

04

Tijana Šuković

***Expanding the Lexicon via
Analogy and Schema:
A Constructionist Approach to
Analyzing Proper Names with
Suffixes as Novel Lexemes in
English***



INTRODUCTION

Most research on word-formation in English centers on the discussion of how new words enter the lexicon. In early generative approaches to word-formation as in Lee (1960), the focus of language study was on syntactic transformational rules, whereas the lexicon was viewed as a special component placed outside the grammar. This resulted in creating a grammar-lexicon division also known as the rule-list fallacy (Langacker 1987). In contrast, Aronoff put a greater focus on the study of the lexicon when he provided a detailed account of rules for expanding the lexicon of English in his monograph *Word Formation in Generative Grammar* (1976). Similarly to transformational rules in syntax, there are rules which operate in the production of new words i.e. Word Formation Rules (WFRs). WFRs are always applied to a word which is a member of a major lexical category such as a noun, a verb or an adjective; for example, the rule for creating negative adjectives with the prefix *un-* is represented as $[X]_{Adj} \rightarrow [un\#[X]_{Adj}]_{Adj}$ (Aronoff 1976, 63). Rules are input-oriented in the sense of applying a regular rule to one established word (i.e. a lexical base takes a particular affix), and they never include the creation of 'less regular' cases. Conversely, these less regular cases with 'atypical' bases (such as proper names) can be explained as instances of output-oriented abstractions called schemas, because schemas do not only specify bases and affixes, but also serve as blueprints for creating new lexemes. This holistic approach to word-formation was proposed by Booij in *Construction Morphology* (2010)¹.





Proper names as potential formal bases are rarely considered in word-formation. Indeed, Lehmann and Moravcsik state that *mountainless* is a possible derivative of the common noun *mountain* whereas **alpless* is perceived as an impossible word (2000, 747). A few exceptions to this point of view are found in semantically-oriented accounts as in Marchand (1969) or more recent corpus-based studies such as Bauer et al. (2013). However, these approaches lack a formal representation of proper names in word-formation, which would illustrate the exact mechanisms for expanding the lexicon of English.

This paper presents a constructionist approach to analyzing proper names with suffixes as novel lexemes in English². The organization of the paper is as follows. In section 2, the theoretical explanations of schema, analogy and second-order schema are provided. In section 3, the research methodology is explained and the analysis of novel lexemes with proper names and three different suffixes *-ness*, *-hood* and *-oid* is carried out. The last section of the paper discusses the findings of this research and summarizes the key points in the concluding paragraph.

THEORETICAL BACKGROUND: CONSTRUCTION MORPHOLOGY

In Construction Morphology, the lexicon is regarded as a hierarchical structure which excludes either/or word-formation (i.e. rules or analogy) owing to its different levels of abstraction – it assumes both “analogical word-formation, based on an individual model word, and word-formation based on abstract schemas” (Booij 2010, 89). It contains lexical





items of a rich internal structure which can be related to one another on account of regularity or variation (Masini 2019). Speakers normally add novel lexemes to the lexicon by generalizing over existing lexemes, and sometimes they even “stretch the limits of what a constructional schema typically allows” in the production of new words (Hilpert 2014, 76). The three key mechanisms in the production of novel lexemes (schema, analogy, and second-order schema) are illustrated in the following sections.

Schema

An abstract schema expresses a generalization about the form and meaning of a morphological construction in the mind of a speaker (Booij 2010, 2). The speaker is able to abstract away all the linguistic information from existing words and coin new words by replacing the variable x :

$$(1) \quad < [[x]_{Ni} \text{ hood}]_{Nj} \leftrightarrow [\text{Quality of SEM}_i]_j >$$

This schema is instantiated by nouns such as *sainthood* and *motherhood*, and it produces new derived words licensed by the morphological construction $[N\text{-hood}]_N$ (Booij and Audring 2017, 278). The schema provides the linguistic information about the form-meaning correspondence which is indicated by the use of an arrow \leftrightarrow . The left part of the schema specifies the form, and the right part specifies the meaning of each morphological output which is licensed by the schema in (1). The nominal base and its





meaning (SEM) carry the same index i , and the meaning of the whole construction is indexed as j . According to Booij, a word as a pairing of form and meaning is a linguistic unit, and for that reason only words have lexical indexes, whereas affixes do not have any (2010, 28). Affixes do not carry meaning on their own³, but they evoke particular meanings following the operation of unification i.e. by replacing the variable x (Booij 2010, 2). Generally speaking, schemas have a dual function: on the one hand, they motivate existing words of one type (such as *sainthood* and *motherhood*) by showing their form-meaning correspondence; on the other hand, they produce new words (Booij and Audring 2017, 278). The latter function differentiates schema as a productive mechanism from analogy as a non-productive (or creative) mechanism in word-formation.

