

Same, different, and other:
The microsyntax of identity adjectives

Will Oxford

University of Toronto

November 28, 2010

SUBMITTED TO THE DEPARTMENT OF LINGUISTICS
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR
THE DEGREE OF DOCTOR OF PHILOSOPHY
AT THE UNIVERSITY OF TORONTO

Generals paper 1

Subject: Syntax

Supervisor: Elizabeth Cowper

Readers: Diane Massam, Susana Bejar

Same, different, and other: The microsyntax of identity adjectives*

Will Oxford
University of Toronto
November 28, 2010

Abstract

Although the words *same*, *different*, and *other* are usually referred to as adjectives, their syntactic properties differ significantly from those of prototypical adjectives: on a range of criteria, they pattern with comparative adjective forms rather than simple forms. This paper explains the syntactic patterning of *same* and *different* by assigning them to the functional category Degree rather than the lexical category Adjective. The unique properties of *other* are attributed to a more determiner-like functional category in the DP. The paper discusses the implications of the proposed analysis for syntactic change, grammaticalization in the DP, and typology.

Introduction

The empirical domain of this paper is a group of nominal modifiers that I will refer to as FUNCTIONAL ADJECTIVES, such as *same*, *other*, *first*, *last*, *mere*, *utter*, *main*, and *entire*. The paper has two goals: first, to argue that functional adjectives are grammatically distinct from prototypical adjectives like *large* or *beautiful*, and second, to develop a syntactic analysis of one subset of functional adjectives: the English IDENTITY ADJECTIVES *same*,

*This paper has benefited hugely from the careful advice of my supervisor Elizabeth Cowper and reader Diane Massam. I am also grateful for helpful feedback from audiences at the University of Toronto, the Banff Workshop on Nominal Dependents, and the CLA annual conference, particularly Arsalan Kahnemuyipour, Lisa Travis, and Yuri Zabbal. The Innu-aimun component of the paper stems from research that I conducted under the guidance of Phil Branigan and Marguerite MacKenzie at Memorial University of Newfoundland. All errors and omissions are, of course, my own responsibility.

different, and *other*. The paper is organized as follows. Section 1 makes the case for recognizing functional adjectives as a distinct class, drawing on evidence from the Algonquian language Innu-aimun. With this fundamental point made, the remainder of the paper focuses more narrowly on the English identity adjectives. Section 2 provides a description of the identity adjectives, which turn out to have much in common with comparative adjective forms. In light of this similarity, Section 3 presents an analysis of comparative forms based on the literature. Section 4 builds upon this analysis in order to account for the syntax of identity adjectives. The central proposal is that *same* and *different* belong to the functional category Degree rather than the lexical category Adjective. Section 5 examines the implications of the proposed analysis for grammaticalization and typology.

1 The distinctness of functional adjectives

This section presents the fundamental claim of this paper: that functional adjectives should be recognized as grammatically distinct from prototypical adjectives. To support this claim, I examine a case study from Innu-aimun, an Algonquian language which appears to lack adjectives altogether, but which does, in fact, have a small class of nominal modifiers (§1.1). Although the English correlates of these modifiers (*same*, *other*, *first*, *last*) are normally labelled as adjectives, their grammatical properties differ from those of prototypical adjectives (§1.2). At the same time, they are grammatically similar to their Innu-aimun counterparts (§1.3). Taken together, these facts suggest that we are looking at the same category in both languages, but that this category is distinct from that of prototypical adjectives. The section concludes with an overview of existing research on functional adjectives (§1.4).

1.1 Adjectives in a language without any

The following case study examines Innu-aimun (Montagnais), an Algonquian language with over 10,000 speakers in Quebec and Labrador (Thorburn 2005). Algonquian lan-

guages are generally said to have only three major word classes: nouns, verbs, and particles (Bloomfield 1946), the latter class being a cover term for all function words. Most “adjectival” notions are expressed using intransitive verbs rather than a separate lexical category of adjectives. Alongside “verb-like” verbs such as *pimâteu* ‘s/he walks,’ Innu-aimun also has “adjective-like” verbs such as *uâpishîu* ‘s/he is white.’ As I discuss further in Section 5.3 on typology, there are no obvious reasons to regard these adjective-like verbs as a distinct grammatical category from other Innu-aimun verbs.

In general, then, Innu-aimun lacks adjectives and uses verbs instead. Despite this fact, however, a closer look reveals that Innu-aimun nevertheless has two classes of dedicated nominal modifiers. The first is a small set of clitic-like elements that Algonquianists refer to as PRENOUNS, exemplified in (1).

(1) PRENOUNS: *mishta-* ‘big,’ *tshishe-* ‘mature, great,’ *minu-* ‘good,’ *miku-* ‘red’

Prenouns are not independent words, as they are firmly bound to the noun stem. Their meanings are prototypically adjectival, and I will suggest in Section 5.3 that, if anything, it is prenouns that should be identified as the “true” adjectives of Innu-aimun.

Importantly, however, prenouns are not the only class of nominal modifiers in Innu-aimun. In a detailed study of the particles of the dialect spoken in Sheshatshiu, Labrador (Oxford 2007, 2008), I found that there is a small class of previously undocumented adjectival particles, which fall into two main semantic groups:

- (2) a. IDENTITY ADJECTIVES: *peikâtâu* ‘same,’ *kutak* ‘other’
b. ORDINAL ADJECTIVES: *ushkat* ‘first,’ *mâshsten* ‘last’

These “adjectives” are morphosyntactically distinct from prenouns, as they are independent words rather than bound morphemes. They are also semantically distinct, as their meanings are more functional than descriptive. Their syntactic patterning is illustrated in (3). Like their English counterparts, they usually occur within the DP preceding the noun.

- (3) a. *Utâkushît* [DP **peikûtâu** *nîsh*^u *auenitshenat*] *nuâpamâtîht*.
 yesterday [DP **same** two person.3P] 1.see.PAST.1>3P
 ‘I saw the same two people yesterday.’ (Oxford 2008: 90)
- b. *Ekue âshûpaniht* [DP *nenû* **kutakanû** *ûtshînû*].
 then cross.to.CONJ.3P [DP that.3’S **other**.3’S mountain.3’S]
 ‘And so they crossed to the other mountain.’ (Oxford 2008: 59)
- c. [DP **Ushkat** *mîtsuâp*] *tshe uâpâtamin, pîtutshe anite*.
 [DP **first** house] IC.FUT see.CONJ.2 enter.IMP.2 the.LOC
 ‘The first house you will see, go in there.’ (Oxford 2008: 90)
- d. *Eukuannua nenua* [DP **mâshTEN** *nisht*^u *tshîmana*].
 that.is.3’P that.3’P [DP **last** three match.3’P]
 ‘Those are the last three matches.’ (Oxford 2008: 90)

1.2 Lexical versus functional adjectives

Given the existence of the nominal modifiers in (3), should we conclude that Innu-aimun actually does have a full-fledged word class of adjectives, and is therefore typologically the same as English in this respect? Clearly, this conclusion would fail to capture an important generalization: although the English counterparts of the Innu-aimun words in (3)—*same*, *other*, *first*, *last*—are normally labelled as adjectives in dictionaries and by linguists, they are all quite different from prototypical English adjectives such as *large*, *happy*, or *beautiful*. The table in (4) summarizes some of the major differences between the two classes of English adjectives, which I will refer to as “lexical” and “functional” adjectives.

(4) LEXICAL VS. FUNCTIONAL ADJECTIVES IN ENGLISH

LEXICAL ADJECTIVES (<i>large, happy, beautiful</i>)	FUNCTIONAL ADJECTIVES (<i>same, other, first, last</i>)
Take adverbial degree modifiers ¹ <i>the really large house</i>	No adverbial degree modifiers <i>*the really same/other/first house</i>
Have comparative and superlative forms <i>the larger / more palatial house</i> <i>the largest / most palatial house</i>	No comparative or superlative forms <i>*the samer / more same house</i> <i>*the samest / most same house</i>
Strongly marked before a numeral <i>#the large <u>three</u> houses</i> (cf. <i>the <u>three</u> large houses</i>)	Unmarked before a numeral <i>the same/other/first <u>three</u> houses</i>
Rich lexical/encyclopedic content	Simple lexical content
Open class	Closed class(es)

The term “functional adjectives” has antecedents in the work of Kayne (2005:13), who includes “functional adjectives like *other, same, good*” in his list of functional elements that are plausibly related to syntax, and Cinque (2005:327), who mentions *same* and *other* as “functional adjectives” in passing, noting that they remain to be added to his DP hierarchy. The differences noted in (4) provide ample grounds for recognizing functional adjectives as a distinct group of nominal function words, more akin to demonstratives or quantifiers than to lexical adjectives. This move allows for an elegant statement of the cross-linguistic facts described above: while English has both lexical and functional adjectives, Innu-aimun has only functional adjectives.

¹The term “adverbial degree modifiers” is intended to refer to deadjectival modifiers such as *extremely, incredibly, or tremendously*, but not the modifier *very*, which is distinct. Unlike deadjectival modifiers, *very* can modify most functional adjectives (*the **very** same/first/last*) and, in fact, can even modify nouns (*the **very** man I want to see*). I therefore set *very* aside, as it is not diagnostic of the distinction in question.

1.3 Similarities between English and Innu-aimun functional adjectives

Despite the vast typological distance between English and Innu-aimun, there are notable grammatical parallels between functional adjectives in the two languages. Syntactically, the order of elements within the DP is comparable in both languages. Based on examples from texts and my fieldwork, the order given in (5) appears to be the default word order in the Innu-aimun DP (Oxford 2008: 93).

(5) Dem > Adj_F > Num > Prenoun² > N

This order closely aligns with the unmarked order of the corresponding elements in English:

(6) Dem > {Adj_F, Num} > Adj_L > N
those other three happy people
three other

This correspondence suggests that functional adjectives are a possible addition to the work of Greenberg (1963) and Cinque (2005) on cross-linguistic regularities in DP word order.

Morphologically, there are distinctions within the group of functional adjectives in both languages. In Innu-aimun, the functional adjective *kutak* ‘other’ is an exception: like demonstratives, it inflects to agree with the head noun for gender, number, and obviation, as exemplified in (7). All other Innu-aimun functional adjectives are uninflected particles.

(7) *kutakat* ‘other (animate plural, proximate)’ (Oxford 2008:57)
kutaka ‘other (animate singular/plural, obviative)’
kutakanû ‘other (inanimate singular, obviative)’

English *other* also exhibits exceptional behaviour: it fuses with the indefinite article to form *another*. In both languages, then, the word meaning ‘other’ seems more determiner-like than the other functional adjectives: in Innu-aimun, it can carry D-like inflection, while in English, it can fuse with D. I return to this observation in Section 4.4.

²As mentioned above and discussed further in Section 5.3, Algonquian pre-nouns may actually be the closest typological parallel to English lexical adjectives.

1.4 Functional adjectives in the literature

The preceding sections have argued for the value of a grammatical distinction between functional adjectives and lexical adjectives. To my knowledge, this exact distinction has not previously been made in the literature. However, it is not a new observation that some adjectives lack the full range of prototypical adjectival behaviour; in particular, the fact that certain adjectives can function attributively but not predicatively is often noted in the descriptive literature (e.g. Bolinger 1967; Quirk, Greenbaum, Leech, and Svartvik 1985; Huddleston and Pullum 2002). The list of “defective adjectives” in (8) combines such “attributive-only” adjectives with the functional adjectives discussed above. The rough classification suggested here is for descriptive convenience only—the development of a grammatically and semantically adequate classification requires further work.

