3 Word classes: Semantics, morphosyntax and pragmatics

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Abstract

The assignment of words into word classes is crucial to analyses of lexical conversion, and to grammatical analysis more generally. Word classes are theoretically based on morphosyntactic distribution, but in practice this does not yield a neat distinction between nouns, verbs and adjectives. In some languages, there is systematic flexibility in how lexemes appear in morphosyntactic contexts, which can be likened to an extreme degree of lexical conversion. Given these complications, in this chapter I turn to semantics and pragmatics, highlighting their relevance for a theory of word classes. Conversion involves redeployment of a lexeme from one context into another, and this can be understood as a pragmatic process that maintains semantic content while modulating information structure. This may account for cases where word classes deviate from semantic classes, and explain why some word classes are more semantically coherent than others.

Keywords

word class, conversion, syntactic typology, lexical semantics, pragmatics

3.1 Introduction

The notion of lexical conversion, defined as a lexeme changing class while maintaining the same form, obviously depends on some theory of word classes. But although the notion of word classes is crucial to studies of conversion, and to grammatical analysis more widely, attempts to establish a theoretically rigorous approach have proved complicated. Indeed, several linguists who have attempted rigorous analysis have found that word classes do not provide a solid foundation for linguistic theory:

> '[T]o say that a word is an adverb, for example, explains little and confuses much … The near-universal use of a very small number of labels has obscured the existence of deeper problems.' (Crystal 1967: 24)
>
> '[W]ord class is an epiphenomenon, it is not a basic concept but a derivative notion in linguistics.' (Kenesei 2020: 76);
>
> '[A] word class is not an essentialist category. A word class is a population: a spatiotemporally bounded set of historical entities.' (Croft 2023).

In this chapter I provide an overview of word-class analysis. Following the authors quoted above, I propose that word classes are either fuzzy categories, or descriptive approximations of a more complex reality. This is perhaps inevitable, since grammatical analyses are merely synchronic snapshots of complex adaptive systems. Taking a snapshot of such a system at any given point of time, certain word classes may be more or less clearly distinct (Anward 2000; Heine & Kuteva 2007; Hieber 2018; Bisang 2023).

This chapter can only provide a very partial summary of the enormous literature on word classes. I structure my account around three dimensions: morphosyntax, semantics, and pragmatics. Morphosyntax is the mainstream theoretical approach to word classes, as distributional phenomena based on syntagmatic or paradigmatic contexts (3.2). But despite its widespread application, the morphosyntactic approach faces well-known problems. If applied rigorously, distributional classes often turn out to be messy, gradient, or splinter into an unwieldy array of micro-classes. Comparative morphosyntax also highlights the

flexibility of some languages, for example where the same lexemes can be systematically used in both noun-like and verb-like morphosyntactic contexts. This flexibility can be understood as an extreme degree of lexical conversion, which at the same time brings into question the validity of a purported word-class distinction.

Turning to semantics (3.3), the current mainstream view is that this does not play a major role in defining word classes, but I will argue that this rejection has been too hasty. On the one hand, there are some word classes such as number words that do have a consistent semantic character; on the other hand, even the classes that are apparently most semantically heterogeneous, such as nouns, may be more semantically consistent in some languages than others. This may be the case especially in languages where conversion is not widely used, giving major word classes more semantic coherence.

In the final section (3.4), I will focus on the pragmatic character of word classes. Pragmatics has been discussed in some previous theories of word class, but its role still remains under-appreciated, and it sheds light particularly on conversion processes. The core insight of the pragmatic approach is that morphosyntactic word classes are not merely formal structures, but instead play distinctive roles in the pragmatic packaging of information. Conversion can be understood as a pragmatic process, redeploying a lexeme from one context into another, in a way that maintains semantic content while modulating information structure. If this approach is on the right track, then we do not need to treat word classes as purely formal facts of morphosyntactic distribution. Rather, we can motivate them as symptoms of a finely tuned communicative system, which does not just encode truth-conditional propositions, but also packages information according to discourse context.