Analogy

The notion of analogy was described in Generative Grammar in the sense of analogic change, “the kind that actually changes the set of grammatical rules” (Chomsky 1964, 22). Given that generative linguists were more concerned with transformational rules, it was much later that analogy was studied as a mechanism in word-formation. Analogy as “a synchronic morphological force” is associated with rule-creating creativity which takes place after the speaker’s inspection of existing words which may result in the incidental actuation of existing derivational patterns, but in different configurations (van Marle 1990, 267). The reinterpretation of existing rules may give rise to ad hoc formations that can even be phonologically adapted so as to “sound good” (van Marle 1990, 272).





Within the theoretical framework of Generative Grammar, Bauer (1983) discusses the phenomenon of analogy in word-formation, and defines an analogical formation as “a new formation clearly modeled on one already existing lexeme, and not giving rise to a productive series” (96). Analogical formations are regular to the extent that “their meaning can readily be discerned on the basis of the individual forms which obviously have served as their model” (Plag 2003, 37). This is achieved through a proportional relation between the model word and its corresponding item as in $a:b :: c:d$ e.g. *eye:eyewitness :: ear:earwitness*. In principle, analogy is necessarily paradigmatic in nature since it describes a substitution relationship between the words of the same category (e.g. *earwitness* and *eyewitness* are nouns); in contrast, rules which are typically syntagmatic illustrate the linear relationship between the words with the same base (e.g. *sleep – sleepless – sleeplessness*). It seems that whenever a syntagmatic approach fails to explain a particular morphological structure or phenomenon, an analysis in terms of paradigmatic structure or analogy is proposed (Bauer et al. 2013, 518). As a result, analogy and rules are seen as strict alternatives in generative accounts.

Matiello (2017) studies analogical formations in depth and proposes the following account of analogy: an analogical formation (target) is explicitly modeled on an established word stored in the speaker’s lexicon (model) on the basis of certain similar features which the two words or phrases share (9). There is at least one striking feature (be it phonological, morphotactic or semantic) which creates a direct link between the model





and the target. The ideal starting point for detecting an analogical formation is identifying its source word which serves as the model, and then the proportional relation which activates the target. The model and the target are highly conditioned by the context, i.e. they have to co-occur in the same discourse – it is also far more usual for the model to occur first so that new words are more anaphoric of the preceding text than cataphoric of the following one (Mattiello 2017, 14).

Like Mattiello, Booij (2010) states that in the case of analogical word-formation it is essential that a speaker can pinpoint to an individual existing model and that they understand the meaning of the target depending on the model (90). However, model words may also be used to create new patterns via abstraction. To put it more precisely, the emergence of a general schema is also possible after a while due to the “repeated analogical extensions” of an established form (Hilpert 2013, 471). This kind of analogical extension is also known as a second-order schema in Construction Morphology.

Second-order schema

A second-order schema is a structural reinterpretation of analogy i.e. it is an abstract and productive pattern despite being created on a single model word. For instance, the word *Watergate* served as the model for all subsequent words ending in *-gate* which refer to a political scandal (Booij 2010, 90):

(2) < [[x]_{Ni} [gate]_{Nj} ↔ [political scandal pertaining to SEM_i]_j >





Apart from the words ending in *-gate* (such as *Clintongate* or *Irangate*), many other novel lexemes (such as the ones ending in *-burger*, *-holic*, *-tainment*, and *-zine*) have also gone through the structural reinterpretation of their model words (Booij 2010, 90). With an increase of new words, the model word is not necessarily the only word that prompts novel lexemes; however, the model word still serves as the source word and its purpose is to strengthen the second-order schema and turn it into a productive pattern. As Tuggy (2015) points out, analogy and schema are not to be seen as strict alternatives and “the two types may be often simultaneously active” (100).

