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Lexical vs. structural case: a false dichotomy

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Abstract This article takes issue with the two dichotomies of structural vs. lexical case and thematic vs. idiosyncratic case, on the basis of their predictions on: (a) synchronic productivity, (b) language change, and (c) language acquisition. It is shown here that these predictions are not borne out in Icelandic. In fact, productivity data from Icelandic suggest that accusative objects to new verbs are assigned lexically and not structurally. Another problem is presented by different changes in case marking in the history of the Germanic languages, changes that can only be captured by two complementary approaches to structural case, which in turn severely undermines the general explanatory power of this concept. It turns out, moreover, that the case preservation property of lexical case, as opposed to structural case, in passives and raising-to-object constructions, is a construction-specific property, not generalizable to the language as a whole. An alternative approach is sketched in terms of a usage-based Construction Grammar where all case marking of core arguments in Icelandic is regarded as lexical, i.e. word-bound, and modeled in terms of lexicality–schematicity hierarchies which capture verb-specific idiosyncrasies, higher-level generalizations, as well as the default status effect found for the Nom-Acc Construction.

Keywords Structural vs. lexical case · Thematic vs. idiosyncratic case · Default case · Productivity · Language acquisition · Language change · Usage-based Construction Grammar

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1 Introduction

There is a long-standing tradition in modern linguistic frameworks which divides morphological case into lexical and structural case, and specifically in Icelandic, lexical case has been divided into thematic and idiosyncratic case.¹ This article takes issue with both these dichotomies, claiming instead that all morphological case marking, at least in Icelandic, is lexical, i.e. word bound, and not structural. Section 2 gives the historical background of the tradition assuming these two dichotomies, and in opposition to that the hypothesis of the current article, that all case marking of core arguments in Icelandic is lexical, is presented. Section 3 deals with the lexical vs. structural case dichotomy, with examples from Icelandic, as well as pointing out some existing problems caused by the dichotomy. Section 4 lays out three predictions that the dichotomy between lexical and structural case makes on (a) productivity, (b) historical changes, and (c) language acquisition, predictions that are not borne out in Icelandic. Section 5 demonstrates that the distinction between lexical and structural case is a derivative of case marking facts with no explanatory power, only descriptive power. Section 6 examines the data that originally motivated the dichotomy and shows that the perseverance of the dative and the genitive, as opposed to the non-perseverance of the nominative and the accusative turns out to be highly construction specific, not generalizable to the language as a whole. Section 7 gives a brief outline of how the data discussed in this paper can be accounted for on a usage-based constructional approach, without making reference at all to the lexical vs. structural case dichotomy, hence concluding that this dichotomy is not needed in linguistic theory. Section 8 summarizes the content and conclusions of this article.

As an alternative to the dichotomy between structural and lexical case in generative grammar, I suggest an analysis of case marking in Icelandic, founded on a usage-based constructional approach to language and grammar. In particular I suggest a model of grammar in terms of lexicality–schematicity hierarchies, where both higher-level generalizations and lower-level idiosyncrasies are maintained (cf. Croft 2001, 2003). Lexicality–schematicity hierarchies are a continuum from the concrete, lexically filled, to the abstract schematic, with intermediate levels of partially lexically-filled and schematic constructions in between. For argument structure constructions, this entails different levels of schematicity, depending on type frequency and the natural semantic categories arising from these types. The lowest level of the hierarchy consists of lexically-filled verb-specific constructions. One level up, we find verb-subclass-specific constructions, which are abstractions of the verb-specific constructions. The level above that consists of verb-class-specific constructions, which are abstractions of the verb-subclass-specific constructions. Above that we find basic-event-type constructions, which are abstractions of the verb-class-specific constructions. The highest level of argument structure constructions is totally abstract, consisting of schematic structure and the empty slots relevant for that structure, with only a relational meaning at best (Barðdal 2008,

¹ The title of this article is inspired by the title of Croft (2003): “Lexical rules vs. constructions: A false dichotomy.”

pp. 45–50, *inter alia*). The number of levels assumed for each argument structure construction in a language is an empirical issue, based on type frequency and verb classes, only assumed to be psychologically real in the minds of speakers, if properly founded by linguistic data. For Icelandic this means that only the Nom-Acc Construction, and not the Nom-Dat Construction, can be assumed to exist at the highest most schematic level of abstraction. Lexicality–schematicity hierarchies are structured inventories of lexicon–grammar interactions and as such they are ideal for modeling lexical patterns in grammar. A model like the present one makes a purely “lexical” approach to case marking not only possible but also feasible.

2 Background

The conception that there is a fundamental difference between the so-called structural and non-structural morphological cases is found already in traditional grammar, cf. Kuryłowicz’s (1964) distinction between grammatical and semantic cases. This distinction has been carried over to modern linguistics frameworks, cf. Chomsky’s (1981, p. 171) opposition between “structural” case and “inherent” case:

Structural Case . . . is a structural property of a formal configuration. Inherent Case is presumably linked to θ -role.

What Chomsky labels here as “inherent” case is what later came to be known as “thematic” case, i.e. case marking assigned on the basis of a specific thematic role. Structural case, on the other hand, is nominative assigned on the basis of the subject position and accusative on the basis of the object position in a sentence.

Zaenen et al. (1985), however, in their seminal article on case marking and syntactic functions make a distinction between what they call “functional,” “idiosyncratic/lexical” and “semantic” case. Functional case for them is structural case, i.e. assigned by certain positions or slots in the structure/sentence, and semantic case is the label they use on, for instance, adverbial and instrumental case. On the notion of idiosyncratic/lexical case, they state the following:

Idiosyncratic or lexical case marking is an idiosyncratic property of a lexical item, assigned by a verb, preposition or adjective. We assume that idiosyncratic case is associated with a particular thematic role . . . (1985, p. 465)

It is clear here that Zaenen et al. use the terms “lexical” and “idiosyncratic” as synonyms about the case marking of, amongst others, verbal arguments, i.e. core arguments that are not regarded as being assigned case on the basis of the structure of the sentence. These are accusative, dative and genitive on subjects and accusative on some objects in Icelandic, as well as dative and genitive objects. Zaenen et al. convincingly demonstrate, moreover, that case marking and syntactic functions do not go hand in hand in Icelandic (first observed by Andrews 1976), that subject-like arguments in the accusative, dative and genitive case behave syntactically as nominative subjects in Icelandic, and object-like arguments in the nominative case behave syntactically as ordinary accusative objects, despite the non-canonical case

marking. The latest contribution to this discussion is found in Barðdal and Eythórsson (2003, 2006), Eythórsson and Barðdal (2005) and Barðdal (2006a) where it is shown that subject-like obliques in German also behave syntactically as subjects, exactly like in Icelandic, and hence that the difference between Icelandic and German is not categorical but gradient in nature.

In contrast, Yip et al. (1987) elaborate with “syntactic” vs. “lexical” case, where syntactic is the same as structural, while lexical case is further divided into thematic and idiosyncratic case. Thematic case is linked to a particular thematic argument, while idiosyncratic case really is regarded as unpredictable. Compare the following quote from Yip et al. (1987, p. 227):

... that it is possible for verbs to have one lexical case that has been assigned by a regular lexical rule to a particular class of arguments [i.e. thematic], plus a second truly unpredictable or ‘quirky’ lexical case.

It is thus clear that the modern distinction between lexical and structural case, with lexical case further divided up into thematic and idiosyncratic case, can be dated at least as far back as 1987. This distinction, or set of distinctions, has become classical in current generative frameworks, and is employed by for instance Sigurðsson (1989), Jónsson (2005), Jónsson and Eythórsson (2005) in their work on Icelandic, and by others.

Research on morphological case has also given rise to further dichotomies, like for instance the one between abstract and morphological case (Sigurðsson 2003). Other variations of this theme have been developed in the literature, as in Woolford (2006), where non-structural cases are divided into “lexical” and “inherent” case with lexical case referring to experiencers and themes and inherent case referring to goals. I know of only two serious attempts in the literature to refute this dichotomy (apart from in my own earlier work), and that is Svenonius (2006) and Sigurðsson (2008).

Svenonius (2006) claims that all case marking of core arguments, in for instance Icelandic, is structural, and that there only exist different types of structural cases. Svenonius’ analysis deals first and foremost with object case, passives, medio-passives and anti-causatives (unaccusatives in his terminology), so it is not clear on his account whether for instance dative subjects are also structurally assigned or whether they would still be regarded as lexical in his framework.

Sigurðsson (2008) dispenses altogether with the distinction between structural and lexical case, and suggests instead an analysis based on default or elsewhere case. On his approach, the nominative and the accusative are non-cases or “elsewhere” cases, which show up in the lack of a dative or a genitive. Accusative is the unmarked elsewhere case in relation to the dative and the genitive, while the nominative is the unmarked elsewhere case in relation to the accusative. The question that arises, not properly addressed in Sigurðsson’s paper, pertains to what kind of status the dative and the genitive have. Or, in other words, Sigurðsson’s approach still seems to entail that the nominative and the accusative are qualitatively different from the dative and the genitive.

The distinction between lexical and structural case is a widely used distinction within linguistics, not only in syntax but also in experimental linguistics

(see, for instance, Hopf et al. 1998), acquisition studies (see, for instance, Eisenbeiss et al. 2005–2006) and in other fields. It has not only been applied to Icelandic but to several other languages, such as German (Haider 1985; Heinz and Matiassek 1994; Bader and Bayer 2006, Chap. 3), Russian (Babby 1985, Franks 1995: Ch. 4, Richardson 2007), Finnish (Maling 1993, Manninen 2003), and others. Opposing the consensus in the literature, the hypothesis put forward in the present article is the following:

- (1) Hypothesis: All core case marking in Icelandic is lexical, i.e. word bound

This of course raises the question of how I interpret the notions of structural and lexical case, which is the topic of next section.

3 Lexical vs. structural case

In this section I give examples of structural and lexical case in Icelandic, with both subjects and indirect objects, in order to point out some of the problems caused by the idea that lexical case is assigned thematically.