- (8)
- a. Identity adjectives: *same, other*
 - b. Ordinal adjectives: *next, last, previous, subsequent, preceding, further*
 - c. Degree adjectives: *utter, sheer, outright*
 - d. Significance adjectives: *main, chief, principal, mere*
 - e. Extent adjectives: *entire, whole*
 - f. Temporal adjectives: *future, then*

Which of the classes in (8) qualify as functional adjectives? At this point, it becomes clear that “functional adjective” is a cover term rather than a coherent grammatical category. Although the term has real content—it is intended to indicate that the nominal modifiers in question are function words rather than content words—it turns out that most of the classes in (8) have their own unique behaviour. Some may truly be functional categories, as I will argue for the identity adjectives; others may instead be lexical adjectives whose grammatical limitations follow from semantic factors, as Bolinger (1967) proposes. Consequently, each of the classes in (8) merits its own investigation. In the preceding sections, I discussed

both identity adjectives and ordinal adjectives, as these were the two classes that arose from the typological comparison of English and Innu-aimun. The remainder of the paper, however, narrows its focus to only the first category in (8): the English identity adjectives.

Although the term “identity adjectives” is my own coinage, there has been previous research on *same*, *different*, and *other* in two fields: formal semantics and functional grammar. Carlson (1987), Moltmann (1992), Beck (2000), Alrenga (2005, 2007, 2006, 2009), and Brasoveanu (2008) have examined the semantics of *same*, *different*, and/or *other* from various angles. This work has been purely semantic, concerning matters such as the distinction between identity and similarity, the nature of identity, and the orientation of the comparison—whether it is sentence-internal, as in *Mary and John met different men [from each other]*, or sentence-external, as in *Mary and John met different men [from Sue]*. For the purposes of the current paper, it is most important to note the basic denotations for *same* and *different* discussed by Alrenga (2007:14–16 and 2009):³

- (9) a. $[[\textit{same}]] = \lambda y. \lambda x [x = y]$
b. $[[\textit{different}]] = \lambda y. \lambda x [x \neq y]$

Alrenga (2007) shows these simple denotations to be inadequate, as *same* and *different* are in fact able to encode similarity in addition to identity (although their identity function is most commonly recognized). Nevertheless, since the current paper is concerned with the syntax of *same* and *different* rather than with their semantics, I will adopt the denotations in (9) as a crude approximation sufficient for the purposes at hand.

Turning from formal semantics to functional grammar, identity adjectives have been studied extensively by Breban and colleagues (Breban 2003; Breban and Davidse 2003; Breban 2006; Davidse, Breban, and van Linden 2008). The central claim of this work, as expressed in Breban and Davidse 2003, is that all adjectives in the semantic field of similarity and difference occupy a continuum of grammaticalization, with fully lexical adjectives

³The formulation given in (9) is that of Alrenga 2009.

at the starting point and referential “postdeterminers” at the endpoint. Based on a statistical corpus study, Breban and Davidse arrive at the grammaticalization rates summarized in (10), which reflect the proportion of referential versus lexical uses of each adjective.

(10) GRAMMATICALIZATION OF ADJECTIVES OF SIMILARITY AND DIFFERENCE

- a. Fully grammaticalized: *other, same*
- b. Largely grammaticalized: *comparable*
- c. Majority of occurrences are grammaticalized: *equal, similar, further, different*
- d. Minority of occurrences are grammaticalized: *additional, identical, related*

Though not couched in a statistical framework, my analysis will echo the insight that varying stages of grammaticalization are in play in the syntax of identity adjectives.

1.5 Summary: The distinctness of functional adjectives

In this section, I have proposed that it is beneficial to distinguish between lexical and functional adjectives. This distinction allows us to capture the cross-linguistic patterning of nominal modifiers in English and Innu-aimun, and it provides a useful cover term for a range of non-prototypical adjectives in English. Narrowing my focus to one class of functional adjectives, the English identity adjectives *same, different, and other*, I have shown that extensive work has been conducted in formal semantics and functional grammar. Notable by its absence, however, is any similar work in formal syntax, the concern of the current paper. Is this because the syntax of identity adjectives is simply uninteresting? In the remainder of the paper, I intend to show that this is not the case—as we will see, identity adjectives provide a window onto various interesting aspects of the structure of the DP.

2 Properties of English identity adjectives

A necessary prelude to the analysis of identity adjectives is a description of their grammatical properties. In this section I offer six descriptive generalizations regarding identity adjectives, based on material from Quirk, Greenbaum, Leech, and Svartvik 1985 and Huddleston and Pullum 2002 together with my own observations. The general trend that emerges is that *same*, *different*, and *other* have extensive similarities with comparative adjective constructions. In itself, this observation is not new: while discussing *other*, Huddleston and Pullum (2002:1145) remark that “we are here not far removed from the central type of comparative construction.” Similarly, regarding *same* and *different*, Alrenga (2007:2) notes “the deep affinity that such constructions display towards scalar comparatives.” The current paper differs from these works, however, in its use of this striking parallel. Huddleston and Pullum note the parallel simply as a descriptive fact, while Alrenga employs it as a starting point for a comparative-based analysis of the semantics of *same* and *different*. In contrast, it is the syntactic implications of this parallel that are explored in the current paper.

2.1 Generalization 1: Identity adjectives have the same word order as comparative adjective forms

As shown in (11), *same*, *different*, and *other* can either follow or precede a numeral. The different orderings appear to correlate with differences in semantic scope, as discussed by Breban and Davidse (2003:245).

- (11) a. (i) We saw those three **same** men yesterday.
(ii) We saw those **same** three men yesterday.
- b. (i) Choose three **different** cards.
(ii) Choose a **different** three cards.
- c. (i) The three **other** vehicles were damaged.
(ii) The **other** three vehicles were damaged.

In contrast, absolute (i.e. non-comparative) adjectives do not share this ordering flexibility. In pre-numeral position, an absolute adjective is possible, but quite strongly marked:

- (12) a. The three **large** vehicles were damaged.
b. #The **large** three vehicles were damaged.

However, if the adjective is inflected in the comparative form, it gains the same flexibility of order that the identity adjectives have:

- (13) a. The three **larger** vehicles were damaged.
b. The **larger** three vehicles were damaged.

In this respect, then, identity adjectives are more like comparative adjectives than absolute adjectives, despite not being morphologically marked as comparative.

2.2 Generalization 2: *Same* and *different* can occur with comparative clauses; *other* does not

Same can occur with a comparative *as*-clause, just like an equative *as*-comparative:

- (14) a. Sue gave the **same** answer [**as I expected** ____].
b. Sue gave **as good** an answer [**as I expected** ____].

Different can occur with a *than*-clause, just like a non-equative comparative:⁴

- (15) a. Sue gave a **different** answer [**than I expected** ____].
b. Sue gave a **better/more thorough** answer [**than I expected** ____].

In contrast, *other* does not take a comparative clause:

- (16) *Sue gave **another** answer [**than I expected** ____].

⁴(15a) illustrates the *different than* construction. *Different from* is discussed in Section 2.6.

It may seem surprising that *other* cannot take a *than*-clause, since the string *other than* is indeed possible in certain syntactic contexts:

- (17) a. I need to speak with someone [**other than** John].
b. [**Other than** these two chips], the finish is flawless.

Based on examples like (17), Huddleston and Pullum (2002:1145) suggest that *other than* is actually a compound preposition similar in meaning to *besides*, and that it fossilizes an earlier state of affairs in which *other*, like *different*, could indeed select a *than*-clause. As evidence of this earlier stage, consider the following example from 1656 (emphasis mine):

- (18) Neyther is the church reformed in our dayes, **another** church **than** that..deformed in the dayes of our fore-fathers.⁵

It appears, then, that in the past, the grammatical properties of *other* were closer to those of present-day *different* than they currently are.

2.3 Generalization 3: *Same* is obligatorily definite

As shown in (19), *same* must be accompanied by the definite article.

- (19) a. Both cars are produced in **the same** kind of facility.
b. *Both cars are produced in **a same** facility / in **same** facilities.
(cf. **an identical** facility, **identical** facilities)

In this respect, *same* is similar to superlative forms, which are usually accompanied by *the*, as indicated in (20).

- (20) a. Mary is **the best** student.
b. #Mary is **a best** student.

⁵Source: “another, *a., pron.*,” *The Oxford English Dictionary*, 2nd ed., 1989, Oxford University Press.

Note, however, that given an appropriate context, an indefinite superlative can become acceptable (Herdan and Sharvit 2006). For example, (20b) improves if we imagine a convention attended by the best student from each school. In contrast, this does not appear to be possible for *same*, regardless of the context. For example, the intended meaning of (19b) above is clear, and can be paraphrased with *identical*, but (19b) remains fully unacceptable.

2.4 Generalization 4: *Same* and *different* take different degree modifiers; *other* takes none

As shown in (21), *same* takes the same degree modifiers as equative comparatives:

- (21) a. Mary's answers were **just/exactly** the same as I expected.
b. Mary's answers were **just/exactly** as good as I expected.

Same can also take the same degree modifiers as superlatives:

- (22) a. John had the **absolute** same problem as I did.
b. Yesterday was the **absolute** most beautiful day of the year.

Note that the grammatical categories associated with the modifiers of *same* are in opposition: an adjective can be comparative or superlative, but not both (**as biggest as*). Unless we make the curious proposal that *same* is grammatically both comparative and superlative, the overlap in its modification options suggests that the availability of degree modifiers is based on semantic properties of the lexical item rather than its grammatical features.

In contrast to *same*, *different* takes the same degree modifiers as *non*-equative comparatives, as shown in (23).

- (23) a. Sue gave a **far/much/way** different answer than I expected.
b. Sue gave a **far/much/way** more thorough answer than I expected.

Unlike other functional adjectives, *different* can also take adverbial degree modifiers such as *extremely* or *remarkably*. However, I will argue in Section 2.6 that such cases involve a version of *different* that is a true lexical adjective, not a functional adjective.

Although the meaning of *other* is similar to that of *different*, it cannot take the same degree modifiers, as shown in (24). In fact, it appears that *other* does not take degree modifiers at all.

(24) *John came up with a **far/much/way** other solution.

However, this was not the case in the past. In the following examples from the *OED*, *other* is modified by *quite* and *far* (emphasis mine).⁶

- (25) a. I thought it was fine to be a Gentlewoman indeed, for I had **quite other** Notions of a Gentlewoman now. (published 1722)
- b. **Far other** scene her thoughts recal. (published 1808)
- c. This Italian poetry is in a world **far other** from ours of to-day. (published 1879)

This is further evidence that the properties of *other* were once similar to those of present-day *different*, a point which also arose in the discussion of *other than* in Section 2.2.

In summary, the modifiers of *same* pattern with both equative comparatives and superlatives while those of *different* pattern with non-equative comparatives. *Other* apparently once behaved like *different*, but no longer takes any degree modifiers at all.

2.5 Generalization 5: *Same* and *different* can be predicative; *other* cannot

The ability to function predicatively is shared with lexical adjectives.

- (26) a. These two keys are **the same**.
- b. These two keys are **different**.
- c. *These two keys are **other**.

⁶Source: “other, *adj.*, *pron.*,” *OED Online*, September 2010 draft revision, Oxford University Press.

As is the case for *same* in general, predicative *same* is obligatorily accompanied by *the*. This pattern is also possible (though not obligatory) for predicative superlatives:

(27) These two keys are **the best**.

2.6 Generalization 6: There is a distinct class of “lexical comparatives”

In addition to *same*, *different*, and *other*, there is another class of adjectives, exemplified in (28), whose meanings also have a comparative component.

(28) *similar, comparable, identical, akin, distinct, separate, superior, inferior*

However, unlike *same/different*, the *similar/distinct* set does not share the hallmark grammatical property of a comparative construction—the ability to take a comparative clause:

- (29) a. *Sue’s answers were **distinct** [_{CP} than I expected ___].
(cf. **different/better** [_{CP} than I expected ___])
- b. *Sue’s answers were **similar** [_{CP} as I expected ___].
(cf. **the same/as good** [_{CP} as I expected ___])

Rather, the *similar/distinct* set must express the standard of comparison using a PP:

- (30) a. Sue’s answers were **distinct** [_{PP} from John’s / from what I expected].
- b. Sue’s answers were **similar** [_{PP} to John’s / to what I expected].