A quick note on terminology: *Word class*, *part of speech*, *syntactic category* and *lexical category* are all near-synonyms in the literature, with slightly different connotations or theoretical affiliations. For consistency, in this chapter I will use the term *word class* throughout.

3.2 Morphosyntax

Most modern linguistic texts treat word classes as distributional phenomena: Words constitute a class to the extent that they occur in the same syntactic position, or are subject to the same morphological alternations. For example, nouns are defined based on contexts such as a preceding article (*the cat*); while verbs are defined based on contexts such as TAM affixation (*walk-ed*). The promise of this approach is to achieve a rigorous classification (Harris 1946; Wells 1947), independent of semantic criteria that may be considered unreliable or inconsistent (see next section). However, the morphosyntactic approach brings challenges of its own.

The morphosyntactic approach is based on identifying specific contexts, but typical analyses do not simply equate a word class with one particular context. Rather, a word class is a set of words (or lexemes) that collectively appear in one or more morphosyntactic contexts (François 2017). Adjectives in English provide a well-known example of multiple contexts. There are two main syntactic contexts involved, one being the adnominal position in a noun phrase, e.g. *black cat*, the other being the clausal predicate position, e.g. *the cat is black*. Another defining context is comparative and superlative suffixation, e.g. *black-er*, *black-est*. Theoretically, at least, the English adjective class is the set of words that can be used in all these contexts.

Distributional analysis depends not just on syntagmatic contexts, but also paradigmatic contexts. The examples above use syntagmatic contexts, that is to say, the material that precedes and follows the focal word or stem. Paradigmatic contexts must also be considered, for example when we consider verbs like *buy* and *win*. These are universally accepted as members of the verb class, even though they do not appear in the __$_V$-*ed* context, because they also have past forms, namely the non-concatenative forms *bought* and *won* (Corbett and Fedden 2016). This paradigmatic approach played a major role in classical word class traditions (Seuren 1998: 22), and must be considered alongside the syntagmatic methods favoured by twentieth century structuralists (e.g. Harris 1946; Wells 1947).

Although distributional word classes were developed with the aim of achieving a rigorous method of classification, true rigour seems impossible to achieve, as was recognised even in the foundational texts (e.g. Bloomfield 1933: 269). Morphosyntactic contexts, if rigorously applied, do not reliably yield a small number of well-defined classes like noun, verb, adjective, etc. Perfectly neat distributional classes would be achieved, if each word class had a set of morphosyntactic contexts that fully coincided in their lexical occupants, while also being completely disjoint from the lexical occupants of other morphosyntactic contexts. But this does not occur in practice, and neither is it clear to what degree natural languages even approximate such a design.

The case of adnominal and predicative adjective contexts mentioned above presents a well-known example of misaligning contexts. English adjectives have lexically specific distributions, such as *awake* being predicative only, and *entire* being adnominal only (Bolinger 1967). We might then split adjectives into subclasses according to these contexts. But further, cross-cutting splits will be required. For example, the comparative context mentioned above (e.g. *black-er*), does not apply to all adjectives, as some instead appear in a comparative phrase (e.g. *more beautiful*). Studies of this phenomena have found that, as the morphosyntactic contexts multiply, we may end up with so many micro-classes that we are arguably no longer dealing with conventional word classes at all, but instead characterising more specific syntactico-semantic features (Croft 2001: 36). Similar issues are encountered in attempting to develop distributional criteria for adjectives in Spanish (Fábregas 2020), or nouns in English (Crystal 1967). The application of distributional criteria tends to cause a splintering of traditional word classes into subclasses based on their heterogeneous compatibility with various types of determiners, affixes, and clausal positions. Some studies have tackled these phenomena directly by developing hierarchies of lexical subclasses (e.g. Sag, Wasow and Bender 2003: 52; Enfield 2004), while others conclude that word classes should be replaced by arrays of morphosyntactic features (Zeijlstra 2023).

