describe a person's feeling or reactions, and that [*-ing* adjectives] often describe the person or thing that provokes those feelings or reactions", cf. TB, p.71).

Exercise 30: Derivation – Elementary level SB (Id SBE-5)

3 Complete each sentence with the correct adjective.

1 excited exciting

Life in New York is very _____.

It's my birthday tomorrow. I'm really _____.

2 tired tiring

The marathon runners were very _____.

That game of tennis was very _____.

3 annoyed annoying

The child's behaviour was really _____.

The teacher was _____ because nobody did the homework.

Finally, the exercise from Unit 7 (together with some additional exercises) deals with adjectives and adverbs (see *Exercise 31*). *Exercise 31* is a multiple choice (adjective vs. adverb) and is linked to what the *NH* textbooks call a “grammar spot” on adverbs, itself linked to a “grammar reference” at the end of the student’s book (reproduced here as *Grammar Spot 1* and *Grammar Reference 1*). The additional exercises are there (i) to introduce the students to adverbs and see if they notice any patterns by themselves, (ii) to get the students to see how to use those adverbs and (iii) to focus on irregular adverbs (i.e. adverbs that do not add *-ly* to the adjectives, cf. TB, p.80) like *fast*, *hard*, *late*, or *well*.

Exercise 31: Derivation – Elementary level WB (Id 4)

1 Complete the sentences using the adjective once and the adverb once.

careful carefully

1 Be careful ! This cup is very hot.

2 Please listen carefully to what I'm saying.

beautiful beautifully

3 She has a lovely voice. She sings _____.

4 Your dress is really _____ ! I love it!

bad badly

5 We lost the match because we played really _____.

6 'I didn't get the job.'

'_____ luck. Maybe next time.'

real really

7 Can I open the window? It's _____ hot in here.

8 Mm! Spaghetti! This is _____ Italian food!

Grammar Spot 1: Derivation – Adverbs – Elementary level SB, p.60

GRAMMAR SPOT

1 Regular adverbs end in *-ly*.

quickly	slowly	carefully
quietly	badly	really

2 There are some common irregular adverbs.

drive fast	work hard
feel well	get up early/late

▶▶ Grammar Reference 7.3 p139

Grammar Reference 1: Derivation – Adverbs – Elementary level SB, p.139

7.3 Adverbs

Adjectives describe nouns.
a **big** dog a **careful** driver

Adverbs describe verbs.
She ran **quickly**. He drives too **fast**.

To form regular adverbs, add *-ly* to the adjective. Words ending in *-y* change to *-ily*.

Adjective	Adverb
quick	quickly
slow	slowly
bad	badly
careful	carefully
real	really
immediate	immediately
easy	easily

Some adverbs are irregular.

Adjective	Adverb
good	well
hard	hard
early	early
fast	fast

Elementary – Interim conclusion

To summarize, the fact that the elementary level only contains a small number of exercises on word-formation (i.e. 6) seems logical, as the students are still at the beginning of their learning process and still need to get acquainted with other aspects of the language (e.g. inflection, grammar, building their basic vocabulary). It also seems logical that only a small number of affixes (i.e. 7) are covered at this level. The students are introduced to derivation through suffixation, though the term “suffix” is never mentioned.

The choice of suffixes from Levels 2 and 3 seems reasonable (i.e. the students already know the suffixes *-ed* and *-ing* through inflection; the suffix *-ly* is a very frequent suffix and a good indicator that a word might be an adverb and the exercises also show how they attach to adjectival bases; the suffix *-ish* is very frequent and the students will most likely encounter it again in conversations, texts, etc.). The suffixes from Level 5 are only covered in the exercise on nationalities (see *Exercise 29*). Though it has the features of an exercise on derivation, it is probably not meant to channel the students’ morphological knowledge (i.e. at this stage, they have probably learned each form as wholes rather than complex words). This would mean that the elementary level only focuses on suffixes from the lower levels in Bauer & Nation (1993), as expected.

Finally, the theory on adverbs found in the grammar spot and grammar reference is a nice addition as it provides the students with useful (succinct) information.

b. Pre-intermediate level

Except for Unit 7, derivation is not covered in the same units in the workbook and the student's book. The 5 exercises from the workbook come from Unit 2,5,6 and 7, and the 4 exercises from the student's book come from Unit 1, 3 and 7. The 27 affixes found at this proficiency level are listed in Table 17. There are almost four times as many affixes as there were at the elementary level. The affixes of Germanic origin mostly come from the lower levels in Bauer & Nation (1993), while those of Romance origin mostly come from the higher levels. Most of the affixes (19 out of 27) occur in only one exercise.

Table 17: Derivation – Pre-intermediate level – Affixes

Level	Affixes		Total
	Romance	Germanic	
Level 2		-ed, -ing	2
Level 3		un-, -er, -less, -ly, -ness, -y	6
Level 4	in-, im-, -al, -ist, -ity, -ment, -ous	-ful	8
Level 5	-an, -ant, -ence/ance, -ian	-ly	5
Level 6	-able, -ic, -ion, -ist		4
Other	-or, -tion?		2
Total	17	10	27

Three of the exercises recycle material from the previous proficiency level, namely one exercise on *-ed* and *-ing* adjectives, one exercise on adverbs (as well as additional exercises which focus on the form of adverbs, i.e. with or without *-ly*) (see *Exercise 32* and *Additional Exercise 1*), and one exercise on countries (see *Exercise 33*).

Exercise 32: Derivation – Pre-Intermediate SB (Id SBPI-2)

4 What is the adverb from these adjectives? Complete the lines with the adverbs.

clear	quiet	slow	honest	perfect
complete	good	bad	easy	

1 play a game **well** and win 6 get out of bed ...
 2 play a game ... and lose 7 play the piano ...
 3 explain the rules ... 8 pass an exam ...
 4 shut the door ... 9 answer the questions ...
 5 forget something ...



Additional Exercise 1: Derivation – Pre-Intermediate SB (Id SBPI-2*)

2 Many regular adverbs end in *-ly*. Match a verb in A with an adverb in B.

A	B
1 drive	fluently
2 love	carefully
3 speak	patiently
4 rain	bravely
5 wait	heavily
6 fight	passionately

T 3.11 Listen and check. Try to remember the sentences.

3 What do you notice about the adjectives and adverbs in these sentences?

Is this a **fast** train to London? I work **hard** and play **hard**.
 Slow down! You drive too **fast**! She's a very **hard** worker.

I got up **late** this morning.
 We had a **late** breakfast.



Exercise 33 is the only exercise from the data considered to be dealing with decomposition only. The exercise takes the form of a crossword; the students are given nationalities (i.e. adjectives) and need to find the names of the countries (i.e. nouns) to fill in the crossword. I chose to consider the names of the countries as inseparable entities, and therefore as roots.

Exercise 33: Derivation – Pre-Intermediate WB (Id 4)

16 Crossword – countries

Complete the crossword with the countries that go with the nationalities in the clues.

Across	Down
3 Danish (7)	1 Lebanese (7)
4 Iranian (4)	2 Welsh (5)
6 Argentinian (9)	5 Norwegian (6)
9 Egyptian (5)	7 Polish (6)
14 Irish (7)	8 Slovak (8)
15 Greek (6)	10 Turkish (6)
16 Iraqi (4)	11 Chilean (5)
17 Dutch (7)	12 Belgian (7)
18 Moroccan (7)	13 Israeli (6)

The exercise from Unit 2 focuses on gerunds and *-ing* forms (see *Exercise 34*). One of the exercises on compounding (see *Exercise 17*) occurred in the same section. It was not necessarily clear whether *Exercise 34* should be included in the database or not (see Footnote 26). In the end, I chose to include it because of line 4, i.e. *I do the cooking in our family*, in which *cooking* is used as a noun.

Exercise 34: Derivation – Pre-Intermediate WB (Id 0)

1 Complete the sentences with the *-ing* form of a verb in the box.

cook
shop
have
go

1 Having a lot of money doesn't make you happy.

2 I like _____ out with my friends at the weekend.

3 _____ online is easier than driving to the supermarket.

4 I do the _____ in our family – even bread and cakes.

The exercise from Unit 6 is the first to focus on prefixes. It focuses on antonyms, thus introducing the prefixes *un-*, *im-* and *in-* (see *Exercise 35*). The student's and teacher's books discuss synonyms and antonyms but do not mention those prefixes.²⁸ In Bauer & Nation (1993), *im-* is presented as a variation of the prefix *in-*. Because of a lack of instruction on their distribution (i.e. when to use which), I considered that the textbooks treated them as two different suffixes, so I listed them as such in Table 10 (p.73). In Balteiro (2011) those prefixes were problematic to Spanish learners, as they tended to only use the prefix *in-* and never the prefix *un-* (e.g. **innecessary*). In Callies (2015), however, the opposite was true; the suffix *un-* was used as default negative prefix by the participants (e.g. **unmoral* instead of *immoral*). In Lieber (2005), the prefix *in-* is said to attach to Latinate bases and it cannot attach to "native bases" (i.e. Germanic bases), while the suffix *un-* is said to attach to both (e.g. *untenable*, *unhappy*). Since those prefixes are recycled at the intermediate and upper-intermediate levels, it would be interesting to add this type of information at some point.