Based on this difference, I conclude that unlike comparative adjective forms and identity adjectives, the *similar/distinct* adjectives are not grammatically comparative. Instead, comparison is simply a component of their lexical meaning—they lexically select a certain type of PP, just as many other adjectives do:

- (31) a. LEXICAL COMPARATIVES: *distinct/separate (from), similar/identical (to), superior/inferior (to)*
- b. OTHER ADJECTIVES: *curious (about), fond (of), smitten (with), responsible (for), angry (at), rich (in), keen (on)*


Note that although *different* patterns with functional *same* in that it can take a comparative clause, it also patterns with lexical *distinct* in that it can take a *from*-PP:

- (32) a. Sue gave a **different** answer [_{CP} **than** I expected].
 b. Sue gave a **different** answer [_{PP} **from** what I expected].


This behaviour suggests that *different* should be divided into two “flavours”: lexical *different*, which selects a *from*-PP, and functional *different*, which selects a *than*-clause. As evidence for such a split, recall that functional adjectives, unlike lexical adjectives, do not have comparative forms:

- (33) **samer*/**more same*, **otherer*/**more other*

If there are indeed two versions of *different*, we would expect the comparative form *more different* to be possible with lexical *different from*, but not with functional *different than*. An example of lexical *more different from* is given in (34).⁷

- (34) LEXICAL *DIFFERENT*: COMPARATIVE IS POSSIBLE
 Sue is **more different** [_{PP} **from** what I expected] [_{CP} **than** I was prepared for].
- 

In (35), the same example is recast using functional *more different than*. Although the intended meaning is the same, the sentence is ungrammatical.

- (35) FUNCTIONAL *DIFFERENT*: COMPARATIVE IS NOT POSSIBLE
 *Sue is **more different** [_{CP} **than** I expected] [_{CP} **than** I was prepared for].
- 

It seems, then, that while lexical *different* has a comparative form, functional *different* does not—exactly what the proposed analysis predicts.

⁷I have drawn lines to aid comprehension of this unwieldy but grammatical sentence, which states that Sue is different from what I expected, and that the extent of the difference is greater than I was prepared for.

Similar evidence comes from superlative forms, which are also impossible for functional adjectives (**samest/*most same*, **otherest/*most other*). As shown in (36), lexical *most different from* is possible, while functional *most different than* is not.

- (36) a. John gave the **most different** answer [_{PP} **from** what I expected].
b. *John gave the **most different** answer [_{CP} **than** I expected].

The evidence from comparatives and superlatives therefore supports the proposal that English has both lexical and functional versions of *different*. All subsequent references to *different* in this paper should be understood to refer to functional *different*.

2.7 Summary: Properties of English identity adjectives

Same, *different*, and *other* share a striking syntactic property: their word order is like that of comparative adjective forms rather than absolute forms. A closer look at their co-occurrence properties reveals extensive similarities between *same* and equative comparatives (as well as superlatives) and between *different* and non-equative comparatives. *Other*, in contrast, lacks many of the properties in question altogether. The grammatical distinctness of the identity adjectives is made especially clear by the existence of a set of “lexical comparatives”—lexical adjectives which have comparative meanings, but which cannot engage in the same grammatical patterns as comparative forms and identity adjectives. Closer examination reveals that *different* has both lexical and functional versions.

3 Analytical background: The syntax of attributive adjectives

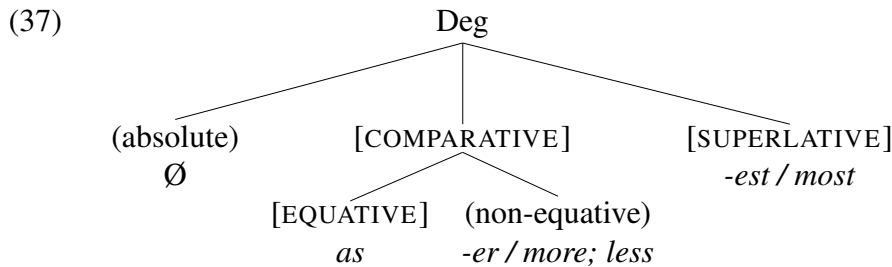
Due to the extensive similarities between identity adjectives and comparatives, it is logical to use comparatives as a starting point for the analysis of *same*, *different*, and *other*. In this section, I sketch an analysis of prototypical attributive adjectives in their absolute, comparative, and superlative forms, laying the foundation for the analysis of identity adjectives

that I will propose in Section 4. Comparative adjectives have received a great deal of attention in the literature, from the seminal work of Bresnan (1973) to more recent studies by Corver (1997), Kennedy (1999), Matushansky (2002), and Bhatt and Pancheva (2004), among many others. For the most part, I will follow the analysis proposed by Kennedy (1999), who takes care to provide an integrated account of syntax and semantics.

I begin by adopting a set of grammatical features to characterize the properties of the Degree morphemes that head adjectival constructions (§3.1). This is followed by an outline of the semantics of these Degree heads (§3.2) and an illustration of the syntactic structures for each of the relevant attributive adjectival constructions (§3.3).

3.1 Feature set for adjectival constructions

I follow Kennedy (1999) in assuming that all adjectival constructions are headed by a morpheme of the category Degree (Deg). For convenience, I will adopt the set of grammatical features in (37), which is sufficient to capture the properties of each adjectival construction. The Deg heads that bear each combination of features are given in italics.⁸



The grammatical correlates of the features in (37) are as follows. A null, unmarked Deg head (\emptyset) occurs in absolute forms. The [COMPARATIVE] feature identifies all Deg heads that can take a comparative clause. By default, this is a *than*-clause, as for the Deg heads *more/-er* and *less*. The Deg head *as* is further marked as [EQUATIVE] to indicate that it

⁸This feature set seems to lend itself to a feature-geometric treatment, as proposed by Harley and Ritter (2002) for pronouns and Cowper (2005) for Infl. Justifying such a geometry for adjectival expressions, however, would require a more general survey of comparative and superlative forms, which is beyond the scope of the current paper.

takes an *as*-clause. The [SUPERLATIVE] feature identifies the Deg heads *most/-est*, which can take a comparative PP (e.g. *the smartest student of them all*).

I have taken the selection of comparative clauses to be the hallmark grammatical property of comparative Deg heads. In addition, comparative and superlative Deg heads also correlate with different degree modifiers, as shown in (38).

(38)

DEGREE HEAD	FEATURES	MODIFIERS
<i>more/-er, less</i>	[COMP]	<i>far, way, much</i>
<i>as</i>	[COMP, EQTV]	<i>just, exactly</i>
<i>most/-est</i>	[SUP]	<i>absolute</i>

However, as discussed in Section 2.4 above, I am taking the selection of degree modifiers to be semantic rather than grammatical. Empirically, this conclusion is forced by the fact that *same* takes the same degree modifiers as two opposing grammatical categories: equative comparatives and superlatives. This stance is theoretically reasonable as well, since we would not expect that optional modifiers should be grammatically selected.

3.2 Semantics of degree heads

Following Kennedy (1999), I assume that all Deg heads have a denotation that fits the schema in (39).⁹ Informally, (39) states that Deg takes three arguments—an adjective *A*, a standard value *s* (provided by the comparative clause), and a noun *x*—and that the *A*-ness of *x* bears a certain relation **R** to the standard.

$$(39) \quad \llbracket \mathbf{Deg} \rrbracket = \lambda A. \lambda s. \lambda x [\mathbf{R}(A(x))(s)]$$

The nature of **R** is determined by the lexical entry of each Deg head:

⁹For convenience, I have exchanged Kennedy’s variable letters *G*, *d*, and *x* for a more mnemonic set.

- (40) a. $[[\mathbf{as}]] = \lambda A. \lambda s. \lambda x [A(x) = s]$
 b. $[[\mathbf{more/-er}]] = \lambda A. \lambda s. \lambda x [A(x) > s]$
 c. $[[\mathbf{less}]] = \lambda A. \lambda s. \lambda x [A(x) < s]$

For example, in *a less nice day than I expected*, the niceness (A) of the day (x) is **less** (\mathbf{R}) than what I expected (s).

3.3 Syntax of attributive adjectival constructions

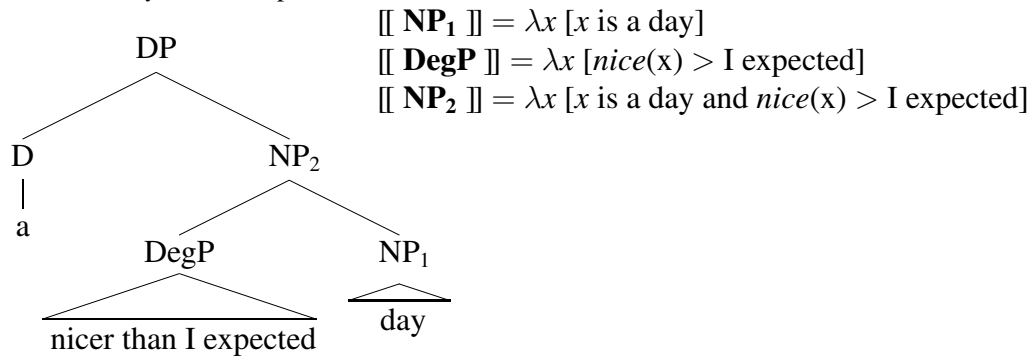
This section sets out the syntactic structures that I will assume for the four attributive adjectival constructions that are relevant for my purposes: (1) absolute adjectives, (2) non-equative comparatives, (3) equative comparatives, and (4) superlatives. I build on the structures proposed by Kennedy (1999), which are integrated with his semantic analysis. However, since Kennedy is concerned only with predicative adjectives, I extend his syntactic analysis to account for attributive constructions.

The details of the analysis are as follows. As proposed by Abney (1987) and Corver (1997), Kennedy takes all APs to have a functional DegP layer. Kennedy (1999) focuses solely on predicative adjectives, but in subsequent work on attributive comparatives, Kennedy and Merchant (2000) follow Svenonius (1992) in taking the attributive AP/DegP to be left-adjoined to NP.¹⁰ I assume that the denotation of the resulting NP node is computed by Predicate Modification (Heim and Kratzer 1998).¹¹ The basics of this syntactic and semantic framework are sketched in (41). The details of the analysis will be clarified in the following sections, as each of the relevant attributive constructions is discussed in turn.

¹⁰Regarding the data in the current paper, the adjunction analysis makes the same predictions as Cinque's (1994, 2010) more elaborate analysis in which APs are introduced as the specifiers of functional heads. I adopt the adjunction analysis for simplicity, but nothing rests on this choice.

¹¹This semantic model is undoubtedly too simple to fully account for attributive comparatives, but it will suffice for the purposes of this paper. See Kennedy and Merchant 2000 for a more sophisticated analysis.

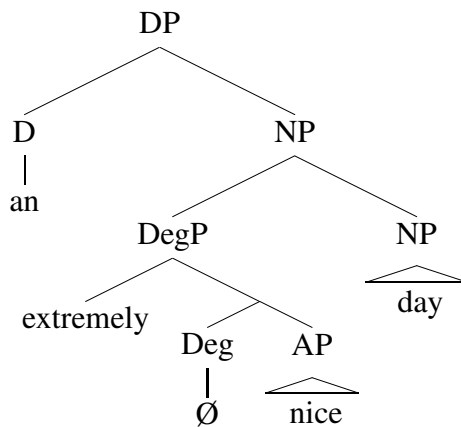
(41) *a nicer day than I expected*



3.3.1 Absolute adjectives

Kennedy (1999: 44) proposes that an absolute adjective *A* is accompanied by a null Deg morpheme that means something like ‘at least as *A* as a contextually-determined standard of *A*-ness.’ As shown in (42), Deg takes an AP as its complement and may take a degree modifier as its specifier.