The emergence of second-order schema is also possible with those lexemes in which the formal base *x* has no lexical entry of its own and it does not exist as an independent word in English (Booij 2010, pp. 29-31). The most typical example of this kind of second-order schema is illustrated by various sets of derived words ending in the suffixes *-ism* and *-ist* e.g. *altruism/altruist*, *bolshevism/bolshevist*, *pacifism/pacifist* etc. Since most of these words are based on borrowed words from other languages, there is no single precise word that actually functions as the base. In addition, there is a semantic interdependency between the words with the same base i.e. the meaning of one member is interpreted thanks to the existence of the other member in the given *-ism/-ist* set. Thus, the formal representation of the *-ism/-ist* paradigmatic relationship is indicated by the use of the symbol \approx (Booij and Masini 2015, 50):





(3) $\langle [x-ism]_{Ni} \leftrightarrow SEM_i \rangle \approx \langle [x-ist]_{Nj} \leftrightarrow [person\ with\ property\ Y\ related\ to\ SEM_{ij}] \rangle$

The second-order schema in (3) may also use an existing lexeme as its base, be it a member of a major lexical category in English such as the adjective *social* e.g. *socialism/socialist*, or a proper name such as *Marx* e.g. *Marxism/Marxist*. This also supports the idea that analogy may gradually develop into a regular and productive schema as an abstract pattern. When a pattern is highly productive and creates many novel lexemes, it is more difficult to determine one specific word which functions as the model word. In fact, only when there is a precise model, the mechanism of word-formation is unquestionably analogy, and then, we may discuss analogy in terms of “clear cases” (Booij 2014, 206).

PROPER NAMES WITH SUFFIXES: METHODOLOGY AND ANALYSIS

The research tool used in this research is *The Corpus of Contemporary American English* (COCA) which contains more than one billion words of text, or more precisely over 25 million words for each year over a period of almost thirty years (from 1990 until 2019). It is equally divided in eight genres: spoken (SPOK), fiction (FIC), popular magazines (MAG), newspapers (NEWS) and academic journals (ACAD), TV and movie subtitles (TV/MOV), blogs (BLOG) and web pages (WEB). Its diversity of genres together with its sample size





makes COCA an effective tool in studying word-formation mechanisms for expanding the lexicon of English.

A closer look into the COCA's search settings shows that seventeen suffixes can be added to proper names⁴. In this paper, the lexemes with proper names as formal bases and the suffixes *-ness*, *-hood* and *-oid* are analyzed with the aim of illustrating schema, analogy and second-order schema⁵. As this study takes a qualitative approach to corpus analysis, twenty-three lexemes are singled out to reflect native speaker intuitions and natural usage, which is favored in the study of constructions as form-meaning pairings in word-formation (Bybee 2013).

Schema: novel lexemes with proper names and the suffix *-ness*

The suffix *-ness* is added to adjectives by default e.g. *happy – happiness*; nevertheless, it may be attached to other kinds of bases and still produce semantically possible outputs such as *thingness*, *as-suchness*, *off-beatness*, *up-to-the minuteness*, *us-ness* etc. (Adams 2001, 32). In fact, it may be attached to almost any category except for the verb category, which makes this suffix “a sort of default way of forming abstract nouns from non-verbal categories in contemporary English” (Bauer et al. 2013, 246). It is involved in the production of new lexemes which are highly compositional and predictable in meaning, e.g. the word *redness* denotes the quality of being red in color.

The novel lexemes consisting of proper names as formal bases and the suffix *-ness* denote a particular abstract quality as well. The abstract quality is not accidentally selected





by speakers, but rather intentionally, as it embodies the very essence of the notion denoted by the base (i.e. a person, a place, an object or a period of time). These lexemes are fully understood in contexts:

(4)

a. In a way, Twitter lets us behind the curtain, and he did it in an authentic and enjoyable way. You didn't feel like he was grandstanding or putting on an act like others. He had a *Michigan-ness* about his Tweets. He kept it real. (NEWS: The Detroit News, 2019)

b. As at every step in the development of Diet Coke, which, incidentally, was and still is marketed with a lowercase d on the label to indicate "that its dietary qualities were secondary to its *Coke-ness*," the concept of the product was carefully calculated by the company. (MAG: American Heritage, 2006)

c. But there was this quiet day for which to be grateful. Blake wished he could find comfort in its *Sunday-ness*, but he could not. (FIC: Cain at Gettysburg, 2012)

d. The band is touring for its Here and Now album, which, like their other records, celebrates rowdiness and lust and a general uncorking of appetites. Halfway through the set things appear to be reaching maximum *Nickelbackness*. (WEB, Genius: The Nickelback Story – Businessweek, 2012)

e. And that's one reason we like to believe in genius. It gives us an excuse for being lazy. If these guys were able to do what they did only because of some magic *Shakespeare-ness* or





Einsteinness, then it's not our fault if we can't do something as good. (WEB, What You'll Wish You'd Known, 2012)

The five contextualized examples show that there is no single existing lexeme which serves as the model for the novel lexemes in (4). All the lexemes consisting of a proper name as the formal base and the suffix *-ness* share the same form-meaning correspondence with the established words ending in *-ness* such as *happiness*, *sleepiness*, *rudeness* etc. Thus, it may be proposed that they are all created schematically following a regular abstract pattern:

(5) < $[[x]_{\text{ProperName}_i} \textit{ness}]_{\text{N}_j} \leftrightarrow [\text{Quality of SEM}_i]_j$ >

Analogy: novel lexemes with proper names and the suffixes *-ness* and *-hood*

Some novel lexemes consisting of proper names and the suffix *-ness* are the outputs of analogy when they are modeled on the lexicalized expression *Your Highness*:

(6)

a. # COMES NOW WORD THAT MR. DONALD Trump is getting into the golf course business in a big way, with the imminent opening of his new Trump International Club in the Palm Beaches. To the prospect of *His Donaldness* being in golf, the true believer must have but one reaction: # Oh. My. God. # But fear not. (MAG: Forbes, 1998)





b. Q What kind of market can Barry Bonds expect? A The last time *His Barryness* hit the market, he received exactly zero offers to leave San Francisco. (MAG: Sporting News, 2006)

c. I think we may have got it all wrong, here is an exclusive interview with *His Charlieness* on impending climate catastrophe. (BLOG, BREAKING: The ‘secret’ list of the BBC 28 is now public – let’s call it, 2012)

d. Things just get more sublimely ridiculous from here. If you ever needed to make a case for how invaluable *Her Kateness* is to saving this show’s bacon circa 2019, this is exhibit A. DF # 5. (MAG: Rolling Stone, 2019)

e. And you must be Baby. Oh. Food. Yes, I prepared this spread for you, Miss Baby. Please help yourself... More, please. That took me all day to make. Please. I would love to make you more. So, *Your Baby-ness*, how does this evaluation work? (TV/MOV: Star vs. the Forces of Evil, Baby/Running with Scissors, 2017)

Even though the model *Your Highness* is not used in the immediate context, all the target words with proper names and the suffix *-ness* in (6) are preceded by a possessive adjective, which serves as the starting point for establishing the proportional relation and connection with the model, i.e. *Your Highness* :: Possessive Adjective + [ProperName-ness]_N. The analogical link is based on the semantic meaning of the model, but the target words are used in a derogatory tone. There is a sense of irony or the speaker’s disapproval in all examples.





The exact link between an established word and a novel lexeme is not always straightforward, and it may vary with the lexemes of the same form. The following novel lexemes ending in *-hood* can be linked to existing lexemes in three different ways:

(7)

a. We're a brotherhood. A brotherhood of Santas. A *Santahood*, if you will. (TV/MOV: *Deadbeat*, *The Ghost of Christmas Presents*, 2015)

b. *Obamahood*, steals from the responsible, gives to the irresponsible. (BLOG, *Bank Watch: Bank of America reports \$15.8 billion in homeowner relief*, 2012)

c. Christian didn't revel in his *Brando-hood*, friends and neighbors say. "I've known him eight years, and up until four years ago I didn't even know he was Marlon Brando's son," says Tommy Bina, co-owner of the Canyon Country Store, 15 minutes from the Brando compound. (NEWS: *USA Today*, 1990)