Lexical and structural case are here understood in the following way:

- (2) a. Structural case is assigned on the basis of the structure or the position in the sentence
 b. Lexical case is word bound, i.e. tied to specific lexical entries

These definitions do not deviate from the traditional definitions of structural and lexical case in the literature. Structural case in Icelandic is (a) nominative on subjects and accusative on objects (ex. (3)), and (b) nominative on objects when the subject is lexically case marked, e.g. by a dative (ex. (4)). Lexical case in Icelandic is accusative (5), dative (6) and genitive (7) on subjects and accusative (8), dative (9) and genitive (10) on objects. These are listed below:

Structural nominative subjects, structural accusative objects:

- (3) Og **gamla kellan** barði **mig** í öxlina ...
 and old.NOM lady.NOM hit me.ACC in shoulder-the
 ‘And the old woman beat me in the shoulder ...’

Structural nominative objects:

- (4) Hundum líkar illa **fótsnerting**.
 dogs.DAT like badly foot-touch.NOM
 ‘Dogs dislike their feet being touched.’

Lexical accusative subjects:

- (5) **Mig** dreymdi undarlegan draum í nótt.
 me.ACC dreamt strange.ACC dream.ACC in night
 ‘I had a strange dream last night.’

Lexical dative subjects:

- (6) **Hundum** líkar illa fót-snerting.
 dogs.DAT like badly foot-touch.NOM
 ‘Dogs dislike their feet being touched.’

Lexical genitive subjects:

- (7) **Áhrifanna** gætir enn.
 effects-the.GEN is-perceptible still
 ‘The effects are still perceptible.’

Lexical accusative objects:

- (8) Mig dreymdi **undarlegan draum** í nótt.
 me.ACC dreamt strange.ACC dream.ACC in night
 ‘I had a strange dream last night.’

Lexical dative objects:

- (9) Lóan stal **senunni**.
 golden-plover-the.NOM stole scene-the.DAT
 ‘The golden plover stole the scene.’

Lexical genitive objects:

- (10) Nefndin skal ekki vitja **staða** sem ...
 committee-the.NOM shall not visit places.GEN which
 ‘The committee is not supposed to visit places which ...’

Here it is also of relevance how thematic case is defined, and in Icelandic dative on subjects is regarded as being assigned on the basis of thematic role. Originally it was assumed in the literature that dative case of subjects was thematically assigned on the basis of the experiencer and beneficiary roles (Zaenen et al. 1985). However, lately it has been argued that dative case on subjects can also be thematically assigned on the basis of the theme and patient roles (Jónsson 1997–1998). This is exemplified in (11)–(14) below:

Experiencers:

- (11) **Hundum** líkar illa fót-snerting.
 dogs.DAT like badly foot-touch.NOM
 ‘Dogs dislike their feet being touched.’

Beneficiaries:

- (12) **Henni** barst pakki í gær.
 she.DAT received package.NOM in yesterday
 ‘She received a package yesterday.’

Patients:

- (13) **Honum** versnaði veikin.
 he.DAT got-worse illness.NOM
 ‘He got worse from the illness.’

Themes:

- (14) **Óhugnanlegri mynd** skaut upp í huga mér þegar ...
 horrifying.DAT picture.DAT shot up in mind me when
 'A horrifying picture surfaced in my mind when ...'

At this point there are two serious problems that come to mind regarding thematic case assignment. First, nominative case is also assigned to experiencer, beneficiary, patient and theme subjects. Therefore, the difference between nominative and dative subjects is that only nominatives are assigned to agents (cf. Barðdal 2001a, pp. 101–102). Thus, if all subjects, except those with the thematic role of an agent, may be assigned dative subject case, how thematic is this case assignment? In other words, if dative case can be assigned to the subjects of all types of non-agentive predicates, it is not restricted to a particular thematic role anymore, which is what the original generalization was supposed to capture. Moreover, the current generalization that dative case on subjects can be assigned to all thematic roles except for agents is not captured by this approach, i.e. by regarding and calling this case assignment “thematic.”

The question of course arises as to whether the use of dative with ditransitives is more predictable in Icelandic. This is not necessarily so, as Icelandic has five different case frames with ditransitive predicates, i.e. Dat-Acc, Dat-Dat, Acc-Dat, Acc-Gen and Dat-Gen (cf. Barðdal 2007; Barðdal et al. 2011 and the references therein). Consider the following Modern Icelandic attested examples:

Dat-Acc

- (15) Menn mæla **þessu bót**.
 people speak this.DAT remedy.ACC
 'People make excuses for this.'

Dat-Dat

- (16) Hann svaraði **henni engu** ...
 he answered her.DAT nothing.DAT
 'He didn't respond to her at all.'

Acc-Dat

- (17) Og sagði ég honum allt ... og leyndi **hann engu**.
 and told I him everything and hid him.ACC nothing.DAT
 'I told him everything ... and hid nothing from him.'

Acc-Gen

- (18) Margrét bað **hann afsökunar**.
 Margaret asked him.ACC apology.GEN
 'Margaret asked him for an apology.'

Dat-Gen

- (19) Ekki stóð vel á hjá blaðinu, svo að Valtýr
 not stood well on at newspaper-the so that Valtýr
 synjaði **honum greiðslunnar.**
 denied him.DAT payment-the.GEN
 ‘This was not a good time for the newspaper so Valtýr denied him
 the payment.’

These examples show that the indirect object can either be marked as dative or accusative, depending on case frame, and that the dative is not uniformly assigned to a beneficiary or a recipient in Icelandic. Therefore, the assignment of dative case to indirect objects cannot be regarded as being thematically more regular than the assignment of dative case to subjects.

A second problem arises from the fact that dative case is also assigned to subjects of subjective speaker-oriented evaluative predicates and not only to subjects of (semi-)factual predicates, which are the ones always discussed in the literature as having oblique subjects, exemplified in (11)–(14) above (cf. Barðdal 2004, pp. 124–131). Speaker-oriented evaluative predicates are predicates occurring in utterances where the speaker evaluates the performance or other abilities of the subject referent. One such example from English is given in (20) below, where the verb *look* is used together with an evaluative complement *good* to convey the speaker’s evaluations of the looks of the subject referent, *John*:

- (20) **John** looks good.

A subclass of speaker-oriented evaluative predicates in Icelandic occurs with a dative subject, like in (21) below:

- (21) **Leikurunum** tókst vel upp á sviðinu.
 actors-the.DAT took-*st* well up on stage-the
 ‘The actors performed well on the stage.’

The referent of the dative subject *leikurunum* is not assigned the thematic role of an experiencer but is rather somebody carrying out a performing act, cf. the translation ‘The actors performed well on the stage.’ It is the speaker, however, who is evaluating the performance of the subject referent. So if anything, it is the speaker who is the experiencer here. On the basis of data like these, I have argued elsewhere (Barðdal 2004) that two levels of relations need to be assumed:

- (a) a level including the semantic relation holding between the referent denoted by the logical subject and the “event” denoted by the predicate (the semi-factual level)
- (b) a level including the empathic relation holding between the speaker and his/her attitudes towards the content of the proposition encoded in the utterance (the subjective level)

The examples in (11)–(14) belong to the first level and the example in (21) belongs to this second level, and it is not clear at all how an approach based on thematic

roles can account for the dative case marking of the subject in (21), i.e. how an approach based on thematic roles can account for these two levels.

In addition to these problems, the dichotomy between lexical and structural case makes three predictions on: (a) productivity, (b) historical development, and (c) language acquisition, which are not borne out in Icelandic. This is the topic of next section.

4 Predictions of the dichotomy between lexical and structural case

The lexical vs. structural case dichotomy makes the following three predictions:

- (22) Prediction 1: *Only structural case and not lexical case should be productive when new verbs enter a language*, as structural case is assigned on the basis of the syntactic structure, i.e. nominative to subjects and accusative to objects, while lexical case is bound to predefined lexical items and specified in the lexicon to occur with these.

This interpretation of the role of the lexical vs. structural case dichotomy for productivity is confirmed by the following quote from Pinker (1999, p. 19) on the productivity of regular and irregular past tense forms in English:

The theory that regular forms are generated by rule and irregular forms are retrieved by rote is pleasing . . . because it explains the differences in productivity between the two patterns . . .

The distinction between lexical and structural case is equivalent to the distinction between regular and irregular past tense forms, as regular forms are regarded as being generated by a rule, while the irregular forms are regarded as being associated with specific lexical entries. Hence, on this approach only the forms generated by a rule should be productive while the ones not generated by a rule, but associated with specific lexical entries, should not be productive.

- (23) Prediction 2: *Structural case should increase in frequency over time while lexical case should decrease in frequency*, as only structural case should be productive. Given a gradual renewal of the vocabulary, a proportion of verbs selecting for both structural and lexical case should fall into disuse, while new verbs should only be assigned structural case. Through history, frequencies should therefore become more and more skewed in favor of verbs selecting for structural case.
- (24) Prediction 3: *Children should overuse structural case at the cost of lexical case*, as the mapping of lexical case with the relevant lexical entries needs to be learned specifically, while structural case does not need to be mapped with any lexical entries.

These three predictions of the lexical vs. structural case dichotomy, which I now discuss in turn, are not borne out in Icelandic.

Table 1 The differences between Nom-Acc and Nom-Dat types in various counts of Icelandic (Barðdal 2008, p. 79)

	Dictionary count		Corpus count		Borrowed verbs	
	N	f (%)	N	f (%)	N	f (%)
Nom-Acc	1,381	65.2	303	61.7	68	63.6
Nom-Dat	738	34.8	188	38.3	39	36.4
Total	2,119	100.0	491	100.0	107	100.0

4.1 Synchronic productivity

The first prediction, that only structural case and not lexical case should be productive, is clearly not borne out in Icelandic, as borrowed transitive verbs in Icelandic can assign either accusative or dative case to their objects. Table 1 gives the absolute type frequency, i.e. dictionary frequencies (first column) and the relative type frequency, i.e. type frequency based on occurrence in a text corpus (second column) of Nom-Acc and Nom-Dat predicates in Icelandic. The last column specifies the proportion between Nom-Acc and Nom-Dat with transitive verbs that have been borrowed into Icelandic, based on a database of borrowed verbs (Barðdal 2008, pp. 78–89). It is therefore the last column that shows the productivity of accusative and dative case on objects in Icelandic.