(42) It was [_{DP} an extremely nice day] today.

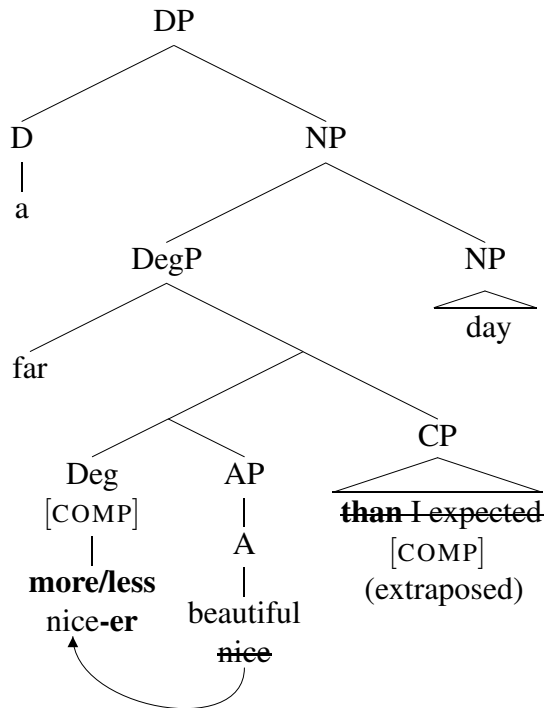


3.3.2 Non-equative comparative adjectives

As in absolute forms, comparative Deg selects an AP complement and can take a degree modifier as its specifier. Comparatives have one additional element: the comparative

clause, which Kennedy takes to be “selected by Deg⁰ but adjoined to Deg’” (1999:108).¹² The comparative clause undergoes right-extrapolation, as discussed by Matushansky (2002) and, for simplicity, represented by a strikeout in all tree diagrams in this paper.

(43) It was [_{DP} a far **more/less beautiful / nicer** day] today [~~than I expected~~].

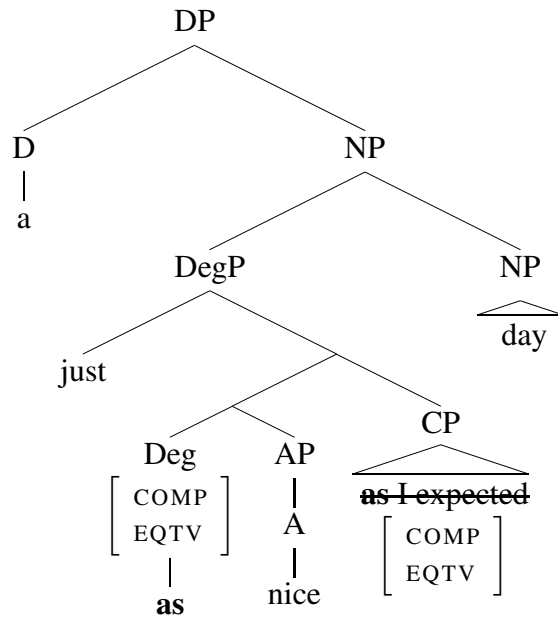


3.3.3 Equative comparative adjectives

In attributive equatives, DegP fronts to the beginning of DP (*as nice a day* instead of **an as nice day*). This fronting is discussed by Matushansky (2002), who takes it to be an idiosyncratic property of certain Deg heads. In all other respects, the structure in (44) is the same as (43).

¹²Kennedy subsequently clarifies that the comparative clause “is a selected adjunct, syntactically on a par with the selected adjuncts of verbs like *word* or *behave*” (fn. 13, p. 173).

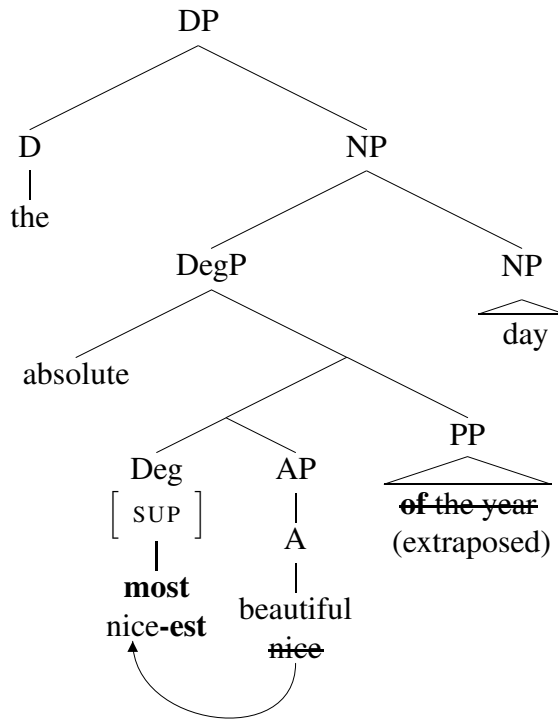
(44) It was [_{DP} just **as nice** a day] today [**as I expected**]. (DegP-fronting not shown)



3.3.4 Superlative adjectives

While Kennedy is not concerned with superlatives, it appears that we can analyze them along the same lines as comparatives, as Corver (1997) does. I will assume the analysis shown in (45), where the Deg head *most/-est* bears a [SUPERLATIVE] feature, selects an AP complement and a comparative PP adjunct, and takes an optional degree modifier. As noted in Section 2.3, superlatives must normally be accompanied by the definite article. According to Matushansky (2008:29), this is “due to the semantics of the superlative morpheme, which presupposes uniqueness.” Following Matushansky, I will take the definite article requirement to be semantic rather than grammatical.

(45) It was [_{DP} the absolute **nicest/most beautiful** day] [**of the year**] today.



3.4 Summary: The syntax of attributive adjectives

This section has shown that all attributive adjectival constructions can be accommodated within the same structural configuration: an AP with a DegP functional layer. Among the comparatives, each Deg head makes the same contribution—a relation—to a shared semantic formula, and a small set of grammatical features on Deg is sufficient to capture the grammatical properties of absolute, comparative, and superlative constructions.

4 The syntax of identity adjectives

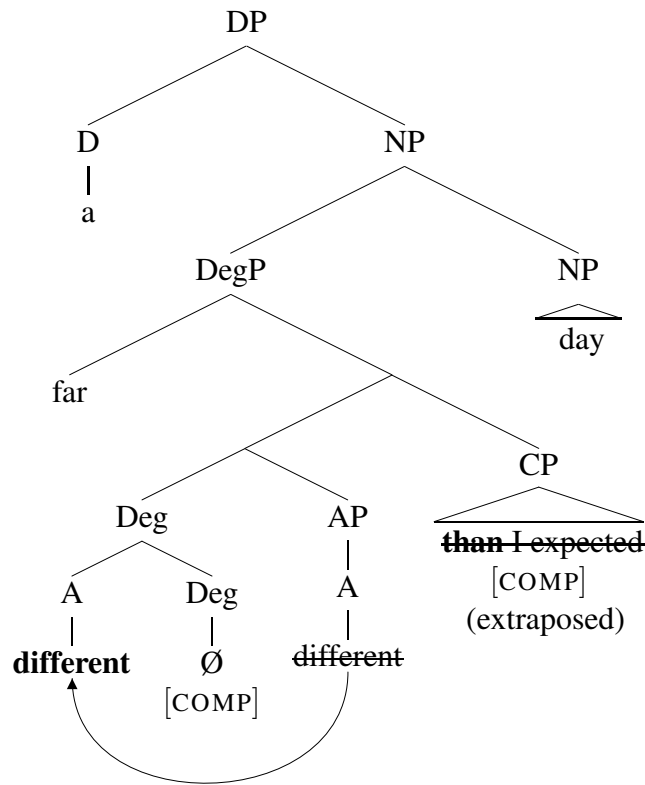
With the necessary background in place, I now turn to the main topic of the paper: the syntax of the identity adjectives *same*, *different*, and *other*. My central proposal is that the identity adjectives have been reanalyzed from the lexical category Adjective to the functional category Degree. As members of the Deg category, they can access the same

set of features as other Deg morphemes, thus explaining the properties they share with comparatives.¹³ The following sections show how the details of this analysis apply to *different*, *same*, and *other* in turn.

4.1 Syntactic structure for *different*

The tree diagram in (46) illustrates the proposed analysis of functional *different*.

(46) I had [_{DP} a far **different** day] today [**than** I expected].



The core of this proposal is that *different* actually spells out a null comparative Deg head that incorporates its adjectival complement. This analysis captures the insight that *different* represents a Deg head, but it is not the only way to capture this insight. I consider an alternative syntactic representation in Section 5.1 below, but for now, I will assume the incorporation account.

¹³This proposal echoes the approach of Alrenga (2007), who argues that from a semantic perspective, *same* and *different* should be regarded as comparative heads of the same nature as *more/-er*, *less*, and *as*. However, Alrenga's focus is purely semantic, whereas I am interested in the syntactic ramifications of this parallel.

How did the configuration in (45) come about? Let us assume that at some point in the past, *different* was solely lexical, like the semantically similar adjective *distinct* still is. Absolute forms of *different* would have been accompanied by the same null, non-comparative Deg head that accompanies all absolute adjectives. At some point, however, *different* appears to have been reanalyzed as a functional category—syntactically represented by its incorporation into Deg. As part of this reanalysis, the lexical selectional property of *different* (its ability to select a comparative *from*-PP) was “translated” into the grammatical feature [COMPARATIVE] on null Deg, giving it the ability to select a *than*-clause. Semantically, the lexical meaning of *different* was transferred to the “relation” element of the Deg denotation, supplying the relation “not equal.” The semantic consequences of this reanalysis are sketched in (47); the resulting denotation is equivalent to the simple denotation that I adopted as a rough approximation of the meaning of *different* in (9) above.¹⁴

- (47) a. Addition of [COMPARATIVE] allows Deg to select a comparative clause

$$[[\mathbf{Deg}]] = \lambda A. \lambda s. \lambda x [\mathbf{R}(A(x))(s)]$$

- b. A-to-Deg incorporation deletes *A* as an independent element of the denotation

$$[[\mathbf{A} + \mathbf{Deg}]] = \lambda s. \lambda x [\mathbf{R}(x)(s)]$$

- c. Lexical meaning of *different* supplies the value for **R**

$$[[\mathbf{different} + \mathbf{Deg}]] = \lambda s. \lambda x [x \neq s]$$

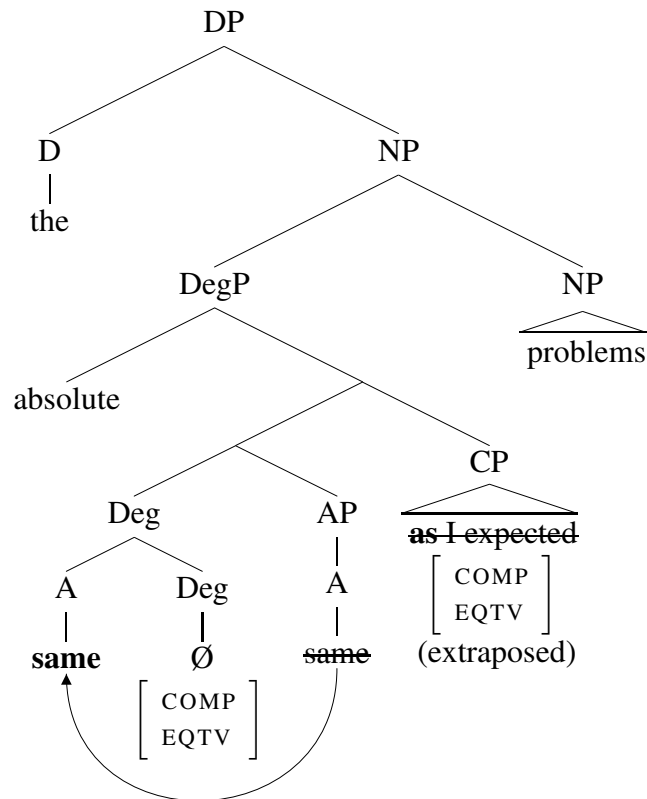
Essentially, then, a new comparative Deg head was created by combining a null, non-comparative Deg head with the grammatical “translations” of the lexical properties of its complement *different*. The simplicity of the lexical meaning of *different* and the compatibility of this meaning with the “relation” element of the comparative Deg denotation likely explain why the lexical adjective *different* was susceptible to this reanalysis.