Paradigmatic contexts may fare somewhat better in determining discrete word classes (see Thornton, this volume). For example, Latin, with its rich inflectional system, appears to have relatively distinct noun, verb, and adjective classes. But paradigmatic contexts are also vulnerable to overlaps. For example, the productive Spanish verb conjugation class *-ar* provides a paradigmatic context with lexical overlaps, so that stems such as *trabaj-* 'work' and *viaj-* 'travel' appear in both this paradigm (e.g. *viaj-ar*), and in the nominal paradigm (*viaj-es* 'PL') (Herce 2019: 57; see also Bauer and Valera, this volume; Thornton, this volume). Similarly, in Icelandic the most regular and segmentable *-a* class is also the most flexible in accommodating novel lexemes (Herce 2019: 63).

Although the morphosyntactic approach to word classes clearly has limitations, this does not imply that it is useless for grammatical analysis. The more sober conclusions are, firstly, that morphosyntactic classes are gradient categories (Aarts 2007; Keizer 2023), and secondly, that morphosyntactically defined classes involve complex lexical overlaps. While the original aim of the morphosyntactic approach was to provide more rigour than semantics, in practice is it not usually applied rigorously, but instead as a heuristic for defining approximate classes.

3.2.1 Word-class flexibility

Word-class flexibility has been a major topic in the typological literature on word classes, with implications for the notion of conversion. Since distributional criteria sometimes yield word classes with a substantial degree of lexical overlap, it is not surprising that the degree of this overlap should vary among languages. To continue with our adjective example: While these at least form a fuzzy class in English, there are other languages where adjectives are not considered to be a distributional class at all, due to systematic morphosyntactic overlaps with nouns (e.g. Martuthunira: Dench 1995), or verbs (e.g. Lao: Enfield 2004). As for nouns vs. verbs, there has been extensive debate on whether all languages have such a distinction (for an overview see Dixon 2009: Ch. 11). Languages with particularly extensive morphosyntactic overlap of nouns and verbs are known as *flexible word class* languages (Rijkhoff 2007; Hengeveld 2013; Peterson 2013). For example in Samoan, the same lexemes can typically occur in both nominal contexts, as in (1a) where *lā* 'sun' occurs with an article, and verbal contexts, as in (1b) where it occurs with a TAM particle (Rijkhoff 2007: 716).

(1) a 'Ua malosi le lā.
PERF strong ART sun
'The sun is strong.' (lit. 'The sun strongs')

b 'Ua lā le aso.
PERF sun ART day
'The sun is shining today.' (lit. 'The day suns') (Mosel and Hovdaugen 1992: 80)

One focus of debate on lexical flexibility has been semantic differentiation of nominal and verbal contexts. For example, Evans and Osada (2005: 357) point to semantic differences in the purportedly flexible language Mundari, such as the word *buru* meaning 'mountain' in nominal contexts and 'heap up' in verbal contexts (see also Valera 2014; Bauer 2018). They argue that such instances should be treated as distinct, homophonous lexemes, rather than a single lexeme with flexible word-class. However, this argument may be inconsistent with more general analytical practices in linguistics. Polysemy is of course a widespread feature of lexemes, and lexical polysemy is often linked to distinctive contexts. Take for example the polysemy of *catch* in *<u>catch</u> a ball* versus *<u>catch</u> a flight* (Pustejovsky 1995). Assuming that these involve the same lexeme *catch*, with semantic differences linked to distinct contexts, it is hardly surprising that a single lexeme should also have different meanings in distinct morphosyntactic contexts, as in the example of Mundari *buru*.

3.2.2 Flexibility and conversion

Debates about highly flexible languages like Samoan and Mundari partly hinge on the question of whether we are dealing with the same lexemes appearing in distinct contexts, or distinct homophonous lexemes, which belong to distinct word classes. This question becomes more salient when flexibility is pervasive, since, following the distributional approach outlined above, a high degree of overlap between the words filling purportedly

nominal and verbal contexts sheds doubt on the value of positing distinct classes. In languages where overlaps are less systematic, the word-class distinction remains stronger, and any observed overlaps are more readily described as lexical conversion, i.e. a process of change from one word-class to another (van Lier and Rijkhoff 2013). Conversion implies a process by which one lexeme is changed into another (Bauer and Valera, this volume).