Exercise 35: Derivation – Pre-Intermediate WB (Id 5)

3 Write the antonym of the adjectives using the prefix *un-*, *im-*, or *in-*.

Adjective	Antonym with a prefix
1 tidy	<u>untidy</u>
2 polite	_____
3 expensive	_____
4 happy	_____
5 interesting	_____
6 correct	_____
7 intelligent	_____
8 possible	_____

The remaining 4 exercises come from Unit 7 and deal with "word endings" (i.e. suffixation). This topic is discussed in all three books, and the exercises from the workbook

²⁸ However, the prefix *un-* is briefly mentioned in the teacher's book, Unit 2 p.26, to introduce an exercise on happiness (i.e. *happy vs. unhappy*, *happiness vs. unhappiness*).

and student's book cover similar affixes and words. These exercises are interesting because they are the firsts of the series to focus on a wider range of affixes within one exercise.

All 4 exercises cover noun and adjective forming suffixes. As shown in Table 17 (p.86), the 6 suffixes of Germanic origin (viz. *er*, *-less*, *-ly*, *-ness*, *-y*, *ful*) come from Levels 3 and 4 in Bauer & Nation (1993), while the 14 suffixes of Romance origin (viz. *al*, *-ist*, *-ity*, *-ment*, *-ous*, *-an*, *-ant*, *-ence/ance*, *-ian*, *-able*, *-ic*, *-ion*, *-ist*, *-or*) come from Levels 4 to 6 (except *-or*, and *-tion*, which are not listed in any level). Those four levels respectively correspond to (i) the most frequent and regular affixes, (ii) frequent and regular affixes, (iii) regular but infrequent affixes, and (iv) frequent but irregular affixes (Ibidem). Based on this, it is impossible to know whether the choice to put those affixes at this proficiency level was motivated by their frequency or their (written/spoken) regularity; or neither.

Exercises 36 and 37 cover similar words and both include pronunciation (i.e. word stress), but there are still some differences between the two. First, *Exercise 36* does not provide the suffixes to use, while *Exercise 37* does. Then, *Exercise 36* is partly contextualized (unlike *Exercise 37*). Finally, *Exercise 37* only asks the students to find nouns (persons), while *Exercise 36* also asks for adjectives.

The suffix *-ist*, present in both exercises, is listed in Table 17 in two levels, namely Level 4 and Level 5. This is because the suffix *-ist* from Level 4 does not give rise to stem allomorphy, as in *receptionist* for example, while it is the case with the suffix *-ist* from Level 5, as in *scientist*.

Exercise 36: Derivation – Pre-Intermediate WB (Id 6)

1 Complete the chart. Underline the stressed syllable.

Noun	Person	Adjective
1 <u>h</u> istory	<u>h</u> istorian	<u>h</u> istorical
2 <u>p</u> olitics		
3 <u>a</u> rt		
4 <u>m</u> usic		
5 <u>c</u> hemistry		
6 <u>s</u> cience		
7 <u>e</u> conomics		
8 <u>p</u> hotography		

2 Complete the sentences with a word from exercise 1.

- 1 Van Gogh didn't show any artistic talent until he started painting in his twenties.
- 2 When water turns into steam, there is a _____ reaction.
- 3 Marie Curie was a Polish _____, famous for her work on radioactivity.

Exercise 37: Derivation – Pre-Intermediate SB (Id SBPI-4)

1 What are the endings of the nouns in *italics*?
Karl Marx was a *philosopher*, *historian*, and an *economist*.

2 Use these endings to make jobs from words in the box.

-er -or -ist -ian -ant

'photograph	re'ception	'science	farm	art
'politics	'music	ac'count	'decorate	act
in'terpret	'library	e'lectric	law	

T 7.8 Listen, check, and repeat the jobs. Pay attention to changes in word stress.

The two remaining exercises are also very similar. The exercise from the workbook is illustrated in *Exercise 38*. The exercise from the student's book was already illustrated in *Exercise 28* (p.80). The two main differences are that in *Exercise 28* the affixes are provided and that the students need to move between nouns and verbs, and nouns and adjectives (while they only do the latter in *Exercise 38*). It is interesting to note that in *Exercise 28*, the chosen suffixes are said to show the part of speech. It is indeed a key feature of most suffixes.

Exercise 38: Derivation – Pre-Intermediate WB (Id 7)

3 Complete the chart.

Noun	Adjective
1 <u>fame</u>	famous
2 ambition	_____
3 _____	successful
4 _____	healthy
5 fashion	_____
6 _____	noisy
7 comfort	_____
8 _____	popular

Three of the suffixes presented in *Exercise 28*, namely *-sion*, *-tion* and *-ility*, were problematic to classify. In the case of *-ility*, which is used in the exercise to find *responsibility* based on *responsible*, I considered it was the equivalent of the suffix *-ity* from Bauer & Nation (1993) and put it as such in Table 10 (p.73) and Table 17 (p.86). In the case of *-sion*, used in the exercise to find *decision* based on the verb *to decide*, I considered it was closest to the suffix *-ion* (Level 6) in Bauer & Nation (ibid.).²⁹ Finally, the suffix *-tion*, which occurs in the words *explanation* (based on *explain*) and *competition* (based on *compete*), remains as such in Table 10 and Table 17, though in the case of *explanation*, it could have been considered to be closest to the suffix *-ation* (Level 4). My decision not to consider *-tion* as *-ation* stemmed

²⁹ The case of stem allomorphy caused by the suffix *-ion* in *decision* is similar to some of the examples given in Bauer & Nation (1993 :277), like *describe – description*, *include – inclusion*. Those alternations are suspected to be closer to Latin morphology than English morphology (Ibidem.)

from the case of *competition*, mentioned in Bauer & Nation (1993:274) as best learnt as an exception:

The distribution of *-ition* and *-ion* in words like *definition* and *dilution* is not predictable according to general principles, so that *addition*, ***competition***, *definition*, *exposition*, (and other words whose base ends in *-pose*), and *repetition* (with irregular orthography) are perhaps best learned as exceptions.

This exercise shows that the textbooks are not always very accurate when it comes to the presentation of suffixes. At this point, the students are still at the beginning of their learning process and maybe those forms make the link between the base and the derivative a bit clearer. As the goal is not for the students to become experts on word-formation and affixation, but to get them to notice that words can have several forms, those inaccuracies are probably not of too much importance at this proficiency level.

The suffixes *-tion* and *-sion* are also mentioned in the last additional exercise (see *Additional Exercise 2*). The exercise is meant to show how the addition of a suffix can change word stress.

Additional Exercise 2: Derivation – Pre-Intermediate SB (Id SBPI-6*)

4 T 7.9 Listen and repeat the words. Where is the stress?

Two-syllabled nouns and adjectives

nouns	danger kindness critic artist difference
adjectives	dangerous healthy friendly famous different

Two-syllabled verbs

invite explain discuss employ decide compete
--

Nouns ending in *-tion* and *-sion*

invitation explanation competition ambition decision
--

Pre-Intermediate – Interim conclusion

The evolution from the elementary level to the pre-intermediate level is quite striking, as the number of affixes almost quadruples between the two (i.e. from 7 to 27

affixes). This reflects Nation's (2000) view that focus on affixation should start at the lower intermediate level. The number of exercises is also a bit more consequent (i.e. from 6 to 9 exercises). Most of the exercises continue to deal with suffixation, but prefixation is introduced in one exercise on antonyms. Also, the terms "suffix" and "prefix" are introduced in some of the exercises, though not always. The terms "endings" or "forms" are sometimes used. One of the exercises showed that some of the so-called "suffixes" were indeed closer to "endings" than actual suffixes (see *Exercise 28*). This imprecision was however not deemed important.

Most of the affixes are not recycled across the level (i.e. 19 out of the 27 affixes occur in only one exercise). It was expected that most of them would belong to Levels 3 and 4 from Bauer & Nation (1993). Even though these two levels do indeed display the highest numbers of affixes (see Table 17), the number of affixes from Levels 5 and 6 is too high to confirm the original hypothesis that the lower proficiency levels focus on the lower affix levels from Bauer & Nation (and the higher proficiency levels on the higher affix levels).

Unlike the elementary level, there are no grammar references on the material on word-formation at this level. A grammar reference about the distribution between the negative prefixes *un-* and *in-*, as well as some general information about suffixes would be a nice addition (e.g. a definition of suffixes, some of their key features, a list with the suffixes covered in the exercises and their meaning).