¹⁴As discussed in regard to (9), this denotation is the roughest possible approximation of the meaning of *different*; Alrenga (2007) shows that a far more sophisticated analysis is actually required. The trajectory in (47) is intended simply to illustrate the semantic plausibility of my account—it is by no means a fully worked-out semantic analysis.

4.2 Syntactic structure for *same*

As with *different*, the properties of *same* follow from an analysis in which it spells out a null comparative Deg head that incorporates its complement, as shown in (48). In this case, Deg bears the feature [EQUATIVE] in addition to [COMPARATIVE], giving it the same selectional properties as the Deg head *as*.

(48) I had [_{DP} the absolute **same** problems] today [**as** I expected].



As it was for *different*, the lexical meaning of *same* is well-suited to fill the “relation” element of the Deg denotation: whereas *different* supplied the relation “not equal,” as shown in (47c) above, *same* supplies the relation “equal.”

The proposed analysis straightforwardly accounts for the similarities between *same* and equative *as*-comparatives. However, recall that *same* also shares two properties with superlatives: the availability of degree modifiers such as *absolute* and the obligatory occurrence of the definite article. I have already argued that both of these properties are seman-

tic rather than grammatical, so it appears that in addition to its grammatical kinship with equative comparatives, *same* must also have some semantic commonality with superlative *most/-est*. The uniqueness presupposition carried by the superlative morpheme is the most obvious candidate, but the exact nature of the semantic parallel with *same* is unclear—in his dissertation on the semantics of *same* and *different*, Alrenga (2007:113–117) considers the issue at length but leaves its resolution to future work. I, too, will set the problem aside, as its semantic nature places it beyond the scope of the current paper.

4.3 Interim summary: The syntax of *same* and *different*

In essence, I have proposed that *same* and *different* pattern like “intransitive” Deg heads—that is, Deg heads that do not appear with an overt lexical AP complement. Using the term “intransitive” in this informal sense, *same* can be seen as the intransitive equivalent of *as*, while *different* is the intransitive equivalent of *more/-er/less*. This analysis straightforwardly explains the properties that *same* and *different* share with equative and non-equative comparatives. Furthermore, associating *same* and *different* with the functional category Deg captures the intuition expressed in Section 1 of this paper—namely that despite being adnominal modifiers, these items are more functional than prototypical lexical adjectives.

In the case of *different*, this state of affairs seems to have arisen due to reanalysis from a lexical category to a functional category, with concomitant “translation” of selectional properties and denotations. The fact that some prescriptive grammarians still frown upon *different than* suggests that the reanalysis was fairly recent. The status of *same*, on the other hand, appears to have been stable for centuries: Breban and Davidse (2003:306) report that the behaviour of *same* has remained constant since the time of Old English.

4.4 The exceptional *other*

In the description in Section 2, we saw that *other* differs from *same* and *different* in several ways: it cannot take degree modifiers, it does not select a comparative clause, and it cannot

serve a predicative function. We also saw that this has not always been the case: in the past, *other* was compatible with degree modifiers and could take a *than*-clause.

In addition, recall from Section 1.3 that there are more ways in which *other* is exceptional: it can fuse with the indefinite article to form *another*, and its Innu-aimun equivalent *kutak* inflects like a demonstrative, unlike the rest of the Innu-aimun functional adjectives. In both languages, then, there are certain respects in which *other* seems less like an adjective and more like a determiner.

To account for these observations, I propose that *other* has been grammaticalized to a stage beyond that currently occupied by *same* and *different*, following the trajectory in (49).

(49) **Stage 1:** *Other* is a lexical adjective (like *distinct* and lexical *different*).

D > Deg > **Adj_{other}** > N

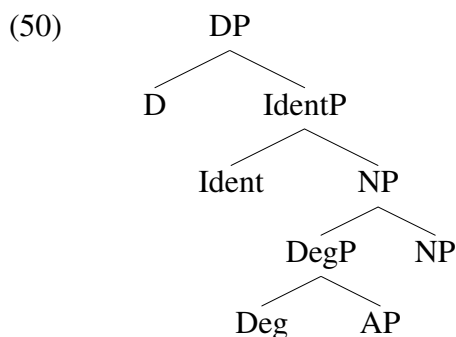
Stage 2: *Other* is reanalyzed as Deg (like functional *different*).

D > **Deg_{other}** > Adj > N

Stage 3: *Other* is reanalyzed as a functional head closer to D.

D > **Ident_{other}** > Deg > Adj > N

In Stage 3, I have posited a new functional head *Ident* (“Identity”), for which I tentatively propose the structure in (50). Notice that *Ident* is a head in the functional hierarchy of the DP, the extended projection of N, rather than the DegP, the extended projection of A. In Stage 3, then, *other* has left the adjectival domain and become a nominal functional head.



Unlike Deg, Ident is not grammatically comparative. Rather, it is more determiner-like, involving referentiality—perhaps serving to identify a “new” instance of the type denoted by N, as proposed for *other* by Breban and Davidse (2003), who, in later work, use the term “deictification” to refer to the grammaticalization process involved (Davidse, Breban, and van Linden 2008).

Under this analysis, *other* is no longer associated with the Deg category, so it cannot carry the [COMPARATIVE] feature; this explains why *other* cannot select a comparative clause. Furthermore, since *other* can no longer form a DegP—the extended projection of an AP—it follows that it cannot serve as an adjectival predicate. Finally, the fact that Ident occupies the same functional hierarchy as D (unlike Deg) could potentially account for the fusion of *another* in English and the D-like inflection carried by *kutak* in Innu-aimun. I leave the elaboration of a morphological analysis along these lines to future work.

A full syntactic analysis of *other* must also await future work, as the primary focus of this paper is the true identity adjectives *same* and *different*. However, the following sketch is intended to establish the syntactic plausibility of the Ident hypothesis by illustrating how it can account for the word-order interactions between *other*, cardinal numerals, and comparative or superlative DegPs (i.e. the identity adjectives *same* and *different* and the comparative and superlative forms of lexical adjectives). Following Julien (2005), I will assume that cardinal numerals head a CardP, part of the functional hierarchy of the DP. The following two principles are then sufficient to capture the distribution of *other*:

1. The order **D** > {**Ident/Card**} > **NP** is provided by the nominal functional hierarchy.

Ident and Card can merge in either relative order for different scopal effects:

- (51) a. [DP the [_{IdentP} **other** [_{CardP} **three** [_{NP} men]]]]
 b. [DP the [_{CardP} **three** [_{IdentP} **other** [_{NP} men]]]]

2. A comparative or superlative DegP can adjoin to and modify any sub-DP projection, i.e. IdentP, CardP, or NP. (Independently of the Ident hypothesis, this assumption is required in order to account for examples such as *the biggest three houses*.)

Together, these principles give us the two DP templates in (52), in which Ident and Card can occur in either order and a DegP can appear at any level.

- (52) a. [DP D [IdentP (DegP) **Ident** [CardP (DegP) **Card** [NP (DegP) NP]]]]
 b. [DP D [CardP (DegP) **Card** [IdentP (DegP) **Ident** [NP (DegP) NP]]]]

Restricting ourselves to examples involving only one DegP, all six of the Ident-Card-DegP orders predicted by (52) appear to be possible. Invented examples often lack the context required for a positive acceptability judgment, but the real-world examples in (53) and (54), which were gathered using a Google search, demonstrate the possibility of each order. The examples in (53) illustrate the three orders in which Ident precedes Card, while the reverse orders are shown in (54). For each order, I show two variants: one in which DegP is the functional adjective *different* and one in which it is the superlative lexical adjective *best*.¹⁵

(53) D > **Ident** > **Card** > NP

- a. D > **DegP** **Ident** > **Card** > NP
- (i) I tend to break it down to four key areas instead (as I can never remember the other two as everyone seems to have a **different** other two).
 - (ii) I know Conflag is a must-have. What do you guys think the **best** other two glyphs are?
- b. D > **Ident** > **DegP** **Card** > NP
- (i) “Full House”: Three cards of the same rank with another **different** two cards of the same rank.
 - (ii) Of the three teams Villanova faces twice, two of them are Pitt and Syracuse. Rutgers is the other, but that doesn’t make up for two games against the other **best** two teams in the Big East.

¹⁵The source URLs for these examples are listed at the end of the paper, following the references.

- c. D > **Ident** > **Card** > **DegP** NP
- (i) This means that we have to define **another two different** structures and **another two different** structure types.
 - (ii) You forgot about *30 Rock* and *The Office*, the **other two best** shows on NBC.

(54) D > **Card** > **Ident** > NP

- a. D > **DegP** **Card** > **Ident** > NP
- (i) Then you could also recognise that say four of those guiding spirits were also helping create another life with a **different six other** guiding spirits elsewhere.
 - (ii) Credit will be given for your answer to question 1 and for the **best two other** answers.
- b. D > **Card** > **DegP** **Ident** > NP
- (i) Every provider that has at least two interconnections with **two different other** providers must have an Autonomous System (AS) number. . .
 - (ii) In each conference, the four division champions and the **two best other** teams (they get a wild card) play the playoffs.
- c. D > **Card** > **Ident** > **DegP** NP
- (i) It might be as little as two different versions for shield hardeners, and **two other different** versions for armour hardeners.
 - (ii) That's an aggregate 12-1 against the **two other best** teams in the country.

While this sketch is only the beginning of a syntactic analysis of *other*, I feel that it lends plausibility to the Ident hypothesis. Considering the suggestive similarities between English *other* and Innu-aimun *kutak*, both of which appear to be grammatically distinct from all other categories in their respective languages, an obvious task for future research would

be to examine the equivalents of *other* in a wider range of languages in order to ascertain the extent to which this correlation holds.

4.5 Summary: The syntax of identity adjectives

This section has presented a syntactic analysis of the identity adjectives *same*, *different*, and *other*. The core of the analysis is that *same* and *different* actually spell out the functional category Deg. This analysis captures the functional nature of *same* and *different* as well as the grammatical properties they share with comparative constructions—in essence, *same* and *different* are shown to be the intransitive equivalents of the transitive Deg heads *as* and *more/-er/less*. In order to capture the distinct properties of *other*, I posited a new functional head Ident, located in DP rather than DegP, to which *other* has been grammaticalized.

5 Issues and implications

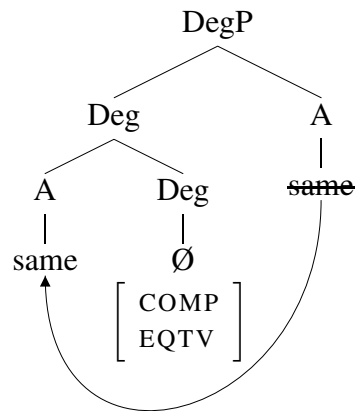
This final section considers some issues and implications that arise from the proposals made in this paper. Section 5.1 takes a closer look at the syntactic representation of *same* and *different* and identifies the resulting predictions for syntactic change within the DegP. Section 5.2 takes a step back to consider what we have learned about grammaticalization in the DegP and DP as a whole. Finally, and most generally, Section 5.3 discusses the broader typological implications of the insight that began this paper: the recognition of functional adjectives as a grammatically distinct class.