The novel lexemes *Santahood* (7a) may be categorized as an analogical formation given that there is an anaphoric model (i.e. *brotherhood of Santas*) which serves as the starting point for creating the proportional relation $N:[N-hood]_N :: \text{ProperName}:[\text{ProperName-hood}]_N$. Thanks to our extra-linguistic knowledge about a legendary outlaw who stole from the rich in order to help the poor, we may identify a link between *Obamahood* (7b) and the model which is not used in the immediate context, i.e. *Robin Hood*. *Obamahood* may be considered as an instance of creative analogy involving





the model *Robin Hood* and the schema in (1) following the proportional relation *Robin Hood* :: [ProperName-*hood*]_N. Finally, due to a lack of the model in the immediate context, *Brandohood* (7b) is most likely an output of the schema in (1) – the novel lexeme may be formally represented as a [ProperName-*hood*]_N morphological construction denoting a certain kind of quality, and it has the same form-meaning correspondence as other established words ending in *-hood* e.g. *childhood*, *adulthood*, *motherhood*, *sainthood* etc.

Second-order schema: novel lexemes with proper names and the suffix *-oid*

The suffix *-oid* is of Greek origin and most English complex words ending in *-oid* have a scientific tone to them (Bauer et al. 2013, 313). This feature can be traced to astronomical terms coined in the 18th and 19th century – the first recorded astronomical term ending in *-oid* is believed to be *asteroid* probably after the Greek word *asteroidēs*⁶ meaning *star-like*, *starry* from *aster-*, *astēr* “star, the plant *Aster amellus*, starfish” + *-oidēs* “resembling, having a specified form”. In COCA’s scientific journals and texts, the suffix *-oid* is attested with the proper names denoting astronomical objects; accordingly, the novel lexemes denote or describe a similar object such as *Plutoid*, *Saturnoid* and *Uranoid*⁷. With proper names that denote individuals, the novel lexemes ending in *-oid* are qualifying adjectives meaning ‘similar to/resembling’ a particular person, either in their style (8a) or behavior (8b):

(8)





a. Here it is the coarser, *Picassoid* drawings that stand out: for example, the untitled charcoal and pastel that brings together a disembodied and distorted profile from Picasso with the faucets from the artist's bathtub. (NEWS: New York Times, 1990)

b. On the surface his approach is scientific and slightly *Dawkins-oid*: in *Cracked* he briskly locates the source of addiction in "a tiny region of the brain called the nucleus accumbens," and suggests that the emotional dissociation of the trauma victim is "an evolutionary remnant of the risky strategy of feigning death." (MAG: Atlantic Monthly, 2009)

When the suffix *-oid* is added to the names of public figures or celebrities, the novel lexemes may sometimes convey strongly negative or mocking connotations:

(9)

a. The *Clintonoid* damage control continues. Trent Lott ushered two more Clinton judges through confirmation, thwarting an attempt by Oklahoma senator Jim Inhofe to block the nominations. (MAG: National Review, 2000)

b. We should deport all those brainless metrosexual *Obamanoid* idiots, who have NO concept of American History, to the lawn outside of the Hague. (BLOG, Obama Supporters Call for Secessionists to Be Deported, 2012)

c. Last summer Helsinki Watch reported more than 60 political trials in the first half of 1989 as Kafka's intense embryonic vision merged uncannily with the bizarre and deadly





machinations of *Stalinoid* sludge that suffocated the nation. (FIC: Massachusetts Review, 1990)

d. “U Smile” is a gorgeous *Jacksonoid* pianopumper, with Bieber suffering chivalric agonies – “Tour lips, my biggest weakness / Shouldn’t have let you know / I’m always gonna do what they say” – as his voice bears the melody aloft on a cluster of vowel sounds plump as Renaissance putti. (MAG: Atlantic Monthly, 2011)

The lexemes with proper names and the suffix *-oid* in (9) are used to indicate an existence of a particular ‘absurd’ notion similar to the original one. They might be analogically modeled on the word *android* in its science fiction use, i.e. *a mobile robot usually with a human form*. The sci-fi meaning of *android* is probably borrowed from Late Greek *androeidēs* “in the form of a man, like a man,” from Greek *andr-*, *anēr* “man, husband, human” + *-oeidēs*⁸. The idea of ‘android’ resemblance to a particular public figure (i.e. Bill Clinton, Barack Obama, Joseph Stalin, and Michael Jackson) is communicated via negative associations which are evoked by expressions such as *damage control* (9a), *brainless [...] idiots* (9b), *bizarre and deadly machinations* (9c), *suffering chivalric agonies* (9d). In this sense, the above lexemes describe individuals who lack reasoning (9a-c) or emotions (9d) like robots.