The fact that some of the material from the elementary level is recycled here is positive.

c. Intermediate level

The intermediate level comprises a total of 12 exercises (6 in the workbook and 6 in the student's book) found in Unit 1, 5, 6 and 11. This is probably the most interesting level when it comes to derivation.

Table 18 shows the 33 affixes found in the exercises, with the newly introduced affixes shown in bold. Unlike the two previous proficiency levels, here, affixes from all six levels are

included. Levels 3 and 4 still display the highest numbers of affixes (when compared to the pre-intermediate level), with 6 and 12 different affixes respectively. The difference between the number of affixes of Romance and Germanic origin is noticeable, as there are twice as many affixes of Romance origin (i.e. 22 affixes) as there are of Germanic origin (i.e. 11 affixes), but the distribution between the two stays quite similar to the pre-intermediate level.

Most of the newly introduced affixes belong to Levels 5 to 7 (and the category “Others”). Among those 15 newly introduced affixes, are the first verb forming suffixes (i.e. –(i)fy and -ize) so far, and two allomorphs of the prefix *in-*, namely *il-* and *ir-*.

Table 18: Derivation – Intermediate level – Affixes

Level	Affixes		Total
	Romance	Germanic	
Level 2		<i>-ed, -ing</i>	2
Level 3	<i>-able</i>	<i>un-, -er, -less, -ly, -ness</i>	6
Level 4	<i>il-, in-, im-, ir-, -al, -ation, -ess, -ist, -ity, -ize, -ment</i>	<i>-ful</i>	12
Level 5	<i>mis-, -ian</i>	<i>-dom, -en</i>	4
Level 6	<i>pre-, re-, -(i)fy, -ion, -ive</i>	<i>-th</i>	5
Level 7	<i>dis-</i>		1
Other	<i>extra-, -arian</i>		2
Total	22	11	33

The workbook and student’s book each comprise 1 exercise on derivation in Unit 1, but they do not cover the same affixes. It is interesting to notice that the term “word formation” is used explicitly for the first time (as title for both exercises).

The exercise from the workbook (see *Exercise 39*) is short but interesting for two reasons, namely the fact that for one of the words the students need to add two affixes (i.e. *un-* + *employ* + *-ment*) instead of one, as is usually the case, and the fact that each base is used in more than one sentence, thus showing the students that one base can help form several derivatives. The latter is also the case for the exercise from the student’s book (see *Exercise 40*).

Exercise 39: Derivation – Intermediate WB (Id 1)

12 Word formation

Complete the sentences using the word in CAPITALS in the correct form.

- 1 My brother is a musician. MUSIC
- 2 A trumpet is a _____ instrument. MUSIC
- 3 I drive a very _____ car. ECONOMY
- 4 I spend more than I earn. I must _____. ECONOMY
- 5 _____ give governments advice about finance. ECONOMY
- 6 _____ have a lot of responsibility for their staff. EMPLOY
- 7 The _____ rate in the UK is about 5%. EMPLOY
- 8 I'm self-_____. I don't work for anyone else. EMPLOY

In *Exercise 40*, the students fill in sentences with the correct derivative of *act*. As for *Exercise 39*, the exercise is interesting because the students use the same base throughout the whole exercise. The suffixes are provided in a box, but two of them are problematic in the same way that *-tion* and *-sion* were in *Exercise 28* (p.80). Here, the suffixes presented as *-ress* (*actress*) and *-ivities* (*activities*) are listed in Table 10 (p.73) and Table 18 as the suffixes *-ess* and *-ity*. In those cases, it seems that the word “suffix” is used in a broader sense, as in “the part missing from the word”, written with stem or affix allomorphy and inflection if needed. Again, the link between the base and the derivatives is slightly clearer with the suffixes presented in those forms.

Exercise 40: Derivation – Intermediate SB (Id SBI-1)

Word formation

- 4 Complete the word *act* in the sentences using the suffixes from the box.

-ress -ion -ing -ive -ivities

- 1 My grandfather is 84, but he's still very active.
- 2 My sister's an act_____. She's often on TV.
- 3 Act_____ is not always a well-paid job
- 4 This is not a time to do nothing. It is a time for act_____.
- 5 We do a lot of act_____ in class to learn English.

Note: The teacher's book suggests doing the same exercise with verbs like *present*, *succeed* and *advertise*.

In the student's book, a whole section from Unit 5 is dedicated to word-formation (the term “word building” is used in the title of the section), more specifically to prefixes and suffixes. *Exercise 41* deals exclusively with suffixation and *Exercise 42* with prefixation. Both

exercises first provide information on the type of affix they focus on. The third exercise mixes prefixation and suffixation (see *Exercise 43*).

Exercise 41: Derivation -Intermediate SB (Id SBI-2)

1 Work with a partner. Look at the information on suffixes.

SUFFIXES are used to form different parts of speech.

What endings do you notice on these words?

What part of speech are they?

act action active actively

What part of speech are the words in the box?

What are the different word endings?

prediction	colourful	excitement	suitable
shorten	confidently	creative	business
automatically	imagination	qualify	careless

Exercise 42: Derivation -Intermediate SB (Id SBI-3)

2 Look at the information on prefixes.

PREFIXES are used to change the meaning of words. Look at these words with prefixes.

predict regrow extra-terrestrial disorder

Which means...?

before outside again

Which is a negative prefix?

Choose a prefix from the box to make the words mean the opposite.

un-	in-	im-	il-	dis-	ir-
-----	-----	-----	-----	------	-----

1 possible	impossible	5 appear
2 patient		6 regular
3 lucky		7 formal
4 legal		8 conscious

What is interesting with *Exercise 41* is that the students are asked (though indirectly) to decompose the words and therefore to make the difference between base and suffix. The exercise also has the students elicit the parts of speech that go with the different suffixes (e.g. *-ment*, *-ness* for nouns, *-en*, *-fy* for verbs, *-ly* for adverbs). *Exercise 42* mostly focuses on prefixes that form opposites (e.g. *possible* vs. *impossible*). The pre-intermediate level had already introduced the suffixes *un-*, *in-* and its variation *im-*. Here, the suffix *dis-* is introduced, as well as two other variations of *in-*, namely *il-* and *ir-*. Other prefixes are mentioned in the first part of the exercise (i.e. *pre-*, *re-* and *extra-*) to show how prefixes can change the meaning of words. It is worth noting that the word *predict* was maybe not the best example to illustrate the prefix “pre-”, as its root is bound (i.e. *-dict*). According to Nation (2000:434), bound roots are better studied at a more advanced level and according to Prčić (1999)³⁰, it is important to present transparent (i.e. easily interpretable) examples. Words like *prewar* or *preschool* would therefore have been better examples because they are more transparent (i.e. their word parts are more obvious because the base is a free morpheme). However, due to the many borrowings from Romance languages, both word-base (i.e. the affixes attach to free bases)

³⁰ The article by Prčić (1999) discusses the treatment of affixes in learner dictionaries.

and stem-base (i.e. the affixes attach to bound roots) morphology coexist in English, and the learners are exposed to them from early on. It raises the question of whether such distinction should be discussed in high school textbooks.

Exercise 6 (p.44 but repeated below) confirms that the intermediate level focuses on showing the versatility of derivation: The students are no longer presented with one option to derive words, but with many. An almost identical exercise was discussed in Van Lint (2016:23). Such exercises are probably effective as they illustrate the concepts of prefix, suffix (and implicitly base/root) in a very visual way. With the question “Which group can make the most words?” (also mentioned in the teacher’s book), productivity is also introduced in the exercise. The teacher’s book also includes instructions on spelling (i.e. stem allomorphy).

Exercise 6: Derivation -Intermediate SB (Id SBI-4)

- 3** Work in two groups. Make new words with the base words using the suffixes and/or the prefixes. Which group can make the most words?

PREFIX	BASE WORD	SUFFIX
un- im- re- dis- mis- in-	agree arrange conscious expense happy help kind polite react success understand use	-ness -ment -ion -ful -less -able -ive

- 4** Complete the sentences with a word from exercise 3.

- Bob and Jan don't get on at all. They dis_____ about everything.
- Money doesn't always lead to h_____ness.
- My aunt says today's kids are all rude and im_____.
- Thanks for your advice, it was really h_____ful. I really appreciate your k_____ness.
- My dad is u_____less at fixing his computer. I always have to help him.
- Please don't mis_____ me. I didn't mean to be un_____. I'm really sorry.
- Timmy fell off his bike and hit his head. He was un_____ for a few hours.
- What was your wife's re_____ion when she heard you'd won the lottery?

Unit 5 also includes one additional exercise meant to show how affixes can change the stress in a word (e.g. 'advertise vs. *ad'vertisement*, or *pre'fer* vs. *'preference*).