The dictionary count is carried out on the basis of an intermediate-sized Icelandic-English dictionary (cf. Barðdal 2008, pp. 58–59 for the details of this source), while the corpus count is conducted on the basis of a small but well-stratified corpus with six different genres, five written and one spoken genre (cf. Barðdal 2001a, pp. 76–80 and its bibliographical section). The database with borrowed verbs was mostly compiled on the basis of occurrences on the Icelandic discussion forum for Mac users (www.apple.is/umraedur).

Observe that the proportions between Nom-Acc and Nom-Dat for the borrowed verbs mirror almost exactly the proportions between Nom-Acc and Nom-Dat in the two other counts, i.e. 64% Nom-Acc vs. 36% Nom-Dat. This means that speakers who borrow transitive verbs from a foreign language into Icelandic assign dative case to the object of these verbs in approximately 36% of the instances. *This is totally unexpected on the assumption that dative as an object case is lexical*, i.e. tied to specific lexical entries, as one would not expect such high numbers for a construction that should be unproductive. These borrowed verbs are listed below (spelling original), first the Nom-Acc verbs and then the Nom-Dat verbs (cf. Barðdal 2006b, 2008).

- (25) **Nom-Acc:** *archive-a* ‘archive’, *battla* ‘battle’, *biddsslappa* ‘bitchslap’, *blasta* ‘blast’, *bojkotta* ‘boycott’, *builda* ‘build’, *bomba* ‘bomb’, *branda* ‘brand’, *browsa* ‘browse’, *bösta* ‘bust’, *compilera* ‘compile’, *copy-a* ‘copy’, *digga* ‘dig’, *döbba* ‘dub’, *editera* ‘edit’, *erasa* ‘erase’, *fila* ‘like’, *fixa* ‘fix’, *flexa* ‘flex’, *formatta* ‘format’, *fótósjoppa* ‘photoshop’, *gúggla* ‘google’, *hakka* ‘hack’, *hössla* ‘hussle’, *kidda* ‘kid’, *krakka* ‘crack’, *logga* ‘log’, *massa* ‘finish with style’, *meisa* ‘spray with tear gas’, *modda* ‘modify’, *mounta*

'mount', *muffa* 'bang', *mönnsa* 'munch', *offa* 'off', *óna* 'own', *paira* 'pair', *partiona* 'partition', *patcha* 'patch', *peista* 'paste', *pinga* 'ping', *plögga* 'plug', *próðúsera* 'produce', *prógrammera* 'program', *publisha* 'publish', *r[e]nta* 'rent', *releasa* 'release', *rendera* 'render', *resetta* 'reset', *resolva* 'resolve', *restora* 'restore', *rippa* 'rip', *rokka* 'rock', *skratsa* 'scratch', *skvassa* 'squash, break', *slamma* 'slam', *ssh-a* 'ssh', *stúðera* 'study', *supporta* 'support', *sörfa* 'surf', *synca/synkrónisera* 'synchronize', *tagga* 'tag, write', *testa* 'test', *tóka* 'smoke hash', *trimma* 'trim', *updata* 'update', *upgreida* 'upgrade', *verifya* 'verify'

- (26) **Nom-Dat:** *adda* 'add', *blasta* 'blast', *bomba* 'bomb', *bundla* 'bundle', *convertera* 'convert', *downloada* 'download', *deleta* 'delete', *de-multiplexa* 'demultiplex', *dumpa* 'dump', *droppa* 'drop', *ejecta* 'eject', *expandera* 'expand', *exporta* 'export', *farta* 'fart', *innstalla/innstillera* 'install', *krassa* 'crash', *msna* 'msn', *mökka* 'move', *neimdropa* 'namedrop', *offa* 'off', *parkera* 'park', *peista* 'paste', *poppa* 'deliver when popping by', *pósta* 'post', *publisha* 'publish', *releasa* 'release', *resolva* 'resolve', *restarta* 'restart', *rippa* 'steal', *sjera* 'share', *slamma* 'slam', *starta* 'start', *statta* 'stat, duplicate', *streyma* 'stream', *tilta* 'tilt', *umba* 'be agent for', *unzippa* 'unzip', *uploada* 'upload', *untara* 'unzip'

On a close inspection of these data, it turns out that of the 107 relevant borrowed verbs listed in (25)–(26) above, 88 verbs (82%) are assigned case on the basis of the case marking of an already existing synonymous Icelandic verb (see Table 2). Because of space limitations, I will here refrain from listing the Icelandic synonymous verbs which function as model verbs for Icelandic speakers when these speakers assign case to borrowed verbs, but refer the interested reader to Barðdal (2008, Chap. 3) for a more detailed account of the model verbs. Now, case assignment on the basis of existing synonymous verbs takes place in 63 of 68 cases for accusative object verbs and in 25 of 39 cases for dative object verbs. This difference is statistically significant (Pearson Chi-Square, $p < 0.0002$; Yates Chi-Square, $p < 0.0005$; Cramer's $V = 0.3596$). As Cramer's V shows that the association between the case frame assigned to a borrowed verb and the case frame of an existing synonymous Icelandic verb is as strong as 36%, this factor cannot be ignored.

Table 2 Case assignment of borrowed verbs

	Synonymously assigned		Non-synonymously assigned	
	N	f (%)	N	f (%)
Nom-Acc	63	92.6	5	7.4
Nom-Dat	25	64.1	14	35.9
Total/Average	88	82.0	19	18.0

Two examples of case frames assigned to borrowed verbs on the basis of synonymous existing verbs are shown in (27)–(28) below.

(27) Eftir að ég updataði **tölvuna** núna síðast ... Accusative
after that I updated computer-the.ACC now last
'After I updated the computer last time ...'

(28) ... þá ákvað ég að offa **því** um 2–4 vikur. Dative
then decided I to postpone it.DAT about 2–4 weeks
'... then I decided to postpone it for 2–4 weeks.'

In the example in (27) the borrowed verb *updata* 'update', which is synonymous with the Icelandic Nom-Acc *uppfæra*, is being used with an accusative object. In contrast, in (28) the borrowed verb *offa* 'off' is being used with the same case frame, Nom-Dat, as found for its near synonym in Icelandic, *fresta* 'postpone'. Here I would like to emphasize that synonymous verbs in Icelandic do not generally share a case frame. There are, of course, some synonymous verbs in Icelandic that share a case frame, but there are plenty of examples of the opposite as well (cf. Maling 2002; Barðdal 2008, Chap. 3).

On the assumption that accusative case is assigned to objects on the basis of their object position in the sentence structure, it comes as a complete surprise that 63 out of 68 borrowed verbs, or 92.6%, are clearly assigned accusative case to the object on the basis of already existing Icelandic synonymous verbs. Case and argument structure assignment on the basis of synonymous verbs should only take place with dative object verbs, as they are the ones allegedly lexically assigned, i.e. assigned on the basis of lexical entries. Therefore, it appears as even more surprising that the tendency to assign a case frame on the basis of a synonymous verb is more prominent with Nom-Acc verbs than Nom-Dat verbs. On consultation with Icelandic speakers, they respond indeed by referring to an existing synonymous verb as a motivation for their novel case assignment, either existing Nom-Acc or existing Nom-Dat verbs, depending on which borrowed verb is at issue. My results thus suggest that accusative case on objects is lexically assigned and not structurally, contra previous assumptions. This lexical assignment of the accusative to objects must be properly accounted for within any linguistic model claiming to represent psychological plausibility.

The remaining 19 (of the 107) verbs, listed in an Appendix below, do not have near-synonyms in Icelandic with the relevant case frame. These are clearly assigned object case either because they belong to a small semantic verb cluster, or on individual idiosyncratic basis.

Low-level verb-class generalization:

(29) ... búin að importera **öllum færslum** þessa Dative
finished to import all.DAT transactions.DAT this
árs inn í MT ...
year into in MT
'... finished importing all transactions from this year into MT ...'

existing Nom-Acc or Nom-Dat verbs. Neither of these predictions, however, are borne out, as only five of the 68 borrowed verbs which were assigned the Nom-Acc Construction, or 7.4%, are not assigned case on the basis of existing synonymous verbs. These can therefore be regarded as extensions based on the structural default. It is a major problem, however, that the Nom-Dat Construction has been extended even further, as 14 of 39 of the borrowed verbs are assigned the Nom-Dat Construction, or 36% of the Nom-Dat verbs, are extensions beyond existing synonymous Nom-Dat verbs. Again, the fact that the Nom-Acc Construction seems to be more or less assigned on the basis of existing synonymous verbs in Icelandic does not speak for the analysis that the Nom-Acc Construction is assigned to new verbs as a structural default. Rather, it speaks for the analysis that accusative, as an object case, is lexical, i.e. word bound or tied to specific lexical entries.

One could perhaps argue for an alternative analysis which would assume that the grammar of Icelandic does not consist of a Nom-Acc structural default and several minor non-productive patterns, but rather that there are at least two major rules of case marking in Icelandic, one Nom-Acc rule targeting the majority of transitive verbs and another Nom-Dat rule targeting a smaller, yet a substantial, set of verbs, and both would be productive within their respective domains. Such an analysis, however, would at best be a notational variant of the constructional analysis that I sketch out in Sect. 7 below. Also, one argument against such a notational variant is found in the fact that the domain of each of the two case constructions, Nom-Acc and Nom-Dat, cannot be defined in terms of a general semantic rule, but has to be defined lexically for the predicates instantiating each case pattern.

Yet another alternative analysis to the present analysis would be to view the assignment of Nom-Dat to arguments of borrowed verbs as taking place prior to the assignment of Nom-Acc to these verbs. On such an assumption, one might, in fact, expect the distribution of accusative objects to reflect non-dative environments, which in this case happens to coincide with accusative environments. On such an analysis, the Nom-Acc Construction is not assigned on the basis of synonymous verbs, it only appears so, as the assignment of Nom-Dat takes place first. Then after the case assignment of the prioritized dative, the Nom-Acc Construction would be assigned as a structural default. However, there are at least two arguments against this latter alternative analysis.