After looking into the examples in (8) and (9), it appears that there is a pragmatic difference between the two samples. This can be connected with the established words *asteroid* and *android* as possible model words. Nevertheless, there is the same





conventional form-meaning correspondence in all novel words, which suggests a regular abstract pattern i.e. a shared second-order schema. Without specifying pragmatic differences, the most general representation of the second-order schema creating novel lexemes with proper names and the suffix *-oid* is as follows:

$$(10) \quad < [[x]_{\text{ProperName}_i} \textit{oid}]_{A_j} \leftrightarrow [\textit{Similar to/Resembling SEM}_i]_j >$$

DISCUSSION AND CONCLUSION

The study presented above shows that novel lexemes with proper names and the suffixes *-ness*, *-hood* and *-oid* may be created via schema, analogy, and second-order schema as word-formation mechanisms for expanding the lexicon of English. Schemas operate at an abstract level following a regular and productive pattern as in the case of forming abstract nouns by adding the suffix *-ness* to proper names. Structurally, these words correspond to existing lexemes with adjectives as formal bases (such as *happiness*, *sleepiness* etc.), and semantically, they are fully understood in different contexts thanks to the available information in a productive schema. In analogical formations with proper names and the suffixes *-ness* and *-hood*, model words are rarely used in the immediate context; it is more likely that they are strongly implied since we can guess the exact source words by applying our extra-linguistic knowledge (e.g. *Your Highness* and *Robin Hood*). Schema and analogy are simultaneously active as a second-order schema in creating the





lexemes with proper names and the suffix *-oid*; we can link these lexemes to established words of Greek origin (e.g. *asteroid* and *android*), and yet associate them with a conventional form-meaning correspondence as if having been created by a regular abstract pattern.

These findings show that speakers rely on their knowledge of language in the production of new words – they are able to abstract away the linguistic information from existing lexemes and apply the “rules” of schema and analogy (and second-order schema) with atypical bases such as proper names. Novel lexemes are successfully interpreted thanks to our extra-linguistic knowledge related to proper names as formal bases or the model words. Thus, the creation of new words is a combined effect of the speaker’s access to the hierarchical lexicon comprising the linguistic information about schema and analogy, and their application of this linguistic knowledge together with the extra-linguistic knowledge they possess.





END NOTES

¹The theoretical framework of Construction Morphology follows the basic tenets of Construction Grammar (Masini): language is part of a speaker's mental or cognitive system and its units are constructions as form-meaning pairings which capture generalizations about the speaker's knowledge of language. Constructions are more closely defined as "learned pairings of form with semantic and discourse function, including morphemes or words, idioms, partially lexically filled and fully general phrasal patterns" (Goldberg 2003, 5), and they are investigated at all levels of grammar (including word-formation).

²This paper is based in part on the author's ongoing doctoral research *Proper Nouns as Word-formation Components in English* (University of Belgrade, Faculty of Philology).

³Booij rules out morphemes as constructions (as opposed to Goldberg) and emphasizes that "their meaning contribution is only accessible through the meaning of the morphological contribution of which they form a part" (2010, 15).

⁴Three groups of suffixes are found with proper names: verb-forming *-ize* and *-ify*, noun-forming *-(i)ana*, *-dom*, *-ese*, *-hood*, *-ness*, *-ism*, *-ist*, *-ite* and *-ship*, and adjective-forming *-esque*, *-free*, *-ish*, *-less*, *-like* and *-oid*. The words consisting of proper names as formal bases and these suffixes are studied in the author's doctoral research.

⁵The total number of extracted lexemes with proper names as formal bases is 149; there are 132 lexemes ending in *-ness*, 4 lexemes ending in *-hood*, and 13 lexemes ending in *-oid*. Both hyphenated and non-hyphenated forms are attested in COCA. Hyphenation depends on text writers or transcribers, and consequently doublets are often found. Nevertheless, the most frequent lexemes are non-hyphenated. This may be due to the fact that only the non-hyphenated forms are established words and dictionary entries (e.g. *Marxism*).