Most of the exercises from Unit 6 are not as interesting. Some of them recycle material on *-ed* and *-ing* adjectives (though they are now presented in both texts and sentences to fill in). Those exercises are still useful as the students apparently tend to continue to confuse both

forms (according to the teacher's book, though it was not necessarily mentioned in the literature reviewed in Part 1). Other exercises focus on adverbs (distinguishing, as usual, between adverbs in *-ly* and irregular adverbs). One of the exercises is a multiple choice in which the students must choose between the adjective and adverb form of a word (e.g. *wonderful* vs. *wonderfully*). It includes one case of suppletion, namely *good* – *well*. The last exercise from Unit 6 consists in completing sentences with the correct derivatives of the words in bold (see *Exercise 43*).

Exercise 43: Derivation – Intermediate WB (Id 5)

3 Complete the sentences with another form of the word in **bold**. Mark the /ə/ sound in both words.

1 I love his ^{/ə/}**photographs**. He's definitely my favourite ^{/ə/ /ə/ /ə/}**photographer**.

2 Dave studied **politics** at university, but he never wanted to become a _____.

3 **Technology** advances so quickly these days. It's impossible to imagine what _____ changes there will be in the next 20 years.

4 Bill doesn't seem to like **vegetables**. I can't understand why he's a _____.

Note: Here, derivation is only half of the exercise. The other half focuses on finding the schwa sounds in those words.

The exercise from Unit 11 focuses on deriving nouns from adjectives (see *Exercise 44*). The students match the adjectives from the box with the correct noun forming suffixes (given in a chart), and then use the derived nouns in the correct sentences. *Exercise 34* is the only exercise to include the unproductive suffix *-th*, as in *length* and *strength*.

Exercise 44: Derivation – Intermediate WB (Id 7)

- 1 Make nouns from the adjectives in the box using the suffixes to complete the chart.

ill	curious	conscious	free	disappointed
lazy	bored	stupid	strong	exciting
long	wise	moody	generous	

illness	-ness
	-ment
	-dom
	-ity
	-th

- 2 Complete the sentences using the nouns from Exercise 1.

- Jan regained consciousness after 21 years in a coma but it'll be a long time before he has the s to walk again.
- He died peacefully after a long i.
- In a democratic country f of speech is very important.
- Look at the fabulous present Ricardo gave me. I can't believe his g!
- I've measured the height, width and l of the box, and it fits.
- His advice is always so good. I really appreciate the w of his words.
- She can't get over the d of not getting that job in the bank, but I can't get over the s of going for the interview in torn jeans.
- Karen's difficult to live with because of her m. You never know if she's going to be cheerful or bad-tempered.

Finally, *Additional Exercise 3*, right below, clearly deals with word families (i.e. morphologically related words) like *birth* and *born*, *marry*, *married*, and *marriage*, or *dead*, *death*, and *die*)³¹. I did not include it in the quantitative data because it did not really fit the criteria and the chosen approach (i.e. it does not really explicitly focus on specific affixes or on the action of adding affixes/decomposing).

Additional Exercise 3: Derivation – Intermediate WB (Id 2*)

- 1 Complete the sentences with a word from the box.

dying	dead	died	death	die
-------	------	------	-------	-----

- Shakespeare _____ in 1616.
- Julius Caesar was stabbed to _____ by his best friend, Brutus.
- A** Is old Bertie Harrison still alive?
B I'm sure he's _____. Didn't he _____ a few years ago?
- Her father's _____ came as a great shock. He _____ of a heart attack.
- She screamed when she saw the _____ body lying on the floor.
- Our poor old cat is _____. We've had her for fifteen years. She just sleeps all day long.
- Every winter thousands of birds _____ in the cold weather.
- Those flowers have _____. Throw them away.

³¹ The textbook includes all three families but only the latter is illustrated in *Additional Exercise 3*.

Intermediate – Interim conclusion

The intermediate level definitely builds on what had been introduced at the previous levels, which is really positive. The pre-intermediate level had already introduced the terms “suffix” and “prefix”, but here, a whole section from the student’s book (1 page) is explicitly devoted to word-formation and affixation. In general, the exercises are more varied and include different facets of derivation (i.e. spelling, productivity, pronunciation). Unfortunately, there is still no grammar reference to summarize and expand on the theory. According to Nation (2000:443), a good way to practise learning affixes is by making lists with (i) the affixes, (ii) their meaning and (iii) an example. Such lists would be a nice addition. They could be added to the vocabulary list arranged by unit.

Like in the pre-intermediate level, the term “suffix” is sometimes used in a broader sense (i.e. “word ending”) in order to make the link between the base and its derivatives a bit clearer (e.g. *-ivities* instead of *-ity*, or *-ress* instead of *-ess*). Notes on stem and affix allomorphy could maybe be included somewhere (the teacher’s book for example).

In regard to Bauer & Nation’s (1993), affixes from Levels 3 and 4 are still predominant, but now all six levels are represented. The intermediate level manages to introduce 15 new affixes and also manages to recycle about half of the 33 affixes in one or more exercises (which is improvement when compared to the pre-intermediate level).

d. Upper-intermediate level

The upper-intermediate level only comprises 7 exercises and 12 affixes (see Table 19). The difference between this level and the intermediate level is quite surprising. I would have expected this level to have more exercises and affixes, not fewer.³²

Table 19 shows that the majority of the affixes are prefixes (9 of them), and of Romance origin (7 of them). The second affix from Level 7 (i.e. *ab-*) is introduced here. The 3 suffixes of

³² The vocabulary list at the end of the student’s book comprises, however, a lot of complex words, among which many compounds, but also many derivatives, with more affixes than those listed in Table 19 (e.g. *-ism*, *-less*, *-en*, *-ive*, *-ist*, *-ian*, *-ly*, *-ate*, *en-*, *-ish*, *-ness*, *-ic*, *re-*, *-ical*, *-ition*, *-ity*, *-er*, *-or*, *-y*, *-ment*, *-ous*, *-ful*, *-age*, *-ize*, *-ance*, *-able*, *trans-*, *super-*).

Germanic origin are also the three most recycled affixes throughout the series (i.e. *-ed*, *-ing* and *-ly*).

Table 19: Derivation – Upper-intermediate level – Affixes

Level	Affixes		Total
	Romance	Germanic	
Level 2		<i>-ed</i> , <i>-ing</i>	2
Level 3		<i>un-</i> , <i>-ly</i>	2
Level 4	<i>il-</i> , <i>in-</i> , <i>im-</i> , <i>ir-</i>		4
Level 5	<i>un-</i> , <i>mis-</i>		2
Level 7	<i>ab-</i> , <i>dis-</i>		2
Total	8	4	12

The 3 exercises dealing with *-ed* and *-ing* adjectives are quite similar to those found at the previous levels, like completing sentences once with the *-ed* form and once with the *-ing* form, or matching topics with adjectives in their correct form (e.g. an *interesting* job, and not *an *interested* job). A grammar reference on participles is also included at the end of the student's book.

The exercise on adverbs is a reading exercise. The students are given descriptions for adverbs, they read two texts and try to find adverbs that match the descriptions (e.g. *in a way that shows feelings of sadness or anger* → *bitterly*).

The remaining exercises focus on antonyms and deal exclusively with prefixation. The prefixes are the same as in the previous proficiency levels except for the unproductive prefix *ab-* (e.g. *abnormal*), which is introduced here. The exercises are similar to *Exercise 35* (p.88), but the prefixes are not given and the bases can be adjectives (e.g. *untruthful*), nouns (e.g. *dishonest*) or verbs (e.g. *uncover*) (see *Exercise 45*).

Exercise 45: Derivation – Upper-Intermediate WB (Id 2)

1 For the words in **A**, write their opposites in **B**, using prefixes.

A	B	C
Adjectives		
real	<u>unreal</u>	<u>fake</u>
truthful		
credible		
plausible		
probable		
pleased		
normal		
professional		
important		
Nouns		
honesty		
reality		
belief		
Verbs		
appear		
understand		
trust		

Those exercises are interesting because the students get to see that there is more than one prefix to convey the same idea. However, as already mentioned in the previous levels, it would have been interesting to add explicit information (in the teacher's book for example) on the differences between those prefixes (i.e. Are they all productive in English? Can they all attach to any type of base? Are there any restrictions? Are there any patterns or rules that the students would benefit from learning?).

The last additional exercise of the data is illustrated in *Additional Exercise 4*. The word *use* is derived with a series of different prefixes and the students need to match the derivatives with the correct definition. The suffixes *over-* and *under-* are included here.³³ It is interesting to notice that they occur here as prefixes, but as left-hand bases of compounds in one of the exercises of the advanced level (see *Exercise 46*).³⁴

³³ They are not included in Table 10 because they are mentioned in one of the additional exercises.