First of all, if it were true that the assignment of the Nom-Dat Construction takes place prior to the assignment of the Nom-Acc Construction, i.e. if dative objects are somehow given precedence over accusative objects in the grammar, one would certainly expect all existing Nom-Dat verbs to function as model verbs. That is, one would not expect borrowed verbs that are translational equivalents of Nom-Dat verbs to receive Nom-Acc, but rather Nom-Dat. This is not always the case. I here let it suffice to mention one example of the five (7.4%) borrowed Nom-Acc verbs which were not assigned accusative case on the basis of a synonymous Nom-Acc verb. This is the verb *editera* 'edit'. By contrast, this borrowed verb is a translational equivalent of *ritstýra* 'edit' which is a Nom-Dat verb in Icelandic. The fact that *editera* was assigned the Nom-Acc Construction, despite being synonymous with a Nom-Dat verb, does not support

the hypothesis that the dative may be given precedence in the grammar of Icelandic. This hypothesis can therefore as such not be used as an attempt to discredit the analysis proposed here that the Nom-Acc Construction is assigned to borrowed verbs in 93% of the cases on the basis of a synonymous Icelandic verb.

A second argument against this latter alternative analysis comes from speakers' insights. Recall that native speakers refer to existing synonymous verbs in Icelandic as a motivation for their case marking. This applies to both the Nom-Dat and the Nom-Acc Construction and not only the Nom-Dat Construction, which shows that at least some Icelandic speakers assign accusative objects lexically. That fact, therefore, invalidates the latter alternative analysis sketched out above.

4.2 Language change

The second prediction of the lexical vs. structural case dichotomy states that through history frequencies should become skewed in favor of structural case, as only structural case should be productive while lexical case should not be productive. Consider the statistics in Table 3, which are based on type frequencies in two comparable corpora, one from Old Norse-Icelandic and one from Modern Icelandic. The Modern Icelandic corpus is the same corpus as reported on in Table 1 above, except that the frequencies in Table 3 are only based on a subset of that corpus, as two of the genres do not exist for Old Norse-Icelandic texts.

On the lexical vs. structural case dichotomy, one would not expect structural case to decrease in frequency from medieval to modern times. This is, however, what has happened with structural nominative on objects, as evident from Table 3. This is, of course, a consequence of the fact that Dat-Nom predicates are used less in the Modern Icelandic texts than in the Old Norse-Icelandic texts. Observe, moreover, that even though the Nom-Acc case frame increases in its type frequency from Old Norse-Icelandic to Modern Icelandic, so does the case frame of Nom-Dat. This increase of the Nom-Dat case frame is unexpected, as dative case on objects counts as lexical case marking. The differences in type frequency between the four case constructions across Old Norse-Icelandic and Modern Icelandic are statistically significant (Pearson Chi-Square, $p < 0.0002$; Cramer's $V = 0.1624$).

Table 3 Object frequency in Old and Modern Icelandic texts (Barðdal 2009, p. 150)

	Old Norse-Icelandic		Modern Icelandic	
	N	f (%)	N	f (%)
Dat-Nom	33	10.0	11	2.7
Nom-Acc	173	52.1	237	58.4
Nom-Dat	105	31.6	141	34.7
Nom-Gen	21	6.3	17	4.2
Total	332	100.0	406	100.0

Table 4 Case assignment of Nom-Dat verbs of motion and non-motion across periods

	Old Norse-Icelandic		Modern Icelandic	
	Non-motion	Motion	Non-motion	Motion
Nom-Dat	90 (85.7%)	15 (14.3%)	126 (89.4%)	15 (10.6%)

The next question to ask is of course whether this increase in Nom-Dat may be due to thematic case increasing in frequency at the cost of idiosyncratic case. That would be expected on the basis of the thematic vs. idiosyncratic case dichotomy, where thematic case is regarded as being assigned on the basis of a rule, while idiosyncratic case is regarded as being unpredictable. Observe that of the 105 Nom-Dat predicates in the Old Norse-Icelandic material, 15 are motion verbs while 90 are not motion verbs. This means that 85.7% of these dative objects must be regarded as idiosyncratically assigned, as motion verbs are regarded as thematically assigned (see Jónsson 2005, p. 384). In the Modern Icelandic material 15 out of 141 verbs are caused motion verbs. This means that 126 predicates of 141, or 89.4%, assign idiosyncratic case to their objects. The numbers in Table 4 show that there are more idiosyncratic object datives in Modern Icelandic texts than in corresponding Old Norse-Icelandic texts, i.e. 89.4% against 85.7%.

Observe that the differences between Old Norse-Icelandic and Modern Icelandic with regard to whether the Nom-Dat Construction has been assigned to a motion or non-motion verb are so small that they are not statistically significant. However, these figures show once again that my criticism against the lexical vs. structural case dichotomy cannot be swept away by referring to the hypothesis that lexical case can be divided into thematic and idiosyncratic case, as idiosyncratic case seems to have gained in frequency from Old Norse-Icelandic to Modern Icelandic, and not gone down in frequency, which in itself is even more problematic for the proponents of the thematic vs. idiosyncratic case dichotomy.

4.3 Language acquisition

The third and final prediction derivable from the lexical vs. structural case dichotomy has to do with the acquisition of morphological case, namely that children acquiring a language with both structural and lexical case should only have to learn which predicates assign lexical case, while the predicates occurring with structural case do not have to be learned specifically. This follows from the assumption that lexical case is regarded as being tied to specific lexical entries while structural case is regarded as being assigned on the basis of the position in the sentence structure, i.e. by a structural rule. This, in turn, means that children should extend structural case to the predicates conventionally assigned lexical case, with a subsequent overuse of structural case at the cost of lexical case. Lexical case, in contrast, should not be overused or extended to predicates assigned structural case, as this case marking is not rule based, but item based.

Table 5 Children's errors in the object case marking of Nom-Acc verbs (Sigurðardóttir 2002, p. 127)

Nom-Acc verbs	Nom (%)	Acc (%)	Dat (%)	Indist. (%)
<i>baka</i> 'bake'	4.7	67.4		27.9
<i>brjóta</i> 'break'	5.8	86.1		8.1
<i>fela</i> 'hide'	2.3	93.0	3.5	1.2
<i>færa</i> 'move'	1.2	97.6	1.2	
<i>hræða</i> 'scare'	4.9	95.1		1.2
<i>lemja</i> 'hit'	7.0	88.4	3.5	1.2
<i>prjóna</i> 'knit'	1.2	79.9		19.8
<i>rífa</i> 'rip'		100.0		
<i>sjóða</i> 'cook'	1.2	98.8		
<i>skoða</i> 'observe'	1.2	90.5		8.3
<i>strauja</i> 'iron'	1.2	94.1		4.7
<i>öfunda</i> 'envy'	5.3	46.3	45.0	2.5

Tables 5 and 6, from Sigurðardóttir (2002, p. 127), show that Icelandic children use dative object verbs with accusative case and, conversely, accusative object verbs with dative case. This means that lexical dative objects are replaced with structural accusative objects, and vice versa that structural accusative objects are replaced with lexical dative objects. Moreover, both structural accusative and lexical dative are replaced with structural nominative case. These facts run contrary to the predictions of the lexical vs. structural case dichotomy and suggest instead that no such qualitative difference exists between the alleged lexical and structural cases.

It is a fact, of course, that Icelandic children replace lexical dative with structural accusative more often than they replace structural accusative with lexical dative, and that this might possibly reduce the force of my argument.² To this potential objection I have two comments. First of all, the Nom-Acc case frame is substantially higher in type frequency in Icelandic than the Nom-Dat frame, hence it is expected on a usage-based approach to language that the Nom-Acc case frame be overused at the cost of the Nom-Dat frame more than the Nom-Dat frame be overused at the cost of the Nom-Acc frame. This expectation is borne out by the numbers in Tables 5 and 6. Second, if the alleged qualitative difference between lexical and structural case is substantive, and not, say, apocryphal, one would not expect Icelandic children to replace structural accusative at all with another case form. One would only expect them to replace lexical dative with structural accusative (or possibly structural nominative). Therefore, as long as there exist any examples showing that children replace structural accusative with lexical dative, the distinction between lexical and structural case is falsified, irrespective of the quantity of the errors.

When considering the general order of which Icelandic children acquire the morphological cases, it turns out that this varies for subject and object case.

² It is not possible to calculate statistical significance here, as Sigurðardóttir only gives percentages in her tables and no raw numbers.

Table 6 Children's errors in the object case marking of Nom-Dat verbs (Sigurðardóttir 2002, p. 127)

Nom-Dat verbs	Nom (%)	Acc (%)	Dat (%)	Indist. (%)
<i>gleyma</i> 'forget'	3.6	5.9	89.3	1.2
<i>hrinda</i> 'push'	5.8	7.0	84.9	2.3
<i>kasta</i> 'throw'	1.2	5.8	86.0	7.0
<i>læsa</i> 'lock'	4.7	15.3	78.8	1.2
<i>ná</i> 'get'	3.5	4.7	90.6	1.2
<i>stela</i> 'steal'	1.2	9.4	89.4	
<i>striða</i> 'tease'	7.0	7.0	84.9	1.2
<i>vorkenna</i> 'feel sorry for'	7.3	17.1	75.6	

Sigurðardóttir (2002, pp. 115–130) has investigated children from the age of three years, and found that for subject case marking, the nominative is acquired first, then the dative and then the accusative. This order of acquisition mirrors the differences in frequency between the three subject categories, as nominative is the most common subject case in Icelandic, then the dative and then the accusative. This is true for both type frequency (cf. Barðdal 2009, p. 150) and token/text frequency (Barðdal 2001a, p. 86). In contrast, the order of acquisition is different for objects. Here accusative case is acquired more target-like before the dative, also mirroring the type frequency (see Table 1 above) and token/text frequency (see Barðdal 2001a, p. 86) of the Nom-Acc and the Nom-Dat Constructions in Icelandic.