This suggests that we can think of conversion and word-class flexibility as different regions of a single continuum. Conversion is the process that occurs when a language allows some lexemes to be redeployed into different morphosyntactic contexts, but with limited or constrained occurrence. More systematic redeployment is instead regarded as a case of word-class flexibility, which may imply the absence of a genuine word-class distinction. In the following sections, we will explore how these phenomena relate to the two other dimensions of word classes, namely semantics and pragmatics.

3.3. Semantics

While distributional criteria dominate in linguistic theory, the popular understanding of word classes among non-linguists and in school-level grammar instead focuses on semantic categories. The popular idea is that noun, verb, and adjective correspond to semantic classes of objects, events, and properties. Adverbs usually also get a mention as a fourth major word class (Rauh 2015), though I will set these aside for want of space.

The *objects, events, and properties* perspective has been largely deprecated in modern linguistic theory, where the standard view is that word classes are not semantically defined (e.g. Kroeger 2005: 34; but for notable exceptions see e.g. Anderson (1997) and Gärdenfors (2000; 2014)). For example, Gleason's introductory text calls *semantics* the 'least promising' approach to word classes (1965: 116), and recommends that linguists should instead focus on morphosyntactic structure, as described in the previous section. However, despite Gleason's warning, I will here further consider the semantic character of word classes, and how this relates to conversion processes.

The idea that nouns denote concrete objects is quickly undermined when we consider nouns in English. Perhaps the first that come to mind do indeed denote objects such as *cat* or *spoon*, but there are clearly many nouns that do not denote objects, such as *time*, *arrival*, *forgiveness*, or *friendship*. Even some nouns that at first appear to denote objects, such as *friend*, *team*, and *father* (apparently physical people), on further consideration can be seen as denoting relationships between objects, rather than objects as such. Conversion processes further exacerbate this lack of semantic coherence. For example, in English the frequent use of event-denoting words in nominal contexts, such as *walk* in *take a walk*, undermines the purportedly object-based semantic character of the noun class.

While semantic properties do not seem viable for establishing discrete word classes, the wholesale dismissal of semantics may be unduly influenced by word classes such as English nouns. This word class is characterised by many abstract meanings, and frequent instances of conversion. But there are other word classes that appear to be much more semantically coherent, and impervious to conversion. For example, in most languages there is a class of number words that has a clear and invariant semantic character (Crystal 1967; Lehmann 2013: 161). Personal pronouns are another distinctive word class that is semantically coherent. Some languages have other semantically coherent, morphosyntactically distinctive classes, such as lexemes for kin (Dahl and Koptjevskaja-

Tamm 2001), or body parts (Walsh 1996). Thus some word classes clearly do have a semantic character.

Adjectives are another interesting case. Again, in English this class is semantically heterogeneous. While its prototypical core may be properties of objects, such as *large* or *red*, it also includes epistemological words like *false*, quantifiers like *entire*, and modal words such as *likely* (Eckhardt 2006: 80). But we should not let English (or other European languages) set the terms of theoretical debate. A study comparing adjective classes in diverse languages finds that many languages have quite a small set of around 10–20 adjectives, involving quite consistent property concepts such as age, dimension, value, and colour (Dixon 1977).