³⁴ In Lieber (2005) they are both considered as prefixes.

Additional Exercise 4: Derivation – Upper-Intermediate SB (Id SBUI-6)

5 Match the words and their meanings.

1 abused	not ever used
2 disused	not used any more
3 unused	used in the wrong way
4 misused	used too much
5 overused	not used enough
6 underused	used cruelly or badly

Exercise 46: Compounding – Advanced WB (Id 5)

7 Compound nouns formed with prepositions

1 Match words in **A** and **B** to make **compound nouns**.
Sometimes more than one is possible.

A	under	over	fall	spin	
	break	out	down	set	
	up	pile	hang	off	
B	wear	over	out	spring	all
	shot	come	off	through	up
	back	patient	ground	pour	
	underwear				

Upper-Intermediate – Interim conclusion

It seems fair to say that, compared to the two other intermediate levels, the upper-intermediate level does not focus as much on derivation, or at least not explicitly. The vocabulary list at the end of the student's book does, however, show that the students are exposed to complex words – compounds and derivatives – with a wide variety of affixes (see Footnote 32, p.99 for examples).

The exercises on suffixation do not really bring anything new. The material on prefixation, on the other hand, is interesting and it is unfortunate that there is no grammar reference to expand on it (i.e. distribution of the *un-* and *in-* and its allomorphs). At this stage, it would also have been interesting to introduce some other prefixes (see Level 5 in Table 11, p.76) as it is already the third proficiency level that focuses on negative prefixes.

It is worth noticing that the treatment of suffixes and prefixes is slightly different. The exercises on prefixation tend to focus on prefixes with similar meaning (i.e. negative prefixes). The exercises on suffixation do not group suffixes depending on their meaning, but rather depending on the parts of speech they help form. This distinction is true for all the proficiency levels and really reflects/matches the way suffixes and prefixes are defined throughout the series (see *Exercises 41 and 42*, p.95).

e. Advanced level

The advanced level only comprises 5 exercises on derivation, which is 2 fewer than the previous level. They are covered in Units 2, 5, 6 and 8. The 13 suffixes found in the exercises are displayed in Table 20.

Table 20: Derivation – Advanced – Affixes

Level	Affixes		Total
	Romance	Germanic	
Level 2		-ed, -ing	2
Level 3		-er, -ish, -ly	3
Level 4	-ize		1
Level 5	-al, -ian	-en	3
Level 6	-ic, -ion, -(i)fy		3
Other	-ate		1
Total	7	6	13

Table 20 displays an (almost) even number of Romance and Germanic suffixes, with 7 and 6 suffixes respectively. Except for the verb forming suffix *-en*, the suffixes of Germanic origin come from the lower levels (i.e. Levels 2 and 3) while those of Romance origin come from the higher levels (i.e. Levels 4 to 6). Only the suffix *-ate*, here used as a verb forming suffix (e.g. *assassinate*), is not included in Bauer & Nation's (1993) list. The affix levels are evenly represented (except for Level 4), which, as for the other levels, seems to confirm that Bauer & Nation's (1993) suggested order is not really applied through the series.

The 2 exercises from Unit 2 deal with adverbs. *Exercise 47* illustrates the exercise from the student's book, preceded by what resembles a grammar spot. The previous proficiency levels had already discussed the fact that some adverbs do not end in *-ly*. It is also the case here, only this time the exercises focus on adverbs that have both forms with and without the suffix *-ly* (e.g. *late* vs. *lately*). *Exercise 47* is a multiple choice in which the students choose between the two forms of an adverbs. The student's book provides further information in a grammar reference at the end of the book (see *Grammar Reference 2*). It discusses the two form of the adverbs, but also highlights the fact that their meanings are not always related, as in *to work hard* (a lot) vs. *to hardly work* (almost not). The elementary level had already provided another grammar reference on adverbs (see *Grammar Reference 1*, p.85).

Exercise 47: Derivation – Advanced SB (Id SBA-1)

Adverbs with two forms

Some adverbs have two forms, one with and one without *-ly*.

aiming high	highly successful
doing fine	finely chopped onions

▶▶ Grammar Reference p147

3 Complete the gaps with the correct form of the adverb.

1 **hard / hardly**
 We all worked extremely _____.
 Some countries can _____ feed their own people.

2 **easy / easily**
 Chelsea won the match _____.
 Relax! Take it _____!

3 **late / lately**
 I hate it when people arrive _____.
 What have you been doing _____?

4 **sure / surely**
 'Can you lend me some money?'
 '_____.'
 _____ you can see that your plan just wouldn't work?

5 **wrong / wrongly**
 He was _____ accused of being a spy.
 At first everything was great, but then it all went _____.

6 **most / mostly**
 What do you like _____ about him?
 She worked wherever she could, _____ as a waitress.

7 **wide / widely**
 She has travelled _____ in Europe and the Far East.
 When I got to their house, the door was _____ open.

2.5 Adverbs with two forms

Some adverbs have two forms, one with and one without *-ly*. Sometimes the two meanings are connected:

We were flying **high** over the ocean.

I think very **highly** of Joe and his work.

Hold **tight**! The train's going to move.

We control our expenditure **tightly**.

Sometimes the two meanings are not connected:

We work **hard**. (a lot) / I **hardly** recognized her. (= almost not)

Turn **right** round. (= completely) / If I remember **rightly**, they live here. (correctly)

We arrived **late**. (not punctually) / I've noticed that **lately**. (recently)

We get on **fine**. (OK) / Chop the carrots **finely**. (in small pieces)

Sure, I'll help. (certainly) / **Surely** it's illegal? (isn't it obvious that?)

I'm aiming **high**. (not low) / She's **highly** respected. (extremely)

You ate **most**. (more than anyone) / It was **mostly** sunny. (generally)

His shot went **wide**. (off target) / We've travelled **widely**. (extensively)

It could go **wrong**. (badly) / You were **wrongly** informed. (incorrectly)

Go **easy** on him. (gently) / We won **easily**. (without difficulty)

She doesn't play **fair**. (by the rules) / I'm **fairly** sure. (quite)

Don't come **near**! (close) / Are we **nearly** there? (almost)

It's **pretty** easy. (quite) / She smiled **prettily**. (attractively)

Kids go in **free**. (with no charge) / He spoke **freely**. (with no reserve)

Don't stand so **close**! (near) / Watch **closely**. (carefully)

The 3 remaining exercises are quite similar to exercises from the previous proficiency levels. One of them focuses on words linked to nationalities. The elementary and pre-intermediate levels also had one exercise each on this topic (see *Exercise 29*, p.83 and *Exercise 33*, p.87). While those previous exercises focused on the names of the countries (nouns) and the nationalities (adjectives), the exercise at the present level also includes the words for the persons (e.g. *a Scot, a Spaniard, a Finn*), for the people/nation (e.g. *the British, the Spanish, the Turks/Turkish*) and for the languages (e.g. *Finnish, Danish, Icelandic*) (though they are not always derived from the name of the country, as in *The Netherlands – Dutch* or *Argentina – Spanish*).

The second of the remaining exercises deals with present and past participles that can be used as gerunds, adjectives, etc. (similar to *Exercise 27*, p.79). This topic has been discussed at every proficiency level, it is therefore surprising that the grammar spot and grammar reference should be introduced only at the advanced levels (see *Grammar Reference 3*)³⁵.

³⁵ The upper-intermediate level actually also includes a grammar reference but the exercise on participle does not mention it.

Grammar Reference 3: Derivation – Participles – Advanced level SB, p.154

Participles

 8.3 Participles as adjectives

Present participles describe an action which is still happening.

*He dived into the sea to save the **drowning** child.*

*They watched the **burning** forest.*

Past participles describe the result of an action that has happened.

*She looked at the **broken** chair.*

*The **completed** statue looked very lifelike.*

 8.4 Participles as reduced relative clauses

When participles come after a noun, they are like reduced relative clauses.

*I met a woman **riding** a donkey. (who was riding)*

*The cash **stolen** in the raid was never recovered. (that was stolen)*

*The man **being interviewed** by the police is suspected of arson. (who is being interviewed)*

Note: this is only a sample of the grammar reference.

The last exercise from the data focuses on deriving verbs from nouns and vice versa. It is quite similar in form to *Exercise 28* (p.80), as the students need to complete a chart. The two differences lie in the fact that the exercise here is partly contextualized (i.e. the students use the words from the chart to complete sentences) and that the suffixes needed are not provided with the exercise. The students need to use suffixation (e.g. *survive* → *survival*) decomposition³⁶ (e.g. *injury* → *injure*), as well as conversion in some cases (e.g. *to attack* → *an attack*).

Advanced – Interim conclusion

This last level does not really introduce new explicit material on derivation, except for the exercises on adverbs with two forms. The other exercises only review what had been done at previous levels. The exercises do not focus more on the affixes from the higher levels in Bauer & Nation (1993) than the previous proficiency levels. Further investigation would be needed to understand what motivated the choice of affixes throughout the series.