⁶(<https://www.merriam-webster.com/dictionary/asteroid>)





⁷ These lexemes may be used either as nouns or adjectives e.g. *the archetypical Plutoid* or *Uranoid characteristics*.

⁸ <https://www.merriam-webster.com/dictionary/android>

WORKS CITED

- Adams, Valerie. *Complex Words in English*. Harlow: Pearson Education/Longman, 2001.
- Aronoff, Mark. *Word-Formation in Generative Grammar*. Cambridge, MA: MIT Press, 1976.
- Bauer, Laurie. *English Word-Formation*. Cambridge: Cambridge University Press, 1983.
- Bauer, Laurie et al. *The Oxford Reference Guide to English Morphology*. Oxford: Oxford University Press, 2013.
- Booij, Geert. *Construction Morphology*. Oxford: Oxford University Press, 2010.
- . "Language use and the architecture of grammar: a Construction Morphology perspective." *Suvremena lingvistika*, 40 (78), 2014, pp. 193-212.
- Booij, Geert and Jenny Audring. "Construction Morphology and the Parallel Architecture of grammar." *Cognitive Science*, 41 (S2), 2017, pp. 277-302.
- Booij, Geert and Francesca Masini. "The role of second-order schemas in the construction of complex words." *Semantics of Complex Words, Studies in Morphology, Vol 3* edited by Laurie Bauer et al., Springer, 2015, pp. 47-66.
- Bybee, Joan. "Usage-based theory and exemplar representations of constructions." *The Oxford Handbook of Construction Grammar* edited by Thomas Hoffman and Graeme Trousdale, Oxford: Oxford University Press, 2013, pp. 49-69.
- Chomsky, Noam. *Current Issues in Linguistic Theory*. The Hague: Mouton & Co., 1964.
- Goldberg, Adel. "Constructions: A new theoretical approach to language." *Trends in Cognitive Sciences*, 7 (5), 2003, pp. 219-224.





Hilpert, Martin. "Corpus-based approaches to constructional change." *The Oxford Handbook of Construction Grammar* edited by Thomas Hoffman and Graeme Trousdale, Oxford: Oxford University Press, 2013, pp. 458-475.

---. *Construction Grammar and its Application to English*. Edinburgh: Edinburgh University Press, 2014.

Langacker, Ronald. *Foundations of Cognitive Grammar, vol 1: Theoretical Prerequisites*. Stanford: Stanford University Press, 1987.

Lee, Robert. *The Grammar of English Nominalizations*. The Hague: Mouton de Gruyter, 1960.

Lehmann, Christian and Edith Moravcsik. "Noun." *Morphology: An International Handbook of Inflection and Word-formation* edited by Geert Booij et al., Berlin/New York: Mouton de Gruyter, 2000. pp. 732-756.

Mattiello, Elisa. *Analogy in Word-formation: A Study of English Neologisms and Occasionalisms*. Berlin: Mouton de Gruyter, 2017.

Marchand, Hans. *The Categories and Types of Present-day English Word-Formation*, 2nd revised edition. Munchen: C. H. Beck, 1969.

van Marle, Jaap. "Rule-creating creativity: analogy as a synchronic morphological process." *Contemporary Morphology* edited by Wolfgang U. Dressler et al., Berlin: Mouton de Gruyter, 1990, pp. 267-273.

Masini, Francesca. "Construction Morphology." *The Oxford Handbook of Morphological Theory* edited by Francesca Masini and Jenny Audring, Oxford: Oxford University Press, 2019, pp. 365-389.

Plag, Ingo. *Word-formation in English*. Cambridge: Cambridge University Press, 2003.

Tuggy, David. "Schematicity." *The Oxford Handbook of Cognitive Linguistics* edited by Dirk Geeraerts and Hubert Cuyckens, Oxford: Oxford University Press, 2010, pp. 82-116.

SOURCES





“Android, *Adj.* (2)” *Merriam-Webster*, 2024. <https://www.merriam-webster.com/dictionary/android>. Accessed 03 November 2024.

“Asteroid, *N.*” *Merriam-Webster*, 2024. <https://www.merriam-webster.com/dictionary/asteroid>. Accessed 03 November 2024.

English-Corpora. Contemporary Corpus of American English (COCA), new version released March 2020, <https://www.english-corpora.org/coca/>. Accessed 03 November 2024.