Finally, the question arises as to whether the errors children make are tied to idiosyncratic case while thematic case is spared. The data in Tables 5 and 6 do not suggest that. One cannot discern fewer errors with verbs assigned thematic case than with those assigned idiosyncratic case. For instance, the verb *gleyma* 'forget' is correctly used with idiosyncratic dative object case in 89.3% of all occurrences, while the verb *kasta* 'throw' is correctly used with thematic dative object case in 86% of the occurrences. These numbers do not favor the alleged thematic case marking.

Note, moreover, that the distinctions between the Nom-Acc and the Nom-Dat Constructions in Icelandic is different from the distinction between weak and strong verbs in English, where the past tense form of strong verbs is often extended to weak verbs because strong verbs are high in token frequency. There is no reason to expect an effect like that here, as there is no reason to assume that Nom-Dat verbs in Icelandic are considerably higher in token frequency than Nom-Acc verbs (cf. the token frequencies given in Barðdal (2001a, p. 86) with the type frequencies given in Table 1 above for the same corpus).

To conclude, even though one takes the distinction between thematic and idiosyncratic case into consideration, the prediction in (24) above on the acquisition of lexical vs. structural case is still not borne out, which on the whole speaks against both dichotomies. In contrast, the prediction of a usage-based constructional account, that the Nom-Acc pattern be overused more than the Nom-Dat pattern, as it is higher in type frequency than the Nom-Dat pattern, is clearly borne out. Also, the order of acquisition of the cases mirrors their type frequency.

5 Descriptive vs. explanatory power

In the literature on lexical and structural case, two approaches to structural case marking can be found. First, the traditional view of structural case proclaims that nominative is assigned to subjects and accusative is assigned to objects (cf. ex. (3) above). This approach can be traced back to traditional Latin school grammar. A later more modern approach, first advocated in Yip et al. (1987) proclaims that in addition to nominative on subjects and accusative on objects, structural nominative is also assigned to the first argument not bearing lexical case (cf. ex. (4) above). These two accounts capture different kinds of data, or more correctly put, different case frames. On the first approach, Nom-Acc is accounted for, while on the second approach, the nominatives of Dat-Nom, Acc-Nom and Gen-Nom are also accounted for. A preposterous consequence of this latter approach is that accusative objects of Acc-Acc predicates, like *dreyma* 'dream' in (5) above, must be regarded as lexical (cf. Yip et al. 1987, pp. 231–232), as an accusative object is not expected here. If the case marking of the accusative object of *dreyma* 'dream' were structural, it should be nominative, like with Dat-Nom predicates, since the subject of *dreyma* 'dream' is lexically case marked with an accusative subject and the accusative object is the first argument not bearing lexical case. Hence, this accusative object marking must be regarded as lexically assigned within this framework, which appears as an ad-hoc solution, only postulated to save the distinction between lexical and structural case. Observe that also accusative objects of Dat-Acc Constructions in languages like Middle English, Modern Faroese and Balto-Slavic must be regarded as lexical instead of structural on this approach, and not only the accusative object of the Acc-Acc Construction in Icelandic. This problem is, in other words, not specific for Icelandic.

These two different approaches to structural nominative have been developed to account for synchronic structures, and the question arises whether they make the correct predictions about diachronic development. In Icelandic, for instance, one would expect dative and genitive objects to change into accusative objects, as dative and genitive are lexical cases while accusative is the structural case for objects, according to the older traditional approach. There are certainly some examples of, at least, genitive objects changing into accusative objects (cf. Barðdal 2001a, 2008, 2009), like with the verb *þurfa* 'need, want' which selected for a genitive object in Old Icelandic but is found with an accusative object in Modern Icelandic. However, there are also examples of genitive objects changing into nominative objects. Consider the verb *batna* 'recover' which selected for the Dat-Gen case frame in Old Norse-Icelandic (ex. (31)), and selects for the Dat-Nom case frame in Modern Icelandic (ex. (32)).

- (31) Þormóði batnaði þá skjótt Old Norse-Icelandic
 Thormod.DAT got-better then swiftly
augnaverklarins . . .
 eye-pain-the.GEN
 'Thormod then swiftly recovered from the eye pain . . .'
(Fóstbræðra saga 1987, p. 802)

- (32) ... og Steinunni batnaði **veikin.** *Modern Icelandic*
 and Steinunn.DAT got-better illness-the.NOM
 '... and Steinunn recovered from the illness.'

This development from genitive objects to nominative objects is unexpected on the traditional approach that objects are assigned accusative on the basis of their object position in the sentence structure. On that approach, one would expect an accusative here and not a nominative. However, this change can be captured by the latter approach to lexical and structural case, namely that the first argument which is not lexically case marked receives a structural nominative. In other words, it is the modern approach to structural case that captures this change, while the traditional approach to structural case fails.

Another change in the history of Germanic involves nominative objects changing into accusative objects. This happens with predicates that originally selected for the Dat-Nom case frame in Germanic, like *hreowan* 'pity' in Middle English (ex. (33)) and *dáma* 'like' in Modern Faroese (ex. (34)):

- (33) for þi ðat **him** areowe **ow** *Middle English*
 for that that him.OBJ pity you.OBJ
 'so that he would pity you' (Allen 1995, p. 238)

- (34) **Mær** dámar væl **hasa** **bókina.** *Modern Faroese*
 I.DAT like well this book-the.ACC
 'I like this book well.' (Barnes 1986, p. 33)

It has been argued by Allen (1995) and Falk (1997) that this change entails a change from one structural case to another, i.e. a change from a structural nominative to a structural accusative. This change, however, is unexpected on the assumption that structural nominative is assigned to the first non-lexically case marked argument. On that approach the nominative is expected to be maintained. However, this change is captured by the original approach that nominative is the structural case for subjects and accusative the structural case for objects, as on that approach one would expect an accusative here. That is, this time it is the traditional approach to structural case that captures this change, while the modern approach to structural case fails.

These two examples of changes in case marking in Germanic show that the two approaches that have been developed within generative grammar to account for case marking target complementary changes; changes which are predicted to take place by one of the accounts are predicted not to take place by the other account, and vice versa. This means that these two approaches have no explanatory power. They are, in other words, simply derivatives of case marking facts in Icelandic and Germanic. As such they are more or less only useful for descriptive purposes (for a usage-based constructional approach to these changes, cf. Barðdal (2008, pp. 158–166, 2009).

6 Motivation for the structural vs. lexical case dichotomy

The original motivation for assuming a dichotomy between lexical and structural case within the generative framework can be found in raising-to-object constructions and passives (cf. Butt 2006, pp. 67–69, *inter alia*). Both structures were taken to show that lexical case is maintained during structure-changing operations while structural case is not maintained. That is, structural accusative changes into a structural nominative, while lexical dative is preserved through structure-changing operations. I first discuss “raising-to-object” constructions and then passives. Before concluding this section I briefly discuss the possible historical motivations for the preservation of lexical case.

6.1 Raising-to-object

The example in (35) below shows that the nominative subject of *kaupa* ‘buy’ in Icelandic shows up as an accusative object in “raising-to-object” constructions with the verb *láta* ‘let’. In contrast, the example in (36) shows that the dative subject of *líða* ‘feel’ is maintained in the same kind of “raising-to-object” construction in Icelandic:

- (35) Ég lét Svein kaupa bílinn.
 I.NOM let Sveinn.ACC buy car-the.ACC
 ‘I made Sveinn buy the car.’

- (36) Ég lét Sveini líða illa.
 I.NOM let Sveinn.DAT feel bad
 ‘I made Sveinn feel bad.’

It has been argued on the basis of examples like these that there is a fundamental difference between lexical and structural case, as these data show that structural case gets altered in structure-changing operations, while lexical case is preserved. However, this is not true for all “raising-to-object” constructions, but turns out to be highly construction specific. Consider the following examples:

- (37) Mér sýnist Sveinn ætla að kaupa bílinn.
 I.DAT seems Sveinn.NOM intend to buy car-the.ACC
 ‘To me it seems as if Sveinn intends to buy the car.’

- (38) Mér sýnist Svein langa að kaupa bílinn.
 I.DAT seems Sveinn.ACC long to buy car-the.ACC
 ‘To me it seems as if Sveinn wants to buy the car.’

- (39) Mér sýnist Sveini líka bíllinn illa.
 I.DAT seems Sveinn.DAT like car-the.NOM badly
 ‘To me it seems as if Sveinn dislikes the car.’

First, notice that the initial dative *mér* ‘me’ in (37)–(39) is the syntactic subject of the verb *sýnast* ‘seem, appear’. This has been established by, for instance, Thráinsson (1979, 426 ff.) and others who have shown that the dative of verbs like *sýnast* ‘seem, appear’ and *virðast* ‘seem, appear’ clearly behaves as a syntactic subject, exactly like other dative subjects in Icelandic. Second, these examples show that with the raising verb *sýnast* ‘seem, appear’ in Icelandic not only lexically assigned accusative subjects (*langa* ‘want’ ex. (38)), and lexically-assigned dative subjects (*líka* ‘like’ ex. (39)) maintain their case marking, but also structural nominative subjects, as with the verb *kaupa* ‘buy’ (ex. (37)). In other words, with raising verbs like *sýnast* ‘seem, appear’ the subject of the lower verb maintains its case irrespective of which case it is (cf. Barðdal 2001a, pp. 104–105, Thráinsson 2005; p. 432).

One could argue, of course, that these examples are not “real” raising-to-object examples, and that the nominative, accusative and dative subjects in (37)–(39) have not been “moved to the object position” of the higher verb, but are still placed in the “original” subject position of the lower verb. That might explain why they have maintained their case marking. As pointed out by Thráinsson (2005, p. 432), however, both accusatives with raising verbs like *láta* ‘let’ and nominatives, accusatives and datives with raising verbs like *sýnast* ‘seem, appear’ are subject to object shift, a property confined to objects in Icelandic (Collins and Thráinsson 1996). Consider first object shift in an ordinary main clause.