³⁶ There could be cases of back-formation, but since the approach is synchronic rather than diachronic, the term decomposition is used here, and refers to the action of removing an affix.

Though word-formation is not highlighted through exercises on derivation, the students are still exposed to many complex words through the vocabulary encountered in texts and other exercises (as was the case at the upper-intermediate level). Here are some of the affixes (and combining forms) found in the vocabulary list at the end of the student's book: *-ure, -ment, -ant, -ize, mal-, -less, -ation, -ate, -dom, -ity, -ful, -ness, -y, en-, re-, -ess, -al, -ly, -ist, -able, -ous, -en, -ary, -ic, de-, un-, in-, -ion, dis-, poly-, out-, -ive, -ism, over-, trans-, -ist, auto-, -er, -ory, multi-, sub-, psycho-*. As this list contains some combining-forms (e.g. *multi-, poly-, auto-, psycho-*), and as they are included at Level 7 in Bauer & Nation (1993), an exercise on them could be a nice addition.

Discussion

The present study aimed to describe the treatment of word-formation in the *NH* textbooks. Overall, the series does a good job covering the two most frequent word-formation processes, namely compounding and derivation, as well as conversion. Derivation and compounding are covered by five of the six levels, as the beginner level only covers inflection, and conversion is only covered at the upper-intermediate level. Here, I try to summarize my observations and make some suggestions for improvement.

Some general positive notes are that (i) many exercises take pronunciation and spelling into consideration, (ii) the three books (i.e. student's, teacher's and workbook) often echo one another, (iii) the words are usually presented in context, and most importantly (iv) the textbooks feature both practice and theory on word-formation processes, which is improvement when compared to the *IO* and *NIO*, as they only featured exercises. However, the exercises are not systematically linked to theory. One of the most recurring comments in the qualitative analyses was that there were not enough grammar references. As a reminder, the grammar spots and grammar references are meant to summarize any theory (or key features) on a certain topic (e.g. adverbs in *-ly*, *-ed* and *-ing* participles, comparatives and superlatives, tense). Given the consequent number of exercises on word-formation processes it would be nice to have at least one grammar reference at each proficiency level (except for the beginner level), and if not, at least at the three intermediate levels, which contained the highest numbers of exercises and different affixes. Depending on the type and amount of information, there could either be topic specific grammar references (e.g. one on adverbs in *-ly*, one on negative prefixes, one on suffixes), or one general grammar reference in which the information from the different exercises is compiled. For compounding, they could include the definition of compounding/compounds, the possible types of compounds (e.g. nouns, adverbs, adjectives), and some of the most productive and frequent combinations for each type (e.g. *noun + noun*, *noun + adjective*, *verb + particle*). For derivation, they could include the definitions of suffixes, prefixes (those terms are already used in the textbooks), as well as their hypernym, i.e. "affix" (which is never mentioned). Lists of prefixes (+ their meaning) and suffixes (+ the part of speech they form) with examples could also be included there, or with the vocabulary list.

At the pre-intermediate and intermediate levels, the term “suffix” was sometimes used in the sense “word ending”, meaning that stem and suffix allomorphy, as well as inflection were already added (e.g. *-ress*, *-ivities*, *-sion*, *-ility*). I hypothesized it was to make the step between the base form and the derivative a bit more transparent for the students. Allomorphy can make it challenging to derive words and since students do not need to be as precise as linguists, extra help is welcome (at least at the beginning of their learning process). In Bauer & Nation (1993), the affixes causing major allomorphy in their bases are introduced at Level 6. Only two of them were not in the data, namely *-ee* (e.g. *nominee*) and *-y* (e.g. *supremacy*). The nine others were usually covered in only one or two exercises. Bauer & Nation (1993:261) consider that, among the “frequent but irregular” affixes, only the very widely generalized ones (i.e. the ones they list in their article) are worth dealing with. An idea would be to list them somewhere in the books, with examples and with some basic notes on stem allomorphy. Other small inaccuracies occurred in the data (e.g. the word *homeless* presented as a compound instead of a derivative, and prepositions like *over-* or *under-* once presented as the left-hand bases of compounds and once as prefixes).

In regard to Bauer & Nation (1993), the textbooks managed to include about half of the affixes from their list. Most of the affixes from Levels 2 to 4 and 6 were covered but many affixes from Levels 5 and 7 were missing. That being said, there are more affixes at Level 5 than the other levels, and as they are not very frequent, the number covered in the textbooks seems reasonable. The fact that the affixes from Levels 2 to 4 are more often recycled between exercises and proficiency levels makes sense, as they are the most frequent and regular affixes in English. However, the series focuses a lot on *-ed* and *-ing* adjectives/participles because they are mentioned as problematic in one of the teacher’s books, but I could not find anything in the literature to confirm it.

The hypothesis that the lower proficiency levels would focus on lower affix levels and the higher proficiency levels on the higher affix levels was proven wrong. In the *NH* series, the two key proficiency levels for derivation are the pre-intermediate and intermediate levels. They both cover affixes from all levels in Bauer & Nation (1993) and contain more exercises than the other proficiency levels. It is also at the pre-intermediate level that the terms “prefix” and “suffix” are introduced. The pièce de résistance (so to speak) is the intermediate level, with the highest number of exercises, an impressive number of different affixes (i.e. 33) and a

section (i.e. a whole page) devoted to word building. The terms “word building” and “word-formation” are also mentioned. It would most likely be beneficial for the students if lists of prefixes and suffixes were added somewhere in the student’s book. Also, it was not pointed out in the previous sections but, compounding, conversion and derivation are never really mentioned together in the textbooks. Having the students realise that they are three ways of doing the same thing (i.e. making new words) could be interesting and the intermediate level would be the perfect level to do so. Exercises comparing the three could be included in the section on word-formation. The upper-intermediate and advanced levels both lacked new material and new affixes. Their wordlists however contain many complex words (both compounds and derivatives), with a range of affixes as rich as the two previous levels.

The list of prefixes covered in the series mostly consists of negative prefixes and they are the only ones that are systematically recycled between exercises and levels. It would be nice to include exercises on other types of prefixes (which could be selected from Levels 5 and 7 depending on the proficiency level).

The exercises did not seem to make a distinction between Germanic and Romance affixes (i.e. they mixed both in the exercises). The question of whether such distinction should be mentioned to the students or not was briefly discussed with one of the exercises on the prefixes *un-*, and *in-* (and its allomorphs). The discussion could be expanded to other prefixes and suffixes as well. This distinction could be useful for affixes that only attach to one type of base (i.e. native or non-native).

As already said at the beginning of this discussion, the treatment of word-formation in the *NH* textbooks is quite satisfactory. The remarks and suggestions made here are only my attempt to answer the question “what could make those books better?”. There are so many aspects to learning a language, and so many things to take into account when designing EFL coursebooks that I can only admire those who accept the challenge.

Conclusion

The primary aim of this study was to discuss the treatment of word-formation in a widely known EFL textbook series, namely the *New Headway* textbooks. In Van Lint (2016), I had already discussed the treatment of compounding and derivation at three proficiency levels from the *Inside Out* and *New Inside Out* series. The literature review in Part 1 discussed different types of studies. Many of them aimed to investigate (i) the learners receptive and productive WD knowledge, (ii) the link between the learners' WD knowledge and their writing/reading skills, (iii) the effects of cross-linguistic influence. Most agreed that MA and WD knowledge are useful tools to gain more autonomy in the L2. As only two studies included discussions on word-formation in EFL textbooks, namely Tahaine (2012) and Enesi (2017), the case study presented here, together with Van Lint (2016), is meant to contribute to filling in the gap between what the learners know, and what they are actually exposed to in class. In both Tahaine (2012) and Enesi (2017), the conclusion was that the learners' ability to derive words is taken for granted and that textbooks do not include enough emphasis on word-formation processes. The present study therefore first set out to answer the following questions:

- ➔ How does the *NH* series deal with word-formation? Do the textbooks provide both theory and practice? On which word-formation processes do they focus? What type of exercises do they offer?

Contrary to what was expected, the *NH* textbooks provide both theory and practice. The total number of exercises (i.e. 83) is quite satisfactory, but the theory, not as much. The explicit instructions on word-formation processes are kept to a minimum (e.g. "suffixes show the part of speech, "adverbs usually end in *-ly*", "prefixes change the meaning of the word"). The most frequent word-formation process found in the data is derivation, followed by compounding and conversion. Most of the exercises are a form of "gap-filling" exercises and the words are usually presented in context. The textbooks usually also include instructions on spelling and pronunciation when needed.