5.1 The syntactic representation of *same* and *different*

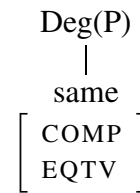
This section examines the syntactic representation of *same* and *different* in greater detail and considers the predictions that two alternative analyses make regarding syntactic change in the DegP. Recall that the central insight of the proposed analysis is that *same* and *different* are, in a loose sense, “intransitive” Deg heads—that is, Deg heads that occur

without an overt lexical AP complement. In the preceding section, I assumed the analysis in (55a), in which the surface intransitivity of the identity adjective results from incorporation of A into Deg. However, we could also imagine an analysis like (55b), in which the identity adjective truly is an intransitive Deg head. In this analysis, the only difference between *same* and *as* is that *as* selects an adjectival complement while *same* does not.

(55) a. SURFACE INTRANSITIVE DEG
same is underlyingly Deg + A

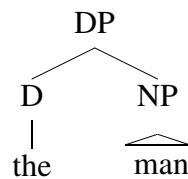


b. DEEP INTRANSITIVE DEG
same is underlyingly Deg

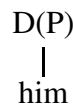


I see no reason to exclude the possibility of a representation like (55b), in which Deg does not take an adjectival complement—in fact, it seems entirely parallel to Abney’s (1987) representation of personal pronouns as “intransitive” D heads:

(56) a. TRANSITIVE D: ARTICLES



b. INTRANSITIVE D: PRONOUNS



If anything, the alternative representations for *same* in (55) appear to model two stages of grammaticalization: in the earlier stage in (55a), the identity adjective retains a link to the lexical adjective position, while in the later stage in (55b), it is fully grammaticalized.

The two analyses also appear to make different syntactic predictions. The presence of an underlying A in (55a) firmly rules out the possibility of *same* occurring with an overt

adjective (e.g. **same good*). In (55b), on the other hand, it is syntactically possible to accommodate an adjective in addition to *same*; all we need to do is amend the denotation of *same* so that, like *as*, it takes an adjectival argument. Even though the representation in (55b) is not transitive, it is more susceptible to being reanalyzed as transitive than (55a) is.

Interestingly, in the case of *same*, there is evidence that certain speakers may, in fact, have carried out such a reanalysis. A Google search reveals many examples of comparative *same good as* and *the same good as*; samples are given in (57) and (58).¹⁶ These usages are undeniably non-standard, and some such examples clearly seem to be errors made by learners of English. However, many more examples occur in passages that are otherwise native-like in their fluency and idiom.

(57) *same good as*

- a. Fit and finish are also **same good as** I saw on all the other Miyabi knives from all the different series.
- b. To me musically it's **same good as** *Thick as a Brick* and the lyrical concept is even better.
- c. We really like this restaurant [...] But the experience last night was really disappointing [...] it is not **same good as** before.
- d. When I did get the TV and hooked up my SXR D to a SD DISH Network DVR box, the TV looked almost **same good as** it did on my Sony HD CRT.
- e. German is not so important, I had to learn it for 9 years in school, so I speak it **same good as** natives.

(58) *the same good as*

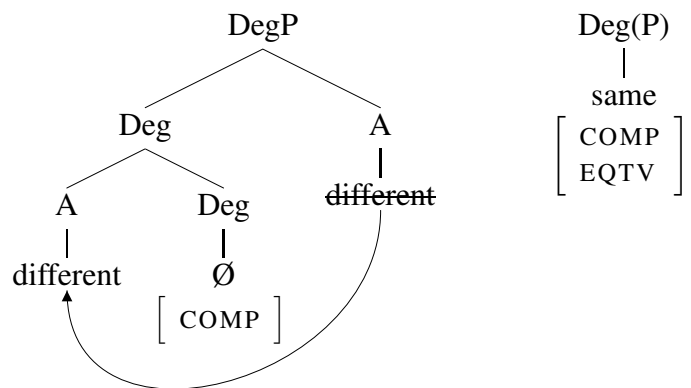
- a. If you don't like eating tomatoes, tomato sauce or paste is **the same good as** raw tomatoes.
- b. Messi is about **the same good as** Maradona and he is only 19.
- c. The video quality will be **the same good as** playing on iPod/iPhone.

¹⁶The source URLs for these examples are listed at the end of the paper, following the references.

- d. On another machine which is capable of showing the alpha effects, the picture now looks not **the same good as** you originally determined.
- e. With the second part (*28 Weeks Later*) I was disappointed, it wasn't **the same good as** the first part was.

Although this usage is completely ungrammatical for me, the existence of such examples seems to indicate that some speakers have indeed reanalyzed *same* as transitive. Interestingly, no similar examples appear to exist for *different*. We can account for this distinction by assigning different analyses to the two lexical items: *different* is a surface intransitive while *same* is a deep intransitive, as shown in (59). This structural difference explains why *same*, but not *different*, is apparently susceptible to a transitive reanalysis.

- (59) a. *different* (surface intransitive) b. *same* (deep intransitive)

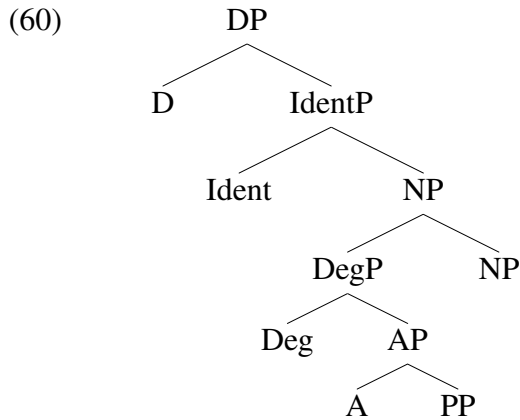


This split analysis is also consistent with the historical facts. As discussed in Section 4.3, *different* has only recently become a functional adjective, whereas *same* has played this role for centuries. It is not surprising, then, that *different* should have a “fresher” link to the A position, as the structure in (59a) represents.

The outcome of this discussion is that each of the English identity adjectives is structurally distinct: *different* is Deg+A, *same* is Deg, and *other* is Ident. These fine-grained differences are the reason for my use of the term “microsyntax” in the title of this paper. They also provide an intricate set of parameters for variation in the properties of identity adjectives across dialects and languages. In this respect, identity adjectives appear to be ideal candidates for a micro-comparative syntactic study in the style of Kayne (2005).

5.2 Grammaticalization in the DegP (and DP)

The general picture that emerges from the proposed analysis is that nominal modifiers in the ‘same/different’ semantic field are in various stages of grammaticalization. Assuming the structure in (60), the lexical items at each structural level are summarized in (61).¹⁷



(61)

POSITION	CURRENT OCCUPANTS
A	lexical comparatives (<i>distinct, similar, lexical different</i>)
Deg + A	functional <i>different</i>
Deg	<i>same</i>
Ident	<i>other</i>

As we have seen for functional *different*, a lexical comparative adjective can undergo incorporation into Deg; subsequent reanalysis as a pure Deg head is possible, which is apparently the status of *same*. The fact that *other* once took degree modifiers and comparative clauses indicates that it, too, was once Deg (if not A). If the Ident analysis of contemporary *other* is correct, it would seem that the grammaticalization trajectory in question is not bounded by DegP, but can continue into the DP proper. Considering the semantic similarity of *other*

¹⁷For simplicity, this structure omits the degree modifier and comparative clause associated with DegP.

and *different*, the fairly recent development of functional *different* may have served to fill the gap created by the departure of *other* from the Deg system.

The diachronic trend towards “upwards” movement of DP elements has been widely noted. In addition to well-known examples such as the development of Romance definite articles from Latin demonstratives, Denison (2006:300) notes that the adjectives *various* and *certain* “have moved a small way towards acquiring properties more typical of determiners,” while Davidse, Breban, and van Linden (2008) examine several other English adjectives that are becoming more determiner-like: *opposite*, *complete*, *old*, *regular*, and *necessary*. They refer to this process as DEICTIFICATION and propose that it is the nominal analogue of auxiliary formation. Closer to the topic of the current paper, Breban (2003) looks at adjectives of similarity and difference and concludes that even lexical comparatives such as *similar* and *distinct* are showing some signs of grammaticalization.

Despite the extensive coverage of this topic in the functional literature, two aspects distinguish the discussion in the current paper: (1) its generative perspective, and (2) its focus on not only the Deg heads themselves, but also their comparative grammatical properties (e.g. clause selection); as we have seen, the development and loss of these properties coincides with a lexical item’s diachronic journey from A to Deg to Ident. To my knowledge, the grammaticalization of Degree-related items has not been extensively investigated from a generative perspective. For example, Roberts and Roussou’s (2003) landmark study focuses on grammaticalization involving T, C, and D, but not Deg; the authors make only passing mention of “the various degree markers which may make up a functional system associated with AP” (223). I hope that the proposals in this paper have at least helped to lay the groundwork for a generative analysis of grammaticalization within this often-overlooked functional system.

5.3 The typological status of functional adjectives

The main focus of this paper has been the development of a syntactic analysis of identity adjectives such as *same* and *other*, one subgroup of a broader assortment of “functional adjectives.” One issue that I have not addressed, however, is the typological implications of recognizing such a category. In this section, I step away from narrow syntactic matters to consider the broader question of how functional adjectives fit with what we know about the cross-linguistic patterning of adjectives in general.

This issue is tangential to the main purpose of the paper—it was simply necessary to establish that some so-called adjectives are grammatically distinct and worthy of a syntactic analysis of their own. Nevertheless, the question is interesting and deserves to be addressed. This section is therefore intended to clarify the typological status of functional adjectives. Along the way, the discussion will also lead us to consider the status of PRENOUNS, a class of Algonquian modifiers that was mentioned but set aside in Section 1.1.

In Section 5.3.1, I consider an obvious possibility: functional adjectives, as a small, closed class, may correspond to the small, closed class of adjectives that has been documented in certain languages. However, as Section 5.3.2 shows, this simplistic alignment of categories cannot be sustained. Instead, I argue in Section 5.3.3 that functional adjectives should be regarded as true function words, distinct from any lexical class of adjectives. Consequently, to avoid inaccurate and misleading cross-linguistic comparisons, typological studies should carefully distinguish functional adjectives from their lexical counterparts.

5.3.1 *Functional adjectives as adjectives*

We have seen that Innu-aimun has a small class of “functional adjectives,” repeated in (62).

(62) *peikûtâu* ‘same,’ *kutak* ‘other,’ *ushkat* ‘first,’ *mâshten* ‘last’

If these words truly were adjectives, then the class of adjectives in Innu-aimun would be quite unlike its English equivalent. However, it would not be alone among the world’s languages: the typological literature notes several languages in which adjectives form a small, closed class rather than a large, open class like in English. According to Dixon’s (2004) survey, the following languages have a small, closed class of adjectives that can function only as adnominal modifiers—just like the functional adjectives of Innu-aimun:

- (63) Languages with a small, closed class of strictly adnominal adjectives (Dixon 2004)
- | | |
|---------------------------|-----------------------------|
| Malayalam (Dravidian) | approximately 15 adjectives |
| Hua (Papuan) | 4 adjectives |
| Dagbani (Gur/Niger-Congo) | approximately 70 adjectives |
| Yoruba (Kwa/Niger-Congo) | approximately 15 adjectives |

The most obvious response to the typological question, then, would simply be to add Innu-aimun to this list. Under this view, the functional adjectives in (62) would be *the* adjectives of Innu-aimun. To account for the dramatic difference in size between the English and Innu-aimun adjective classes, we could say that Innu-aimun lexicalizes a narrower range of concepts as adjectives than English does, as informally schematized in (64).