- (40) a. Sveinn keypti (**ekki**) bílinn (**ekki**).
 Sveinn.NOM bought not car-the.ACC not
 ‘Sveinn didn’t buy the car.’
- b. Sveinn keypti (***ekki**) hann (**ekki**).
 Sveinn.NOM bought not him.ACC not
 ‘Sveinn didn’t buy it.’

The accusative object *bílinn* ‘car’ can occur both following and preceding a sentence adverbial like *ekki* ‘not’ in Icelandic. This possibility in word order is dependent on the nature of the object, found only with full NPs (40a) and not with pronominal objects (40b). This distributional pattern, moreover, is found not only with raising verbs like *láta* ‘let’ (41), but also with raising verbs like *sýnast* ‘seem, appear’ (42–44):

- (41) a. Ég lét (**ekki**) Svein (**ekki**) kaupa bílinn.
 I.NOM let not Sveinn.ACC not buy car-the.ACC
 ‘I didn’t make Sveinn buy the car.’
- b. Ég lét (***ekki**) hann (**ekki**) kaupa bílinn.
 I.NOM let not him.ACC not buy car-the.ACC
 ‘I didn’t make him buy the car.’

- (42) a. Mér sýnist (**ekki**) Sveinn (**ekki**) ætla að kaupa bílinn.
 I.DAT seems not Sveinn.NOM not intend to buy car-the.ACC
 ‘To me it doesn’t seem as if Sveinn intends to buy the car.’
 b. Mér sýnist (***ekki**) hann (**ekki**) ætla að kaupa bílinn.
 I.DAT seems not he.NOM not intend to buy car-the.ACC
 ‘To me it doesn’t seem as if he intends to buy the car.’
- (43) a. Mér sýnist (**ekki**) Svein (**ekki**) langa að kaupa bílinn.
 I.DAT seems not Sveinn.ACC not long to buy car-the.ACC
 ‘To me it doesn’t seem as if Sveinn wants to buy the car.’
 b. Mér sýnist (***ekki**) hann (**ekki**) langa að kaupa bílinn.
 I.DAT seems not him.ACC not long to buy car-the.ACC
 ‘To me it doesn’t seem as if he wants to buy the car.’
- (44) a. Mér sýnist (**ekki**) Sveini (**ekki**) líka bílinn illa.
 I.DAT seems not Sveinn.DAT not like car-the.NOM badly
 ‘To me it doesn’t seem as if Sveinn dislikes the car.’
 b. Mér sýnist (***ekki**) honum (**ekki**) líka bílinn illa.
 I.DAT seems not him.DAT not like car-the.NOM badly
 ‘To me it doesn’t seem as if he dislikes the car.’

These examples therefore show beyond doubt that an analysis assuming that the nominative, accusative and dative subjects of the lower verbs with *sýnast* in (37)–(39) are left in their original subject position, as opposed to being “raised” to the object position of the matrix verb, does not hold. These examples show, moreover, that whatever positional analysis one suggests for the “raised objects” of *láta* ‘let’, the same positional analysis must be assumed for the “raised objects” of *sýnast* ‘seem, appear’ in Icelandic. This shows, in turn, that the ability of lexically-case marked subjects to maintain their case in raising-to-object constructions is a construction-specific property in Icelandic, not generalizable to the language as a whole, also found for nominative subjects in certain raising-to-object constructions.

The question now arises as to whether to regard the data in (37) and (42) as showing that nominative is also lexical. Taking the motivation for the lexical vs. structural case dichotomy to its logical conclusion entails that the nominative here should be regarded as “lexical”, as it is maintained with the “raising-to-object” verb *sýnast*. A more feasible alternative, however, is to say that the case marking properties of “raising-to-object” constructions are specific for each construction and not a general property of the language as a whole or not a general property of all raising-to-object constructions, as it is only found for a subset of raising verbs and not all. This in turn undermines the generative analysis of dative subjects as lexical and nominative subjects as structural, as that analysis is only based on a subset of the relevant data.

6.2 Passives

Turning now to passives, consider the examples in (45)–(46). The former example has been taken to show that the structural accusative object of *kaupa* ‘buy’ in active structures turns up in the structural nominative in the passive, while the latter example, in contrast, has been taken to show that the lexical dative object of *stela* ‘steal’ maintains its dative case when this lexical dative object is promoted to subject.

- (45) **Bókin** var keypt. Passive
 book-the.NOM.FEM was bought.FEM
 ‘The book was bought.’
- (46) **Bókinni** var stolið.
 book-the.DAT.FEM was stolen.NEUT
 ‘The book was stolen.’

Observe, however, that in the adjectival passive construction, allegedly “lexical” dative objects also change into structural nominative (cf. Barðdal 2001a, pp. 103–104; Svenonius 2006). This is unexpected as the dative is supposed to be lexical here.

- (47) **Bókin** er keypt. Adjectival passive
 book-the.NOM.FEM is bought.FEM
 ‘The book is bought.’
- (48) **Bókin** er stolin.
 book-the.DAT.FEM is stolen.FEM
 ‘The book is stolen.’

The semantic/functional difference between the canonical passive construction and the adjectival passive is that the first is processual, or eventive, while the second is stative or non-eventive (Barðdal and Molnár 2003).

One could of course argue now that the adjectival passive does not stand in a diathetic relation to the verb, in the same sense as the canonical passive, confirmed by the analysis of the form of the verb in the canonical passive as a past participle of the verb, while the form is a verbal adjective in the adjectival passive. Hence, one could argue that the adjectival passive is not a real passive, and one would therefore not expect the case marking of the verb to be preserved in the adjectival passive at all.

To this I have two objections. First, one would not expect the case marking of the verb to be preserved in the canonical passive, anyway. That is, the preservation of datives and genitives in passives is unexpected to begin with. Therefore, taking one step back to the stage before the general acceptance of the existence of lexical case, the expectations to the canonical passive and the adjectival passive should clearly be

the same, namely that the subject be in the nominative case. Second, there are verbal adjectives in Icelandic that select for dative subjects:

- (49) a. **Honum** er þetta mjög minnisstætt.
 him.DAT is this.NOM very memory-stood
 ‘He remembers this very clearly.’
- b. **Honum** er ekki bjargandi.
 him.DAT is not rescuing.PRES.PART
 ‘He cannot be saved.’
- c. **Þessari** **bók** er ekki stelandi.
 this.DAT book.DAT is not stealing.PRES.PART
 ‘The book cannot be stolen.’

The form *-stætt* in (49a) is derived from the verb *standa* ‘stand’, while *bjargandi* and *stelandi* in (49b–c) are present participles of corresponding verbs. There are thus, at least, two different copular deverbal adjectival constructions found in Icelandic, one with nominative subjects and the other with dative subjects, which in turn means that there is no formal requirement in Icelandic that an adjective with a copula must assign nominative case to its subject, explaining the non-perseverance of lexical case in the adjectival passive in (48). Therefore, the fact that the adjectival passive is made up of a deverbal adjective, instead of perhaps being a proper passive construction in a diathetic relation to the verb, does not constitute a formal hindrance for lexical case to show up in the adjectival passive, as evident from its behavior in other adjectival constructions, including the one containing present participles.

To conclude, the data presented in this section suggest that case preservation is not a general property of “lexical” case as opposed to “structural” case but is a construction-specific property of individual constructions, like different “raising-to-object” constructions and different passive vs. adjectival constructions. These properties are, in other words, idiosyncratic and have to be defined for each construction. As such, these properties do not support the lexical vs. structural case dichotomy.

6.3 Motivation for the original preservation of lexical case

As a general motivation, moreover, for the preservation of the so-called lexical case, Çetinoğlu and Butt (2008) point out, based on data from Turkish, that when case marking is differential, i.e. when there is an alternation between two case markers based on semantic factors, the case marking tends to be preserved in structure-changing operations. Otherwise all information about the semantic factors would be lost. This means that the preservation of the so-called lexical case in Germanic may originate in earlier patterns involving differential case marking, with the differential case marking now being lost, while the ability of the so-called lexical cases to stay unaffected in structure-changing operations has been maintained as a construction-specific pattern.

There are, in fact, certain remnants of differential object marking found in Icelandic, for instance with the verbs *þvo* ‘wash’, *klóra* ‘scratch’ and *moka* ‘shovel’, as originally pointed out in Barðdal (1993), but see also Barðdal (2001a, pp. 146–156). Consider the following attested examples:

- (50) a. Ég þvoði **henni** á bak við eyrun.
I washed her.DAT on behind with ears-the
‘I washed her behind the ears.’
b. Ég þvoði **pelana** í uppþvottavélinni.
I washed bottles-the.ACC in washing-machine-the
‘I washed the bottles in the washing machine.’
- (51) a. ... klóraði **honum** um bakið, nuddaði á honum iljarnar ...
scratched him.DAT of back-the, massaged on him soles-the
‘... scratched his back, massaged his soles ...’
b. ... björminn klóraði **hann** og beit.
bear-the scratched him.ACC and bit
‘... the bear scratched him and bit him.’
- (52) a. Hann mokaði **snjóinn**.
he shoveled snow-the.ACC
‘He shoveled the snow.’
b. Og mokaði **snjónum** upp á vörubílana.
and shoveled snow-the.DAT up on trucks-the
‘And shoveled the snow up on the trucks.’

In (50) the verb *þvo* ‘wash’ is used with dative when the object is animate and accusative when it is non-animate. In (51a) the dative with *klóra* ‘scratch’ is used when the event denotes petting, while accusative with *klóra* is used when the event describes an attack with subsequent scratching. The accusative is therefore used in a prototypical, highly-affected, transitive event, while the dative is used when the object benefits from the event. In (52) the verb *moka* ‘shovel’ is resultative when used with the dative, i.e. an object is caused to move from one location to another, while no such implication is found when *moka* is used with the accusative (Barðdal 1993, 2008, pp. 121–124).