The present study also aimed to link the material on derivation to Bauer & Nation's (1993) article on word-families:

- ➔ In the exercises on affixation, do the lower proficiency levels focus on affixes from the lower levels in Bauer & Nation (1993), and the more advanced proficiency levels on affixes from the higher levels?

It proved not to be the case. The textbooks covered a consequent number of affixes from Bauer & Nation's (1993) list, but the difficulty of affixes did not increase steadily across the series, as most of the affixes were covered by the pre-intermediate and intermediate levels.

I tried to include throughout the analysis, some suggestions to improve, or at least question, the way in which word-formation is represented in the *NH* textbooks.

Of course, there are many limitations to this study. First, I only focused on the material that explicitly dealt with word-formation and did not investigate how this material interacts with the rest of the textbooks. Analysing the other types of input (i.e. vocabulary from vocabulary lists, from texts and tapescripts) might have allowed to see the motivation behind the choice of words and affixes used in the exercises (i.e. do they cover the same words/affixes/types of derivatives/types of compounds?). Also, I could have reviewed the three books (i.e. student's, teacher's and workbook) more consistently throughout the analysis (I notice the teacher's books were not as well reviewed). Then, I already expected to find exercises on derivation and compounding, as I did in Van Lint (2016), and because I directly focused on them, I might have missed some input on other, less frequent word-formation processes. Finally, the database still has room for improvement, as the approach I chose led to the need for a distinction between "regular" and "additional exercises", as well as to many other frustrations on how to interpret and encode the exercises in the database.

Bibliography

Primary sources

- Soars, L. & Soars, J. (2000). *New headway English course*. 4th ed. Oxford University Press.
 - Soars, L. & Soars, J. (2009). *New headway – Intermediate Student’s book*. 4th ed. Oxford University Press.
 - Soars, L. & Soars, J. (2009). *New headway – Intermediate Workbook*. 4th ed. Oxford University Press.
 - Soars, L., Soars, J., Maris, A. (2009). *New headway – Intermediate Teacher’s book*. 4th ed. Oxford University Press.
 - Soars, L. & Soars, J. (2011). *New headway – Elementary Student’s book*. 4th ed. Oxford University Press.
 - Soars, L. & Soars, J. (2011). *New headway – Elementary Workbook*. 4th ed. Oxford University Press.
 - Soars, L., Soars, J., Maris, A. (2011). *New headway – Elementary Teacher’s book*. 4th ed. Oxford University Press.
 - Soars, L. & Soars, J. (2012). *New headway – Pre-intermediate Student’s book*. 4th ed. Oxford University Press.
 - Soars, L. & Soars, J. (2012). *New headway – Pre-intermediate Workbook*. 4th ed. Oxford University Press.
 - Soars, L., Soars, J., Maris, A. (2012). *New headway – Pre-intermediate Teacher’s book*. 4th ed. Oxford University Press.
 - Soars, L. & Soars, J. (2014). *New headway – Upper-intermediate Student’s book*. 4th ed. Oxford University Press.
 - Soars, L., Soars, J., Maris, A. (2014). *New headway – Upper-intermediate Teacher’s book*. 4th ed. Oxford University Press.
 - Soars, L., Soars, J., McCaul J. (2014). *New headway – Upper-intermediate Workbook*. 4th ed. Oxford University Press.
 - Soars, L., Soars, J. & Hancock, P. (2015). *New headway English – Advanced Student’s book* 4th ed. Oxford University Press.

- Soars, L., Soars, J. & Hancock, P. (2015). *New headway – Advanced Workbook* 4th ed. Oxford University Press.
- Soars, L., Soars, J., Hancock, P. & Storton, R. (2015) *New headway – Advanced teacher's book*. 4th ed. Oxford University Press.

Secondary sources

- Al-Homoud, F. (2017) EFL LEARNERS' RECEPTIVE AND PRODUCTIVE KNOWLEDGE OF WORD DERIVATIVES. *International Journal of English Language and Linguistics Research*, 5(2), 43-56.
- Balteiro I. (2011) Awareness of L1 and L2 word. Mechanisms for the development of a more autonomous L2 learner. *Porta Linguarum* 15:25-34.
- Bauer, L., & Laurie, B. (1983). *English word-formation*. Cambridge university press.
- Bauer L. & I.S.P. Nation (1993) Word families. *International Journal of Lexicography*, 6(4): 253-279.
- Bauer L., Lieber L. and Plag I. (2013) *The Oxford Reference Guide to English Morphology*. Oxford: Oxford University Press.
- Bauer, L. (2001). *Morphological productivity* (Vol. 95). Cambridge University Press.
- Bauer, L. (2004). *A glossary of morphology*. Edinburgh: Edinburgh University Press.
- Brezina V. And Gablasova D. (2015) Is There a Core General Vocabulary? Introducing the New General Service List. *Applied Linguistics* 36(1): 1-22.
- Callies M. (2015) Effects of cross-linguistics in word formation: A comparative learnercorpus study of advanced interlanguage production. In H. Peukert (ed), *Transfer Effects in Multilingual Language Development*, John Benjamins Publishing Company, DOI:10.1075/hsld.4.06cal
- Carstairs-McCarthy, A. (2002). *An introduction to English morphology: words and their structure*. Edinburgh: Edinburgh University Press.
- Collins, B., & Nation, P. (2015). Testing receptive knowledge of derivational

affixes. *Journal of Second Language Teaching & Research*, 4(1), 6-23.

- Enesi, M. (2017). The Effect of Teaching Word Formation Theory to English Students. *European Journal of Language and Literature*, 7(1), 7-12.
- Gor, K., & Jackson, S. (2013). Morphological decomposition and lexical access in a native and second language: A nesting doll effect. *Language and cognitive processes*, 28(7), 1065-1091.
- Hamans, C. (2017, September). Language change and morphological processes. In *Yearbook of the Poznan Linguistic Meeting* 3(1), 1-23. De Gruyter Open.
- Hamiloğlu, K., & Karlıova, H. (2009). A content analysis on the vocabulary presentation in EFL course books. *Ozean Journal of Social Sciences*, 2(1), 44-54.
- Haomin, Z., & Bilü, Z. (2017). Multi-faceted morphological awareness and vocabulary knowledge in English as a second language learners: A multivariate analysis. *Chinese Journal of Applied Linguistics*, 40(1), 42-55.
- He, H., & Deng, Y. (2015). The mental lexicon and English vocabulary teaching. *English Language Teaching*, 8(7), 40.
- Jeon E.H. (2011) Contribution of Morphological Awareness to Second-Language Reading Comprehension. *The Modern Language Journal*, 95(2):217-235.
- Jiang, N., Novokshanova, E., Masuda, K., & Wang, X. (2011). Morphological congruency and the acquisition of L2 morphemes. *Language Learning*, 61(3):940-967.
- Karlsson, M. (2015). Advanced students' L1 (Swedish) and L2 (English) mastery of suffixation. *International Journal of English Studies*, 15(1), 23-49.
- Kastovsky, D. (2009). Astronaut, astrology, astrophysics: about combining forms, classical compounds and affixoids. In *Selected proceedings of the 2008 symposium on new approaches in English historical lexis (HEL-LEX 2)* (pp. 1-13).
- Kieffer, M. J., & Box, C. D. (2013). Derivational morphological awareness, academic vocabulary, and reading comprehension in linguistically diverse sixth graders. *Learning and Individual Differences*, 24, 168-175.
- Kraut, R. (2015). The relationship between morphological awareness and morphological decomposition among English language learners. *Reading and Writing*, 28(6), 873-890.

- Lardière D. (2006) Knowledge of Derivational Morphology in a Second Language Idiolect. In M.G. O'Brien, C. Shea, and J. Archibald (eds), *Proceedings of the 8th Generative Approaches to Second Language Acquisition Conference (GASLA 2006)*, 72-79.
- Leontjev, D. (2016). L2 English derivational knowledge: Which affixes are learners more likely to recognise?. *Studies in Second Language Learning and Teaching*, 6(2), 225-248.
- Leontjev, D., Huhta, A., & Mäntylä, K. (2016). Word derivational knowledge and writing proficiency: How do they link?. *System*, 59, 73-89.
- Lieber, R. (2005). English word-formation processes. In *Handbook of word-formation* (pp. 375-427). Springer, Dordrecht.
- López Jiménez, M. D. (2009). The treatment of vocabulary in EFL textbooks. *ELIA*, 9, 59-81.
- Masrai, A. M. (2016). The influence of morphological knowledge on lexical processing and acquisition: The case of Arab EFL learners. *Ampersand*, 3, 52-60.
- Mochizuki, M., & Aizawa, K. (2000). An affix acquisition order for EFL learners: An exploratory study. *System*, 28(2), 291-304.
- Nation, I. S. P. (2000), Learning vocabulary in another language. (PDF)
- Oz, H. (2014). Morphological awareness and some implications for English language teaching. *Procedia-Social and Behavioral Sciences*, 136, 98-103.
- Oxford University Press, (2019) *New Headway: Six-level general English course*. Retrieved from https://elt.oup.com/catalogue/items/global/adult_courses/new_headway/?cc=be&seLanguage=en (Last consulted on 15 February 2019).
- Plag, I., Dalton-Puffer, C., & Baayen, H. (1999). Morphological productivity across speech and writing. *English Language & Linguistics*, 3(2), 209-228.
- Plag, I. (1999). On the mechanisms of morphological rivalry: A new look at competing verb-deriving affixes in English. na.