- (64) Possible categorization of concepts in English and Innu-aimun

ENGLISH		INNU-AIMUN
Verbs	EVENTS/STATES <i>run, sleep, speak, sit</i>	} Verbs
Adjectives	PROPERTIES <i>jealous, heavy, big, new</i>	
	IDENTITY/SEQUENCE <i>same, other, first, last</i>	} Adjectives

Recognizing a class of “true” adjectives in Innu-aimun would allow us to bring the language in line with the influential typological proposals of Baker (2003) and Dixon (2004), who assert that all languages have a distinct category of adjectives. The usual tack that Baker and Dixon take in a language with “adjective-like verbs” such as Innu-aimun is to demonstrate

that there are grounds for re-classifying some subset of verbs as true adjectives. However, I know of no grammatical justification for such a move in Innu-aimun. Dixon (2004:15–22) provides the following five general criteria for reclassifying adjective-like verbs as adjectives; as I indicate, none of these criteria appear to be satisfied in Innu-aimun.

1. *When adjective-like verbs function as predicates, they have different properties from true verbs, such as a reduced inflectional paradigm or a different set of modifiers.*

RESPONSE: The verbal paradigms of Innu-aimun have been extensively documented by Clarke (1982) and Baraby (1999), neither of whom mention any such inflectional differences; this would surely be a salient feature, since a significant proportion of the intransitive verbs of Innu-aimun are adjective-like. As for modifiers, I have catalogued the properties of Innu-aimun adverbs in previous work (Oxford 2008, chapter 7) and found no special set that occurred only with adjective-like verbs.

2. *Adjective-like verbs behave differently with respect to transitivization.* RESPONSE:

In Innu-aimun, both types of verbs can be transitivized in the same way:

- (65) a. *âîshikueu* ‘s/he cries out’ → *âîshikueuieu* ‘s/he makes him/her cry out’
b. *nekâu* ‘it is sandy’ → *nekâuieu* ‘s/he makes it sandy’

3. *When adjective-like verbs modify nouns, they behave differently from true verbs serving this function.* RESPONSE: Innu-aimun has several morphologically distinct relativizing processes, but each process can apply to any verb. The different processes signify distinctions of tense, aspect, and definiteness (Clarke 1982:139–140).

4. *Adjective-like verbs behave differently with respect to comparative constructions.*

RESPONSE: In Innu-aimun, both types of verbs occur in the same comparative construction, as shown in (66) for the verb-like verb meaning ‘to smoke’ and the adjective-like verb meaning ‘to taste good.’ In both cases, the verb occurs under the scope of the comparative particle *etatû* ‘more’ and the standard of comparison occurs in a PP headed by the preposition *mâk ât* ‘than.’

- (66) a. *Etatû pîtuâu uîn Ân* [PP *mâk ât Shûshepa*].
more smoke.3S her Ann [PP **than** Joseph.3']
 ‘Ann smokes more than Joseph.’ (Oxford 2008:149)
- b. *Etatû ne uîkan* [PP *mâk ât uîshâutîku-uiâsh*].
more that taste.good.3S [PP **than** beef]
 ‘It tastes better than beef.’ (Clarke and MacKenzie 2007, Lesson 11)

5. *Adjective-like verbs have different possibilities for adverb-formation.* RESPONSE:
 Innu-aimun has a fairly small class of adverbs and has no productive adverb-formation processes, so this test is not applicable.

Although the above points do not amount to a full study of this issue in Innu-aimun, I hope that they lend some plausibility to my skepticism towards reclassifying any Innu-aimun verbs as adjectives. If my position is correct, then the only way to sustain the putative universality of adjectives is to find some other class of Innu-aimun words to identify as adjectives. The classification of functional adjectives as the true adjectives of Innu-aimun, as shown in (64) above, would be one means of achieving this outcome.

5.3.2 *Problems for the adjective analysis of functional adjectives*

However, solving the typological problem by classifying Innu-aimun functional adjectives as “true” adjectives does not hold up to closer examination. From a grammatical perspective, we saw in Section 1.2 that an attempt to unify Innu-aimun functional adjectives with English adjectives misses an important generalization: the English words that Innu-aimun functional adjectives correspond to (*same, other, first, last*) have strikingly different grammatical properties from “true” adjectives and are consequently best regarded as a separate (functional) category. It is therefore not really the case that Innu-aimun functional adjectives correspond to true English adjectives at all.

Furthermore, from a semantic perspective, the Innu-aimun functional adjectives do not have the meanings that we would expect to find in a small, closed adjective class. Accord-

ing to Dixon (2004:3–4), such classes usually contain adjectives belonging to four basic semantic types (DIMENSION, AGE, VALUE, and COLOUR) and, optionally, three further peripheral types (PHYSICAL PROPERTY, HUMAN PROPENSITY, and SPEED). The fifteen adjectives of Yoruba, for example, all belong to these types (Dixon 2004:24). In contrast, none of the functional adjectives of Innu-aimun belong to these semantic types—instead of describing inherent properties of the referent, their meanings (sameness/difference and sequencing) relate to the discourse context. On both grammatical and semantic grounds, then, it seems incorrect to classify Innu-aimun functional adjectives as “true” adjectives in an attempt to unify them with the small, closed class of adjectives found in some languages.

The preceding evidence alone, I contend, is sufficient to justify this point. The point becomes even clearer, however, if we take a more comprehensive look at the categories of Innu-aimun. In addition to functional adjectives, Innu-aimun also has a *second* small, closed class of adjective-like items: the bound nominal modifiers known to Algonquianists as PRENOUNS (Bloomfield 1946:104), listed in (67).

(67)

CLASS	PRENOUN	EXAMPLE
DIMENSION	<i>mishta-</i> ‘big’	<i>mishta-ashinî</i> ‘big rock’
AGE	<i>tshiâshi-</i> ‘old’	<i>tshiâshi-akunikan</i> ‘old picture/photo’
	<i>tshishe-</i> ‘mature, great’	<i>tshishe-nâpeu</i> ‘mature man’
	<i>ûssi-</i> ‘new, newborn’	<i>ûssi-mûshîss</i> ‘newborn moose’
	<i>tshikass-</i> ‘raw, fresh’	<i>tshikass-atikuiân</i> ‘fresh caribou hide’
VALUE	<i>minu-</i> ‘good’	<i>minu-nâpeu</i> ‘good/honest man’
	<i>matshi-</i> ‘bad’	<i>matshi-pâkueshikan</i> ‘stale bread’
COLOUR	<i>miku-</i> ‘red’	<i>miku-assikumân</i> ‘copper’ (lit. ‘red iron’)

Prenouns are firmly bound to the left edge of the noun stem—so firmly, in fact, that possessive inflectional prefixes must precede them, as shown in (68).

(68) *nimatshi-pâkueshikanim* ‘my stale bread’

Despite being bound forms, prenouns are more word-like than typical prefixes. In the Innu-aimun orthography, they are set off from the noun stem by a hyphen, the same treatment given to compounds (Drapeau and Mailhot 1989). This orthographic convention expresses the intuition that prenoun-noun combinations are actually compounds in which the first element cannot occur as an independent word, parallel to English examples such as *neo-Conservative* or *miniskirt*.¹⁸

What is the categorial status of prenouns? Unlike most Innu-aimun lexical items with “adjectival” meanings, prenouns are clearly not verbs. They are also clearly distinct from the functional adjectives of Innu-aimun, both morphosyntactically and semantically. Morphosyntactically, prenouns are bound forms, as shown in (68) above, whereas functional adjectives are free-standing words. The morphosyntactic freedom of functional adjectives is demonstrated by their ability to form a discontinuous constituent with the noun they modify, as in (69), where the underlying DP is *kutaka innua* ‘other Innu people.’¹⁹

- (69) *Ekute mîn Mûshuâu-shîpît* [_{AF} *kutaka*] *uetîtâuâht* [_N *innua*].
 there then George.River [_{AF} **other.3'**] IC.reach.CONJ.3P>3' [_N **Innu.3'**]

‘And there at George River, they reached another group of Innu people.’

Semantically, the meanings of prenouns are far more “adjective-like” than those of functional adjectives. Whereas functional adjectives encode notions related to the discourse context such as sameness and sequencing, the meanings of prenouns fit perfectly into Dixon’s (2004) four core semantic types for adjectives (DIMENSION, AGE, VALUE, and COLOUR), as indicated in the table in (67) above.

¹⁸English items such as *mini-*, *mega-*, *neo-*, and *pseudo-* have a variety of labels in the literature, including COMBINING FORM, PSEUDO-PREFIX, SEMI-PREFIX, QUASI-AFFIX, and PREFIXOID (Fischer 1998:55). Some such items, including *mini-*, have transcended their origins in neo-classical compounds to become what we might characterize simply as a class of bound adjectives. If this characterization is correct, then such items would appear to be a direct typological parallel to Algonquian prenouns.

¹⁹In this example, *kutaka* ‘other’ and *innua* ‘Innu people’ are both marked for obviation (3') by the *-a* suffix. This obviation agreement makes it clear that *kutaka* modifies *innua*.

It seems, then, that Innu-aimun actually has *two* small, closed classes of dedicated adnominal modifiers—functional adjectives and prenouns—which are distinct both grammatically and semantically. Of these two classes, it appears to be the prenouns, not the functional adjectives, that should be considered the “true” adjectives of Innu-aimun. It therefore turns out that Innu-aimun is indeed a language with a small, closed class of adjectives, just like Malayalam or Yoruba. However, it is the prenouns of Innu-aimun, not the functional adjectives, that constitute this class. This finding strengthens the conclusion that Innu-aimun functional adjectives should not be typologically identified as true adjectives.²⁰

5.3.3 *Functional adjectives as function words*

If functional adjectives should not be typologically identified with true adjectives, then what is their typological status? As implied by the term I have chosen, I suggest that functional adjectives in both English and Innu-aimun are best regarded as function words. Under this view, the schematic representation of the categorization of adjective-like concepts in English and Innu-aimun suggested in (64) above can be refined as follows:

(70) Revised categorization of concepts in English and Innu-aimun

ENGLISH		INNU-AIMUN	
Verbs	EVENTS/STATES <i>run, sleep, speak, sit</i>	} Verbs	}
Adjectives	PROPERTIES <i>jealous, heavy</i>		
	BASIC PROPERTIES <i>big, new</i>	Adjectives (prenouns)	
Functional	IDENTITY/SEQUENCE <i>same, other, first, last</i>	Functional	

²⁰The identification of prenouns as the “true” adjectives of Innu-aimun contradicts Dixon (2004:34), who groups Algonquian with the languages in which a subset of *verbs* should actually be identified as adjectives. However, Dixon provides no evidence for this assertion, and it appears to follow from nothing more than his conviction that upon close inspection, “adjective-like” verbs in any language will always turn out to be a distinct grammatical category from true verbs (Dixon 2004:12). Identifying prenouns as the true adjectives of Innu-aimun makes it possible to sustain Dixon’s claims about the universality of adjectives without having to resort to gerrymandering certain Innu-aimun verbs into an unwarranted adjective category.

In this revised conception, note that English and Innu-aimun differ in categorization *only among lexical categories*. The two languages draw the boundary between verbs and adjectives in different places, but the split between lexical and functional categories is the same in both languages. It would be interesting to investigate whether this correlation holds across a broader sample of languages.

If functional adjectives are indeed function words, then their closest and most informative typological parallels should be found not among the lexical adjectives, but rather among the other classes of function words that occur within the DP, such as quantifiers, numerals, demonstratives, and determiners. Note that the precise character of each sub-class of functional adjectives may differ—in this paper, I have argued that *same* and *different* are Deg while *other* is Ident; ordinals such as *first* and *last* may be unifiable with ordinal numerals, while other functional adjectives such as *main*, *utter*, and *future* may belong to functional categories that have not yet been recognized within the DP.