At least the differential object marking of the type found in (50) with *þvo* ‘wash’ is well known from the Indo-European languages, suggesting that this may be an old phenomenon in Indo-European. The hypothesis that “lexical” case originates in differential case marking, preserved in structure-changing operations because of differences in semantics, is therefore entirely compatible with the Icelandic data, in turn explaining how and why the ability of “lexical” case to be preserved arose, before it got grammaticalized as a construction-specific property of certain syntactic constructions.

7 All case marking in Icelandic is lexical

The assumption that all case marking of core arguments in Icelandic is lexical can easily be accounted for on a usage-based constructional approach to language and grammar. Also, this assumption does not necessarily entail that higher-level generalizations are lost. On the contrary, on a usage-based constructional approach, where constructions are assumed to exist in lexicality–schematicity hierarchies, both higher-level and lower-level generalization can be maintained, as well as the idiosyncratic behavior of individual predicates (cf. Croft 2001, 2003). The lowest-level idiosyncratic properties are encoded in verb-specific constructions at the bottom of the lexicality–schematicity hierarchy. This is the most lexical level where the case marking of the arguments is encoded. Such encoding of the case marking of verbal arguments is found with all predicates in Icelandic at the verb-specific level. Hence, all case marking of core arguments in Icelandic is “lexical.” In other words, the case marking is specified on an item-specific level for all predicates. In contrast, the highest level of the lexicality–schematicity hierarchy is the most abstract level with the least lexical information and the most schematic information. The highest level is thus an abstraction of all the lower-level verb-specific and intermediate verb-class-specific levels. At the intermediate levels, verb-class-specific and verb-subclass-specific generalizations are stored. To exemplify, consider the lexicality–schematicity hierarchy of the Nom-Acc Construction, given in Fig. 1, based on the occurrence of the 303 Nom-Acc verbal types in the text corpus reported on in Table 1 in Sect. 4 above.

The vertical axis represents the lexicality–schematicity continuum. The lowest level at the bottom of the hierarchy is the semantically and lexically most concrete level, consisting of the 303 verb-specific constructional types in the text corpus (labeled [Verb]), not spelled out here for reasons of space. These 303 verb-specific types make up the next level above, which contains 46 verb-class-specific constructions, some of which can be divided into further verb-subclass-specific constructions. These 46 verb-class-specific constructions are subconstructions of the basic-event-type categories MAKING, MOVEMENT, AFFECTEDNESS, COGNITION/EMOTION, CHANGE, and LOCATION (Barðdal 2008, Chap. 3). Observe that the seven basic-event-type constructions are not all equally entrenched. For instance, the basic-event-type construction LOCATION is the least entrenched one with only two verb-class-specific constructions instantiating it, while the basic-event-type construction COGNITION/EMOTION is the most entrenched one with 12 verb-class-specific constructions instantiating it, and several verb-subclass-specific constructions instantiating some of the verb-class-specific constructions. For a list of the 303 Nom-Acc verbs, and a proper explication of the structure of the Nom-Acc Construction in Icelandic, see Barðdal (2008, pp. 63–69).

Moreover, the high type frequency and the wide semantic spectrum of the Nom-Acc Construction in Icelandic make it the most entrenched transitive construction on the whole. This means that the highest level of the Nom-Acc Construction is a highly abstract and schematic level, i.e. the Nom-Acc Construction exists as a schematic construction in the minds of Icelandic speakers. This also explains why

constructions instantiated by other higher-level verb-class-specific constructions. The type frequency and the semantic range of the Nom-Dat Construction is considerably narrower than the type frequency and semantic range of the Nom-Acc Construction. This is evident from the fact that 27 of the 34 verb-class-specific constructions divide across three basic-event-type constructions, CHANGE, COGNITION/

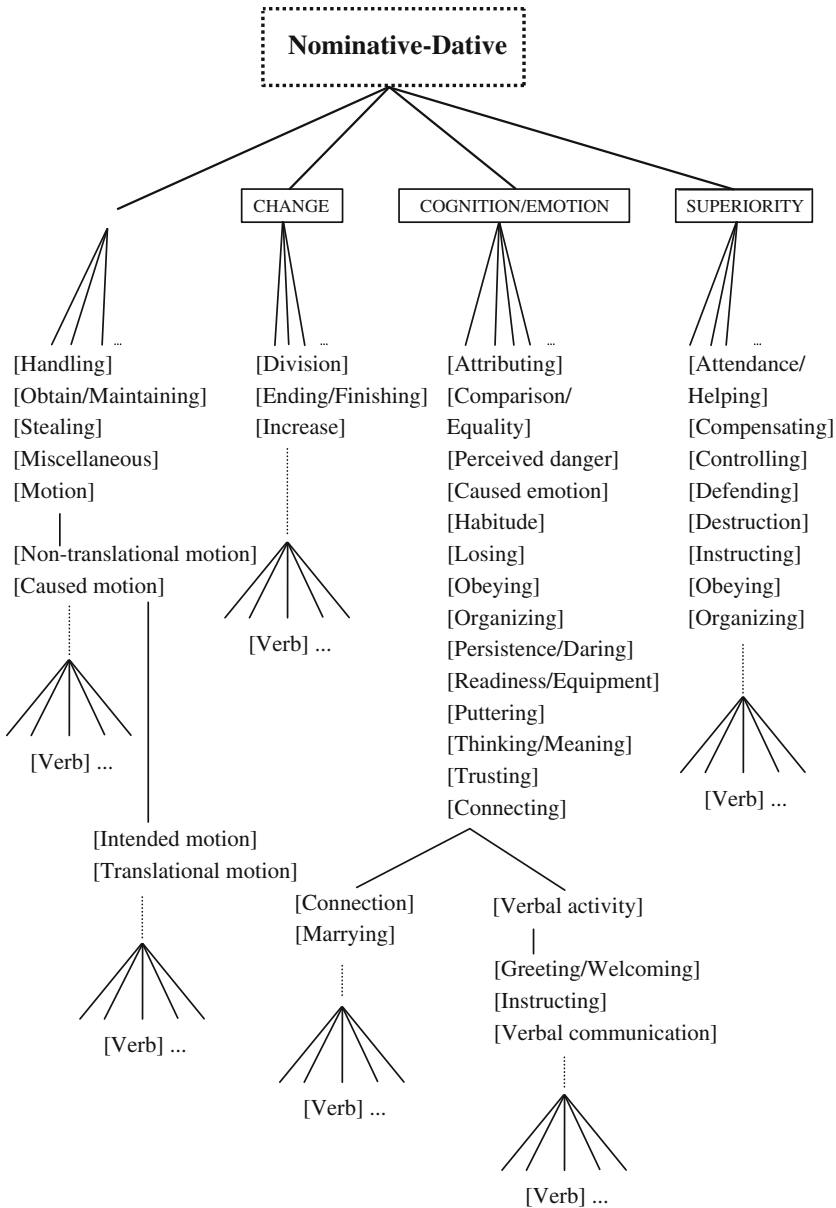


Fig. 2 A lexicality–schematicity hierarchy of the Nom-Dat Construction in Modern Icelandic texts

EMOTION and SUPERIORITY, while five verb-class-specific constructions cannot be said to motivate a higher level basic-event-type level, but only exist as lower-level constructions. As a consequence, the semantic range of the Nom-Dat Construction is considerably narrower than the semantic range of the Nom-Acc Construction, even though the Nom-Dat Construction is of substantial type frequency in Icelandic. This also means that the productivity of the Nom-Dat Construction is going to be more restricted than the productivity of the Nom-Acc Construction, and hence that it will attract somewhat fewer new and existing verbs than the Nom-Acc Construction. These predictions are borne out by the data discussed in Sect. 4 above and in Barðdal (2008, Chap. 3). Note, also, that there is some semantic overlap between the Nom-Acc and the Nom-Dat Constructions, which in turn should result in a choice between case frames for these subconstructions for Icelandic speakers. This prediction is also borne out, as discussed in Barðdal (2008, 74, pp. 86–87).

Full-fledged lexicality–schematicity hierarchies have been suggested for the transitive Nom-Gen Construction in Icelandic (Barðdal 2008, pp. 75–76), the Nom-Gen Construction in Old Norse-Icelandic (Toft 2009), alternating Dat-Nom/Nom-Dat predicates (Barðdal 2001b), the Dative Subject Construction (Barðdal 2006a, 2008, 2010), and the Ditransitive Construction in West-Scandinavian (Barðdal et al. 2011). It also needs to be specified for the various “raising-to-object” and passive constructions what the case frames of the individual subconstructions are, and what the case frame will be for the output constructions. This has been done for the passive construction (Barðdal and Molnár 2003), inchoative aspectual constructions (Barðdal 2001c) and coordinated structures (Barðdal 2006a) in Icelandic. Therefore, on the present usage-based constructional approach, all case marking in Icelandic can easily be accounted for as lexical, i.e. word bound, tied to specific lexical entries, without that resulting in a loss of intermediate and higher-level generalizations.

I would like to emphasize that I regard the Nom-Acc Construction as a default construction for transitive predicates in Icelandic. This view is based on several considerations, like for instance the fact that it is highest in type frequency and has the widest semantic range. I have also found experimental evidence suggesting that the Nom-Acc Construction is assigned by default to nonce verbs by adult speakers (Barðdal 2008, Chap. 4), irrespective of both the form and the meaning of the nonce verbs. On the present approach, this default status can be regarded as a derivative of the construction’s highest level of schematicity. That is, as the Nom-Acc Construction exists at the highest possible level of schematicity, i.e. the level above the basic-event-type constructions, which is a schematic abstract level confined to relational semantics, it may function as a structural default, irrespective of lexical semantics. In contrast, the Nom-Dat Construction does not exist at a level above the basic-event-type constructional level. This is represented with solid lines in Fig. 1 for the highest level of the Nom-Acc Construction and dotted lines in Fig. 2 for the highest level of the Nom-Dat Construction. In this way, the default status of the Nom-Acc Construction can be accounted for without assuming a dichotomy between lexical and structural case.