- Plag I. (2003) *Word-Formation in English*. Cambridge: Cambridge University Press.
- Prčić, T. (1999). THE TREATMENT OF AFFIXES IN THE 'BIG FOUR'EFL DICTIONARIES1. *International journal of lexicography*, 12(4), 263-280.
- Riazi, A., & Aryashokouh, A. (2007). Lexis in English Textbooks in Iran: Analysis of Exercises and Proposals for Consciousness-Raising Activities. *Journal of Pan-Pacific Association of Applied Linguistics*, 11(1).
- Rashtchi, M., & Pirali, F. (2017). Teaching Word Formation Rules and Vocabulary Knowledge Expansion: Proactive Versus Reactive Focus on Form. *International Journal of Applied Linguistics and English Literature*, 6(4), 199-210.
- Schano L. (2015) The Influence of Morphological Knowledge on L2 Reading Comprehension. *Langues et Linguistique*, 35:64-71.
- Schmid, H. J. (2016). *English morphology and word-formation* (Vol. 25). Erich Schmidt Verlag.
- Schmitt N. & C.B. Zimmerman (2002) Derivative word forms: what do learners know? *TESOL Quarterly*, 36(2): 145-171.
- Schmitt, N. (2008). Instructed second language vocabulary learning. *Language teaching research*, 12(3), 329-363.
- Silva, R., & Clahsen, H. (2008). Morphologically complex words in L1 and L2 processing: Evidence from masked priming experiments in English. *Bilingualism: Language and cognition*, 11(2), 245-260.
- Tahaine Y. (2012) The Awareness of the English Word-formation Mechanisms is a Necessity to Make an Autonomous L2 Learner in EFL Context. *Journal of Language Teaching and Research*, 3(6): 1105-1113.
- Van Lint, S. (2016) *Word-formation in EFL textbooks: Analysis of the series Inside Out and New Inside Out at three proficiency levels* (Bachelor Thesis), Université Saint-Louis, Bruxelles.
- Ward, J., & Chuenjundaeng, J. (2009). Suffix knowledge: Acquisition and applications. *System*, 37(3), 461-469.
- Yeh, Y. F., Joshi, R. M., & Ji, X. R. (2015). The development of morphological awareness in Chinese ESL students. *Contemporary Educational Psychology*, 43, 51-60.
- Zhang, D., & Koda, K. (2013). Morphological awareness and reading comprehension in a foreign language: A study of young Chinese EFL learners. *System*, 41(4), 901-913.

Appendices

Appendix 1 is a copy of selected parts from Bauer & Nation's (1993) article on word families. Appendix 2 is the database. As it consists of an Excel file, it is not included here.

Appendix 1

Level 1: each word is a different word (Bauer & Nation 1993:270)

Level 1

A different form is a different word. Capitalization is ignored.

Level 2: inflectional suffixes (ibid., 270)

Level 2

Regularly inflected words are part of the same family. The inflectional categories are – plural; third person singular present tense; past tense; past participle; *-ing*; comparative; superlative; possessive.

Level 3: The most frequent and regular derivational affixes (ibid., 258)

At this stage, the eight criteria outlined at the beginning of this article are applied to derivational morphology. All the criteria are applied quite strictly at this level, and the strictness with which they are applied is reduced at subsequent levels. Here, only orthographic alternations, such as <y> becomes <i>, which are already required for Level 2 will be permitted. The affixes included at level 3 are *-able, -er, -ish, -less, -ly, -ness, -th, -y, non-, un-*. They are all applied with restricted uses which are detailed in Appendix 2.

Level 4: Frequent, orthographically regular affixes (ibid., 260)

At this level, the eight criteria are prioritized. In particular, the fact that an affix is frequent (widely generalized) is taken to be more important than whether it is productive or not, and orthographic criteria are taken to be more important than phonological criteria. This decision is based on the assumption that the processes recommended here are aimed at allowing comprehension of written rather than spoken forms.

One result of this prioritizing is that the levels used within Lexicalist Morphology referred to above and the ones used here fail entirely to coincide at this level, since many of the criteria for Level 1 affixes in such theories are phonological (stress shift, morphophonemic variation).

The following affixes are included at this level – *-al, -ation, -ess, -ful, -ism, -ist, -ity, -ize, -ment, -ous, in-*, all with restricted uses. See Appendix 2 for a discussion of each of the affixes.

However, since the degree of generalization of an affix is an important criterion at this level, it might be that some other affixes should be added to this level for people who are reading in specific scientific fields such as chemistry or geophysics, for example *a-, hypo-, epi-*. We restrict ourselves here to what happens in fairly general English.

Level 5: Regular but infrequent affixes (ibid., 260 and 270-271)

This level adds a number of affixes whose behaviour is fairly regular, which may be productive, but which, because they are not widely generalized, do not individually add greatly to the number of words that can be understood. These affixes will simply be listed below. They are added to free bases, e.g. *contributory*, at this level and no new principles are involved. At Level 7 they are added to bound bases, e.g. *introductory*.

Level 5

-age (leakage), *-al* (arrival), *-ally* (idiotically), *-an* (American), *-ance* (clearance), *-ant* (consultant), *-ary* (revolutionary), *-atory* (confirmatory), *-dom* (kingdom; officialdom), *-eer* (black marketeer), *-en* (wooden), *-en* (widen), *-ence* (emergence), *-ent* (absorbent), *-ery* (bakery; trickery), *-ese* (Japanese; officialese), *-esque* (picturesque), *-ette* (usherette; roomette), *-hood* (childhood), *-i* (Israeli), *-ian* (phonetician; Johnsonian), *-ite* (Paisleyite; also chemical meaning), *-let* (coverlet), *-ling* (duckling), *-ly* (leisurely), *-most* (topmost), *-ory* (contradictory), *-ship* (studentship), *-ward* (homeward), *-ways* (crossways), *-wise* (endwise; discussion-wise), *ante-* (anteroom), *anti-* (anti-inflation), *arch-* (archbishop), *bi-* (biplane), *circum-* (circumnavigate), *counter-* (counter-attack), *en-* (encage; enslave), *ex-* (ex-president), *fore-* (forename), *hyper-* (hyperactive), *inter-* (inter-African, interweave), *mid-* (mid-week), *mis-* (misfit), *neo-* (neo-colonialism), *post-* (post-date), *pro-* (pro-British), *semi-* (semi-automatic), *sub-* (subclassify; subterranean), *un-* (untie; unburden).

Level 6: Frequent but irregular affixes (ibid., 261)

This level includes those affixes which provide major problems of segmentation, either because they cause gross (orthographic) allomorphy in their bases (that is, parts of the base are deleted or additions besides the suffix are needed), or because there are major problems involved in segmenting them caused by homography. Because of the problems these affixes cause, only the very widely generalized ones are worth dealing with: less widely generalized affixes that cause similar problems are better treated by learning the common words which contain them. Some of the affixes dealt with here have already been mentioned. In such cases it is assumed that the transparent cases will have been dealt with at an earlier level, and the more opaque cases are dealt with here. Each affix and its problems are discussed in Appendix 2. Although the problems are dealt with in terms of particular affixes, note that many of the problems recur, and some of them recur with the less widely generalized affixes already mentioned. The affixes are *-able*, *-ee*, *-ic*, *-ify*, *-ion*, *-ist*, *-ition*, *-ive*, *-th*, *-y*, *pre-*, *re-*.

Level 7: Classical roots and affixes (ibid., 262)

At this level belong all the classical roots which abound in English words and which occur not only as bound roots in English (as in *embolism*) but also as elements in neo-classical compounds (such as *photography*). Native speakers as well as L2 speakers have to be taught these explicitly, and there are books available which deal with these matters (Brown 1971), and look at the patterns of classical allomorphy and at correspondences such as those resulting from Grimm's Law. While there are undoubtedly gains in comprehension to be made in this area, it is outside the scope of this paper to discuss them.

What are commonly called combining forms e.g. *Franco-*, *Gallo-*, *Euro(po)-*, *agri-* are also included at this level.

It should be noted that this level includes many of the very frequent English prefixes (Bock 1948; Stauffer 1942), such as *ab-*, *ad-*, *com-*, *de-*, *dis-*, *ex-*, and *sub-*.

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