Finally, it is worth noting one cautionary point that emerges from the preceding discussion: functional adjectives should be carefully excluded from cross-linguistic generalizations involving the adjective category. As we have seen in both Innu-aimun and English, the grammatical properties of functional adjectives can be significantly different from those of lexical adjectives. However, their surface similarities with lexical adjectives mean that these grammatical differences are often overlooked—an oversight which has the potential to muddy the waters of comparison. Echoing the theme of this paper as a whole, functional adjectives warrant investigation as a category in their own right. This approach is the only way to ensure the validity of cross-linguistic comparisons involving adjectives.

6 Conclusion

This paper began by noting an apparent typological paradox in Innu-aimun, which called our attention to an often-neglected class of nominal dependents: the identity adjectives *same*, *different*, and *other*, one subgroup of a broader assortment of “functional adjectives.”

Identity adjectives have much in common with comparative constructions, a fact which I have accounted for by proposing that they have been reanalyzed as function words of the category Degree (or, in the case of *other*, a nominal functional head Ident). I hope to have shown that examining the syntax of this overlooked set of words can yield a range of valuable results—in addition to shedding light on the fine-grained structure of the DP and the relationship between lexical and functional categories, the identity adjectives also provide a rich data set for micro-comparative syntactic research and help to clarify the application of grammaticalization in the Degree domain.

References

- Abney, Steven. 1987. The English noun phrase in its sentential aspect. Doctoral dissertation, Massachusetts Institute of Technology.
- Alrenga, Peter. 2005. Comparisons of similarity and difference. Presented at the Workshop on the Formal Analysis of Adjectives (JET Adjectifs), Université Paris 7, September 28.
- Alrenga, Peter. 2006. Scalar (non-)identity and similarity. In *Proceedings of the 25th West Coast Conference on Formal Linguistics (WCCFL 25)*, eds. Donald Baumer, David Montero, and Michael Scanlon, 49–57. Somerville, Massachusetts: Cascadilla.
- Alrenga, Peter. 2007. Dimensions in the semantics of comparatives. PhD thesis, University of California Santa Cruz.
- Alrenga, Peter. 2009. Tokens, types, and identity. In *Proceedings of NELS 38*, eds. Anisa Schardl, Martin Walkow, and Muhammad Abdurrahman, 53–64. Amherst, Massachusetts: GLSA.
- Baker, Mark C. 2003. *Lexical Categories: Verbs, Nouns, and Adjectives*. Cambridge: Cambridge University Press.

- Baraby, Anne-Marie. 1999. *Guide de conjugaisons en langue innue*. 1st ed. Sept-Iles: Institut culturel et éducatif montagnais.
- Beck, Sigrid. 2000. The semantics of *different*: Comparison operator and relational adjective. *Linguistics and Philosophy* 23:101–139.
- Bhatt, Rajesh, and Roumyana Pancheva. 2004. Late merger of degree clauses. *Linguistic Inquiry* 35:1–45.
- Bloomfield, Leonard. 1946. Algonquian. In *Linguistic Structures of Native America*, ed. Harry Hoijer, 85–129. New York: Viking Fund Publications in Anthropology.
- Bolinger, Dwight. 1967. Adjectives in English: Attribution and predication. *Lingua* 18:1–34.
- Brasoveanu, Adrian. 2008. Sentence-internal readings of *same / different* as quantifier-internal anaphora. In *Proceedings of the 27th West Coast Conference on Formal Linguistics*, eds. Natasha Abner, and Jason Bishop, 72–80. Somerville, Massachusetts: Cascadilla Proceedings Project.
- Breban, Tine. 2003. The grammaticalization of adjectives of identity and difference in English and Dutch. *Languages in Contrast* 4:165–199.
- Breban, Tine. 2006. English adjectives of general comparison: Lexical versus grammaticalized uses. PhD dissertation, University of Leuven.
- Breban, Tine, and Kristin Davidse. 2003. Adjectives of comparison: The grammaticalization of their attribute uses into postdeterminer and classifier uses. *Folia Linguistica* 37:269–317.
- Bresnan, Joan. 1973. The syntax of the comparative clause construction in English. *Linguistic Inquiry* 4:275–343.
- Carlson, Greg N. 1987. *Same and different*: Some consequences for syntax and semantics. *Linguistics and Philosophy* 10:531–565.

- Cinque, Guglielmo. 1994. On the evidence for partial N-movement in the Romance DP. In *Paths Towards Universal Grammar: Studies in Honor of Richard S. Kayne*, eds. Guglielmo Cinque, Jan Koster, Jean-Yves Pollock, Luigi Rizzi, and Raffaella Zanuttini, 85–110. Washington, D.C.: Georgetown University Press.
- Cinque, Guglielmo. 2005. Deriving Greenberg’s Universal 20 and its exceptions. *Linguistic Inquiry* 36:315–332.
- Cinque, Guglielmo. 2010. *The Syntax of Adjectives: A Comparative Study*. Cambridge, Massachusetts: MIT Press.
- Clarke, Sandra. 1982. *North-West River (Sheshātshūt) Montagnais: A Grammatical Sketch*. No. 80 in National Museum of Man Mercury Series, Canadian Ethnology Service Papers. National Museums of Canada, Ottawa.
- Clarke, Sandra, and Marguerite MacKenzie. 2007. *Labrador Innu-aimun: An Introduction to the Sheshatshiu Dialect*. St. John’s, Newfoundland: Department of Linguistics, Memorial University of Newfoundland.
- Corver, Norbert. 1997. The internal syntax of the Dutch extended adjectival projection. *Natural Language and Linguistic Theory* 15:289–368.
- Cowper, Elizabeth. 2005. The geometry of interpretable features: Infl in English and Spanish. *Language* 81:10–46.
- Davidse, Kristin, Tine Breban, and An van Linden. 2008. Deictification: The development of secondary deictic meanings by adjectives in the English NP. *English Language and Linguistics* 12:475–503.
- Denison, David. 2006. Category change and gradience in the determiner system. In *The Handbook of the History of English*, eds. Ans van Kemenade, and Bettelou Los, 279–304. Oxford: Blackwell.
- Dixon, R. M. W. 2004. Adjective classes in typological perspective. In *Adjective Classes:*

- A Cross-Linguistic Typology*, eds. R. M. W. Dixon, and Alexandra Y. Aikhenvald, 1–49. Oxford: Oxford University Press.
- Drapeau, Lynn, and José Mailhot. 1989. Practical guide to Montagnais spelling [Original title: Guide pratique d'orthographe montagnaise]. Manuscript, Attikamek-Montagnais Cultural Institute.
- Fischer, Roswitha. 1998. *Lexical Change in Present-day English*. Tübingen, Germany: Gunter Narr.
- Greenberg, Joseph. 1963. Some universals of grammar with particular reference to the order of meaningful elements. In *Universals of Language*, ed. Joseph Greenberg, 73–113. Cambridge, Massachusetts: MIT Press.
- Harley, Heidi, and Elizabeth Ritter. 2002. Person and number in pronouns: A feature-geometric analysis. *Language* 78:482–526.
- Heim, Irene, and Angelika Kratzer. 1998. *Semantics in Generative Grammar*. Malden, Massachusetts: Blackwell.
- Herdan, Simona, and Yael Sharvit. 2006. Definite and nondefinite superlatives and NPI licensing. *Syntax* 9:1–31.
- Huddleston, Rodney, and Geoffrey K. Pullum. 2002. *The Cambridge Grammar of the English Language*. Cambridge: Cambridge University Press.
- Julien, Marit. 2005. *Nominal Phrases from a Scandinavian Perspective*. Amsterdam: Benjamins.
- Kayne, Richard S. 2005. Some notes on comparative syntax, with special reference to English and French. In *The Oxford Handbook of Comparative Syntax*, eds. Guglielmo Cinque, and Richard S. Kayne, 3–69. New York: Oxford University Press.
- Kennedy, Christopher. 1999. *Projecting the Adjective: The Syntax and Semantics of Gradability and Comparison*. New York/London: Garland.

- Kennedy, Christopher, and Jason Merchant. 2000. Attributive comparative deletion. *Natural Language and Linguistic Theory* 18:89–146.
- Matushansky, Ora. 2002. Movement of degree/degree of movement. Doctoral dissertation, MIT.
- Matushansky, Ora. 2008. On the attributive nature of superlatives. *Syntax* 11:26–90.
- Moltmann, Friederike. 1992. Reciprocals and *same/different*: Towards a semantic analysis. *Linguistics and Philosophy* 15:411–462.
- Oxford, Will. 2007. Towards a grammar of Innu-aimun particles. Master's thesis, Memorial University of Newfoundland.
- Oxford, Will. 2008. *A Grammatical Study of Innu-aimun Particles*. Winnipeg: Algonquian and Iroquoian Linguistics Memoir 20.
- Quirk, Randolph, Sidney Greenbaum, Geoffrey Leech, and Jan Svartvik. 1985. *A Comprehensive Grammar of the English Language*. London: Longman.
- Roberts, Ian, and Anna Roussou. 2003. *Syntactic Change: A Minimalist Approach to Grammaticalization*. Cambridge: Cambridge University Press.
- Svenonius, Peter. 1992. The structural location of the attributive adjective. In *Proceedings of the 11th West Coast Conference on Formal Linguistics*, eds. Erin Duncan, Donka Farkas, and Philip Spaelt. Stanford, California: CSLI.
- Thorburn, Jennifer. 2005. Language attitudes and use of the Sheshatshiu Innu: Preliminary findings. *Toronto Working Papers in Linguistics* 25:76–84.

Source URLs of internet examples

I have standardized the spelling and capitalization in all examples gathered from the internet. The examples in (53) are from the following web pages, accessed on Nov. 25, 2010:

- (a-i) <http://www.factorguru.com/tag/six-cs-of-credit/>
- (a-ii) http://wowmb.net/forums/f22/34290-pvp_glyphs/
- (b-i) <http://www.poker-hand.me/printable-poker-hand.php?ln=en>
- (b-ii) <http://www.villanovan.com/basketball-on-the-horizon-1.1744311>
- (c-i) <http://www.codeproject.com/KB/directx/dx8template2.aspx>
- (c-ii) <http://community.livejournal.com/ohnotheydidnt/33813970.html>

The examples in (54) are from the following sources, as accessed on Nov. 25, 2010:

- (a-i) McCready, David. *The Great Simulator*, p. 72 (via Google Books)
- (a-ii) <http://www.dur.ac.uk/mathematical.sciences/teaching/handbook/asesment/examsinfo/>
- (b-i) <http://e-articles.info/e/a/title/IP-Supernetting-or-CIDR/>
- (b-ii) <http://americanfootballesiee.blogspot.com/2007/12/nfl.html>
- (c-i) <http://eve-search.com/thread/1419739/page/1>
- (c-ii) <http://americanfootballesiee.blogspot.com/2007/12/nfl.html>

The examples in (57) are from the following web pages, as accessed on Oct. 28, 2010:

- (a) <http://zknives.com/knives/kitchen/ktknv/henckels/miyabisth130.shtml>
- (b) <http://www.progarchives.com/Review.asp?id=176831>
- (c) <http://www.smartshanghai.com/dining/reviews/?rev=3971>
- (d) http://forums.cnet.com/7723-7596_102-239041.html
- (e) <http://www.chinese-forums.com/index.php?topic/15359-chengdu-jiaotong-or-sichuan-uni/>

The examples in (58) are from the following web pages, as accessed on Oct. 28, 2010:

- (a) <http://www.yourfairydreams.com/?p=6219>
- (b) <http://answers.yahoo.com/question/index?qid=20081001152305AAiubIz>

(c) <http://www.sothinkmedia.com/ipod-video-converter/help/pages/faq.html>

(d) <http://www.vbforums.com/showthread.php?t=596560&page=2>

(e) <http://www.home-barista.com/advice/which-hand-grinder-for-espresso-works-best-t14104.html>