Observe, moreover, that the present approach to the Nom-Acc Construction as being a structural default does not preclude a view of that same construction as being lexical in the sense that the predicates which select for the Nom-Acc Construction are marked so in the lexicon. This lexical view is supported by Icelandic speakers' case assignment to borrowed verbs which is clearly based on existing lexical verbs and their case frames, equally found to apply for both the Nom-Acc and the Nom-Dat Construction. The default function of the Nom-Acc Construction, in contrast, is a derivative of the Nom-Acc Construction's highest level of schematicity in the minds of Icelandic speakers. The present usage-based constructional approach therefore captures both the lexically-based assignment of the Nom-Acc Construction to new and borrowed verbs in Icelandic and its properties as a structural default, without making recourse to the concept of structural case marking. This shows that the two concepts, structural case and default case, are logically distinct from each other, meaning that one does not need to assume structural case assignment to capture the default status of the Nom-Acc Construction.

The question now arises as to whether a language-specific description like the present one makes any cross-linguistic predictions, like for instance whether the rules for nominative and accusative assignment in Icelandic may be similar to nominative and accusative assignment in many other languages, and hence that there may be a cross-linguistic regularity to be captured here. A usage-based language-specific constructional analysis does not ignore this, but rather leaves this to the description of each language, in the spirit of Radical Construction Grammar (Croft 2001). In other words, Nom-Acc and Nom-Dat Constructions also exist in other languages and a model of these languages has to adequately describe the internal structure of these constructions, including which verbs instantiate them. Together with a proper modeling of other complex syntactic constructions of the language, the case marking facts of each language are captured. Such an analysis also acknowledges the fact that the so-called lexical case marking is highly language specific.

I would, furthermore, like to point out that a nominative in one language is not necessarily the same as a nominative in another language. There are subtle differences found across languages, such as whether the nominative can be used to mark subjects, objects or adverbials, how it is marked morphologically, for instance as a zero, only on pronouns or on all nominal categories, or whether it agrees with the verb or not. This means that a nominative in one language is not necessarily the same as a nominative in another language, even though both are conveniently labeled "nominative". This is equivalent to the fact that a syntactic subject is not a universal category; there are clear cross-linguistic differences found between syntactic subjects, acknowledged by most theoreticians today. The category of morphological "nominatives" and "accusatives" is no different from the category of subjects, in the sense that the behavior of nominatives and accusatives is not uniform across languages. These categories are therefore no more universal than subjects, but are language-specific categories that are most accurately described as such and simply happen to be labeled nominative and accusative in language after language because of a common heuristic tradition.

Hence, all accounts of nominatives and accusatives, claiming to capture cross-linguistic regularities do so only by abstracting away from the cross-linguistic

differences. This is one of the reasons I opt for a language-specific description of the so-called structural cases in Icelandic. Another reason is that a language-specific description in terms of lexicality–schematicity hierarchies captures the idiosyncrasies of the verb-specific argument structure constructions, the intermediate verb-class-specific generalizations, as well as the default effects found for the higher-level Nom-Acc Construction, as opposed to for the Nom-Dat Construction. On such a description, the nominative and the accusative count as lexical, which is also in accordance with how new verbs seem to be assigned the Nom-Acc case frame in Icelandic, i.e. on the basis of the case frames of existing near-synonymous verbs, as outlined in Sect. 4 above.

I have in the present article concentrated on Icelandic data. It remains to be seen whether the dichotomy between lexical and structural case can also be refuted for German, Russian, Finnish and other languages (see, for instance, Zwarts 2006 for a wholly constructional approach to prepositional case in German). Irrespective of whether the lexical vs. structural case dichotomy can be refuted for these languages or not, usage-based constructional analyses can be proposed for them, without making recourse to the dichotomy at all. Hence, a usage-based constructional analysis will always have the benefit over generative analyses that it will sufficiently account for case marking facts of a language like Icelandic, which, as I have shown here, generative analyses do not.

8 Conclusions and summary

In this paper I have expressed a critical view of (a) the dichotomy between lexical and structural case and (b) the dichotomy between thematic and idiosyncratic case. The two dichotomies have not withstood the scrutiny. For instance, I have shown that there are several problems associated with the notion of thematic case assignment in Icelandic. First, all thematic roles of subjects, except agents, can be assigned dative case, hence dative case assignment on subjects is not restricted to experiencers and beneficiaries, as was originally assumed in the literature. In that sense, the concept of thematic case assignment has lost its original generalizing force. Therefore, an approach to case marking based on thematic roles will not capture the dative case assignment of subjects of speaker-oriented evaluative predicates, existing at a level where it is the empathic relation between the speaker and his/her attitudes towards the content of the proposition that is being profiled, and not the semantic relation between the subject and the predicate.

I have also shown that the distinction between lexical and structural case makes three predictions that are not borne out in Icelandic on: (a) synchronic productivity, (b) changes in case frequencies over time, and (c) acquisition of case. These uncorroborated predictions of the lexical vs. structural case dichotomy cannot be rescued by the distinction between thematic and idiosyncratic case. In other words, (a) both lexical and idiosyncratic case are productive in the sense that both can be extended to new predicates in Icelandic, (b) neither lexical nor idiosyncratic case has gone down in frequency from Old Norse-Icelandic to Modern Icelandic texts, and (c) children make errors with both structural and lexical/idiosyncratic case and

not only lexical/idiosyncratic case. This is unexpected if structural case is assigned on the basis of position in the sentence, and hence does not need to be learned, while lexical/idiosyncratic case is tied to specific lexical entries, and hence must be learned specifically for each verb. Moreover, the data on productivity in Sect. 4 suggest that the assignment of accusative case to objects is also tied to specific lexical entries, and hence that accusative objects are also assigned case lexically, exactly like dative objects. This is supported by the distribution of the Nom-Acc and the Nom-Dat Constructions across borrowed verbs. That is, the Nom-Acc Construction should be evenly scattered across semantic space, if this case pattern is assigned structurally, and not correlate with the Nom-Acc case pattern of existing synonymous predicates, which it does. The semantic space of the Nom-Dat case pattern should be shrinking, as it should have been invaded by the Nom-Acc Construction. However, this has not happened. Also, Icelandic speakers, upon consultation, refer to the case frames of existing synonymous predicates when motivating their novel choices of case frames for borrowed verbs. Therefore, even anecdotal evidence speaks for the analysis that the Nom-Acc Construction is lexically assigned in Icelandic.

Furthermore, changes from Dat-Gen to Dat-Nom in the history of Icelandic and changes from Dat-Nom to Dat-Acc in, for instance, Early Middle English and Early Modern Faroese are captured by two complementary approaches to structural case, which in turn severely undermines the general explanatory value of the concept of structural case. It seems, rather, that the power of the lexical vs. structural case dichotomy is purely descriptive.

Finally, it turns out that the motivations for assuming the lexical vs. structural case dichotomy to begin with are construction-specific motivations that cannot be generalized to the language as a whole. These are the non-perseverance of nominative and accusative in structure-changing operations and the perseverance of dative and genitive in the same structure-changing operations. On a closer inspection it turns out that there are passive constructions where the so-called lexical cases also turn into nominative, and there are “raising-to-object” constructions where the nominative is preserved. Hence, the perseverance of dative and genitive vs. the non-perseverance of the nominative and the accusative cannot be generalized to the language as a whole, again diminishing the value of the lexical vs. structural case dichotomy. Evidence from languages with differential object marking, where the dative case is preserved in structure-changing operations, suggests that the preservation of the so-called “lexical” case may have originated in a system opting for maintaining the semantic distinctions expressed by the different cases.

In this article I have suggested instead that all case marking of verbal arguments in Icelandic is lexical, i.e. word bound, tied to specific lexical entries. This can easily be accommodated in a usage-based constructional framework, where constructions are assumed to exist in a lexicality–schematicity hierarchy with verb-specific constructions at the lowest level, abstract schematic constructions at the highest level, and verb-class-specific and verb-subclass-specific constructions at the intermediate levels. Under such an analysis, the case marking of the verb-specific constructions are coded at the lowest level of the hierarchy, while at the same time intermediate and higher-level generalizations are maintained. The default status

effect of the Nom-Acc Construction can be derived from its existence at the highest most abstract level of representation in the lexicality–schematicity hierarchy. On this approach, both the default status and the lexically-based assignment of the Nom-Acc Construction is captured.

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Appendix: Borrowed verbs not assigned case on the basis of synonymous verbs

Nom-Acc:

battla ‘battle’: *battla þá svo þeir hætta þessari iðju*

editera ‘edit’ *oft þarf að “editera” hann; til að editera síðurnar.*

erasa ‘erase’: *Vitið þið nokkuð hvernig maður erasar cdrw diska án þess að*

gúggla ‘google’: Ég nota bene gúgglaði þetta fram og til baka; veit ekkert um þetta ég googlaði það bara

muffa ‘muff’: *Ég var samt ekki að muffa neinn*

Nom-Dat:

de-multiplexa ‘demultiplex’: *hverni de-multiplexa ég þessu?*

expandera ‘expand’: *verð að expandera skjölunum með því að*

exporta ‘export’: *og exportað því svo þaðan i fæl sem ég get importað í Opera*

importera ‘import’: *búin að importera öllum færslum þessa árs inn í MT*

innstalla/innstallera ‘install’: *ætlaði að installa honum en það er eitt vandamál.*

msna ‘msn’: *leiðinlegt að msna fólki sem situr við hliðina á mér.*

peista ‘paste’: *þannig er unnt að peista honum í console*

pósta ‘post’: *Póstaðu lognum hér.*

publisha ‘publish’: *Get ég publishað mínu iCal dagatali á netið*

restarta ‘restart’: *og svo restartaði ég tölvunni eins og venjulega: og síðan restartar finder sér.*

starta ‘start’: *og hindra að ég geti startað henni upp*

umba ‘be agent for’: *að umba útreiknuðu æviverki*

unzippa ‘unzip’: *þegar ég var að reyna að unzippa forriti (Mellel) sem ég sótti.*

untara ‘unzip’: *en það “ætti” að vera nóg að untara skránni í vefrótinni*

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