Returning to nouns, it is unclear to what extent their semantic heterogeneity is a general property, or is particular to certain languages such as English. Although there does not appear to be systematic research on this topic, it has been claimed, for instance, that some Australian Aboriginal languages have 'scarcely any abstract nouns' (Dixon 1980: 272). An informal inspection of narrative samples from English and the Australian language Murrinhpatha suggests that they may indeed be quite different in the degree to which nouns are used to denote concrete objects. Using the same sample texts as Rumsey, Mansfield and Evans (2023), the English sample has mostly nouns with low concreteness, such as *vote*, *opponent*, (political) *party*, *month*, *chance*, and *scene*. By contrast, the Murrinhpatha sample has mostly highly concrete nouns such as *ku* 'animal', *thay* 'tree', and *kardu* 'person'. These may of course not be representative samples,[1] but the Murrinhpatha dictionary (Street 2012) also contains only a handful of abstract nouns (e.g. *le* 'spirit'), and event nouns (e.g. *kampa* 'laughter'). This suggests that the Murrinhpatha nominal context is less frequently targeted by conversion, compared to English with its frequent usages like *take a walk*. Although this evidence is informal and preliminary, it does raise the possibility that nouns may be used more consistently for concrete objects in some languages than in others.

Let us take stock of this section and the last. The morphosyntactic approach dominates current theories of word classes, though careful application of distributional yields fuzzy classes, and may become less viable in languages that more flexibly deploy lexemes into different morphosyntactic contexts. Meanwhile, the semantic approach to word classes has been largely dismissed in modern linguistic theory, due to word classes such as English nouns that lack any consistent semantic character. Nonetheless, there are some word classes that are quite semantically consistent, and some languages may have more semantically consistent classes than others.

3.4. Pragmatics

We now turn to pragmatics, which, I will argue, is an important and underappreciated dimension of word classes. I will also argue that this has particular relevance to conversion, which can be understood as a pragmatic process.

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[1] The Murrinhpatha sample includes a traditional dreamtime story, and a children's story. The English sample includes a novel and a memoir. It is quite possible that the samples focus on different topics, partly explaining the difference in the types of nouns used. But this could also reflect differences in typical discourse topics for Murrinhpatha and English speakers, in which case the sample might be considered representative of a genuine linguistic difference.

The morphosyntactic approach implies that word classes are only partially based on meaningful, communicative properties, being ultimately defined by purely formal grammatical configurations. This may even imply a somewhat stipulative character for word classes, as arbitrary lists of words that happen to appear in the same contexts. But this is somewhat surprising. Why would human language develop in such a way as to have arbitrary listings of words matched to grammatical contexts? Perhaps some of this could be accounted for by individual word histories, but a fully arbitrary system would seem odd. In this section I will suggest that word classes are not as strange as this: Even English nouns are not just a list of lexemes that happen to go with determiners. Instead, the pragmatic character of word classes suggests that they are in fact motivated phenomena of a communicative system.

Some of the best known works on the pragmatics of word classes have claimed that the major classes noun, verb, and adjective are associated with discourse functions of reference, predication and modification respectively (e.g. Dik 1989; Croft 1991; Bhat 1994; Croft 2001: 88ff). The idea is that even if membership of word classes is not semantically consistent, they may still be consistent in the kinds of pragmatic roles they play in discourse. However, the approach based on reference, predication and modification must be taken as a first approximation. The identification of these three purported pragmatic functions has been criticised as vague, for example noting the lack of detail on the claimed distinction between predication and modification (Smith 2010).[2] As we will see, there are some studies that provide more detail about the pragmatic functions of word classes, though this topic remains under-researched.

Important contributions to the pragmatic view of word classes were made by Hopper and Thompson (1984) in their cross-linguistic analysis of nouns and verbs, and by Langacker (1987b) in his notion of *construal*.[3] Hopper and Thompson identify the basic pragmatic function of nouns as to 'introduce a participant in discourse' and that of verbs as to '… assert the occurrence of an event in discourse' (Hopper and Thompson 1984: 708). But rather than proposing a simple mapping from a discrete word class to a discrete pragmatic function, they propose a more complex system in which introduction and assertion are the prototypical functions of morphosyntactically prototypical nouns and verbs, marked by morphosyntactic contexts such as determiners for nouns, or TAM for verbs. Their approach focuses on the role of words in an unfolding discourse. Concepts encoded as nouns, and especially those encoded with the most prototypical noun morphosyntax such as an article, are established by the speaker as likely targets of subsequent reference. Conversely, if a noun is used to make an assertion, it may lose some of the prototypical morphosyntactic marking, as in French and other languages where some nominal predicates do not permit articles:

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[2] Smith (2010) forcefully argues that the pragmatic approach to word classes is unsuccessful, however much of his critique is arguably about semantics, rather than pragmatics. For example, Smith criticises the idea that verbs and adjectives can be distinguished as expressing transitory and permanent predicates respectively (Givón 1979; Croft 1991), but this seems to miss the point that a pragmatic approach is about how words are used for interactional purposes, not the inherent properties of the predicates.

[3] Langacker (1987b) frames his work on nouns and verbs as a rehabilitation of semantic word classes, but since his focus is on how construals go beyond truth-conditional semantics, one can also read his work as a contribution to the pragmatic approach.

(2) Jean est (*un) étudiant.
Jean is (*a) student. (Hopper and Thompson 1984: 717)

Morphosyntax also correlates with pragmatics when we compare prototypical verbs, with finite inflection, to deverbal nominalisations. The finite verb context is used to make assertions (3a), while the nominalised context is used for presuppositions (3b; Cominetti 2023). The presuppositional role of nominalised verbs brings them closer to the prototypical role of nouns, establishing targets for subsequent reference (Hopper and Thompson 1984: 745), as in (3b).

(3) a The car *exploded*.
b The *explosion*$_i$ destroyed a garage. We heard it$_i$ from…

3.4.1. Pragmatics and conversion

While *explode~explosion* illustrates the use of morphology to distinguish a prototypical verb from its nominalised counterpart, conversion involves a similar process without overt morphological derivation. English is rich in conversion processes, as speakers have considerable latitude to redeploy lexemes between nominal and verbal positions. Given the pragmatic character of these morphosyntactic contexts, we can therefore see English conversion as a pragmatic affordance of the language.

One type of redeployment that has been described in detail is the way that, when an event can be understood as centrally involving some physical object, we can redeploy the object lexeme as a verb to assert the event (Clark and Clark 1979). For example, if a gap is closed over using bricks, we can conventionally redeploy the noun *brick* as a verb to depict the event (4a). But less conventional use of objects can also be verbalised according to discourse context. For example, if a task at hand is done using paper, we can depict that task by redeploying the noun *paper* as a verb (4b).

(4) a They *bricked* up the window.
b I *papered* that one already.

These two examples can be seen as different types of conversion. The verbal use of *brick* in (4a) is conventionalised, with corpus evidence showing plentiful examples going back to 1592 (*Oxford English Dictionary*, *brick* v.). But the verbal use of *paper* imagined in (4b) is a type of innovation that English speakers employ, where the interpretation of the action depends heavily on context. Presumably the *brick*-type example also once occurred in such innovative uses, which were frequent enough that the innovation was repeated and gradually conventionalised. Clark and Clark (1979) show that such contextual interpretations play a key role in English noun-to-verb conversion, and we should expect this to be the case for other conversion processes in other languages. This also draws a connection between pragmatics and the aforementioned semantic differences in conversion (e.g. Mundari *buru* ‘mountain’ vs. ‘heap up’). These may originate in innovations that initially require contextual interpretation to make sense, but gradually conventionalise into distinct nominal and verbal meanings (Hengeveld and Rijkhoff 2005).

Pragmatic analysis helps us to understand not only the differences between major word-classes, but also the distinct morphosyntactic contexts of the same class, such as head and modifier positions of nouns (e.g. *baby giant* vs. *giant baby*, Partee 1995) or attributive and predicative positions of adjectives (Thompson 1988; Kaiser and Wang 2021; Sasaki and Altshuler 2023). The attributive position tends to have a presuppositional role, for example helping to identify a cat that you know to be black, rather than asserting its blackness (5a). By contrast the predicate position asserts the property of blackness with respect to a

presupposed cat (5b). This highlights that pragmatic functions are not just about word classes in the traditional sense, but more specifically about morphosyntactic contexts, which are the basis of word class analysis.

(5) a The *black* cat ran away.
b The cat is *black*.

The pragmatic distinction between attributive and predicative adjectives also sheds light on the claim, mentioned above, that some English adjectives are only used predicatively (e.g. *the children are awake*, *the *awake children*). If the attributive context is used for presuppositions and the predicative context for assertions, then it may be that predicates such as AWAKE and ASLEEP are rarely relevant as presuppositions, but much more frequently as assertions. From this perspective, the morphosyntactic distribution is motivated, rather than being a purely formal listing of morphosyntactic compatibilities. This would predict that we might also find attributive phrases like *awake children*, if there are some pragmatic contexts that favour presuppositional wakefulness. This prediction is borne out by corpus examples, for example in a description of surgical procedures, where the wakefulness of children has already been established in the discourse:

(6) tracheal extubation in fully awake children was associated with a greater incidence of persistent coughing (von Ungern-Sternberg et al. 2013: 529) [4]

Finally, although morphosyntactic contexts clearly have pragmatic implications, this does not map neatly onto standard word classes. For example, while the nominalised *explosion* may have a presuppositional role in the subject position of a clause (7a, repeated from 3b above), it is more assertive when combined with an indefinite article either in a presentational construction (7b), or as the object of a psych verb (7c).

(7) a The explosion destroyed a garage.
b There was an explosion.
c We heard an explosion.

This suggests that morphosyntactic contexts contribute to the pragmatic framing of semantic content, alongside higher-level clausal structures, and lexically specific framing devices such as psych verbs. We should therefore not expect pragmatics to provide a neat distinction between nouns, verbs, and adjectives. But pragmatics does appear to have an important role in lexical flexibility, and therefore goes some way to motivating conversion as a communicative process. This partially explains why some word classes, such as English nouns, do not have a consistent semantic character: The pragmatic functions of a word class may complicate its semantic profile. Conversely, it may be that in languages with more a semantically consistent noun class, such as Murrinhpatha, the noun context has less of a pragmatic function. However, further investigation of this conjecture would require far more cross-linguistic research than is currently available on the pragmatic character of word classes.

3.5. Conclusion

Word classes are at the heart of linguistic theory, playing a central role in much of our descriptive and analytical practice. After decades of scrupulous consideration, one might therefore expect that we would have arrived at a comprehensive theory of word classes. Clearly this is not the case. But perhaps this is not so surprising: A comprehensive theory of word classes would perhaps amount to nothing less than a comprehensive theory of

[4] Example identified by a simple internet search for *awake children*.

grammar. If word classes are at the core of linguistic dynamics, then word classes are as complicated, and messy, as language itself.

In this chapter I have reviewed three main approaches to word classes: Morphosyntax, which is the mainstream current approach despite its limitations, semantics, which is the most popular outside of linguistics (and perhaps the least popular within linguistics), and pragmatics, which is a less-explored alternative approach. A nuanced understanding of word classes should be informed by all three of these approaches. Structuralist linguists, inspired by a vision of neatly interrelated parts, gave the morphosyntactic approach a forceful hold on modern linguistic theory. But formal distributions only get us so far. If word classes really did apply a neat, discrete classification structure to all languages, this might validate a conception of grammar as radically separate from other parts of the mind. But since the formal distributions are messy and dynamic, we must ask instead what is driving the dynamics. In answer to that I have posed two main arguments. On the one hand, even if semantics does not consistently characterise every word class in every language, there is still evidence that word classes are driven by semantically similar concepts. Therefore, we should not ignore the role of semantics, and indeed we might study the degree of semantic (in)consistency more carefully as an interesting comparative dimension of word classes. Secondly, the semantic incoherence of word classes such as English nouns is not just an arbitrary fact of lexical listing. Instead, it is at least partly driven by the pragmatic functions of information in discourse contexts, though more research is required in this area.

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