An Analysis of Grammatical Relations and Case Marking in Icelandic

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B.A. (University of California, Davis) 1985

THESIS

Submitted in partial satisfaction of the requirements for the degree of

MASTER OF ARTS
in

Linguistics

in the

GRADUATE DIVISION

of the

UNIVERSITY OF CALIFORNIA

DAVIS

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2002

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ACKNOWLEDGMENTS

I am extremely grateful to Dr. Robert Van Valin, Jr., Dr. Wilbur Benware and Dr. Almerindo Ojeda for their patience, suggestions and guidance, and comments in the development and completion of this research. I thank Dr. Robert Van Valin, Jr., for encouraging my interest in Icelandic syntax, for providing a fertile theoretical framework in which to analyze Icelandic and, and in steadfastly supporting me to the completion of this project, as have Drs. Benware and Ojeda.

I also wish to acknowledge my Icelandic informants: Kristján Thorarinsson, Gylfi Aþjartsson, Freyr Thormóðsson, Thorbjörg Kristinsdóttir, and Hrönn Helgadóttir. All these individuals were patient, inquisitive, and were of immeasurable help, both in the time they generously gave, and in their observations and suggestions.

And, I am also very indebted to my wife and daughter, and friends and family for their support and motivation in pursuing and completing this research.

GLOSSARY OF TERMS AND GENERAL INFORMATION

A — Accusative case; in Icelandic, **þolfall**

Aktionsart — German, 'form of action.' A method of classifying verbs and predicating elements by specific means. Originally proposed by Vendler (1957[1967]). Part of RRG.

AF-OBJ — LFG term for **af** ('by, of') plus object, used to describe Icelandic passive where the object is the former subject of the active sentence (from ZMT).

Artificial Set #1 and #2 — Two sets of artificial verbs were created for testing native speaker intuitions and case marking patterns. These are referred to as Artificial Set #1 and #2 for convenience.

Chi square — A statistical test measuring how well an observed set of data fit an expected set.

D — Dative case; in Icelandic, **þágufall.** Traditionally marks indirect objects (for languages in which they are held to exist), and/or nouns having roles like (a) recipient or object of interest, (b) beneficiary of an action, or (c) possessor of an item. Examples: **Gib mir Brot** (German) 'give me(D) bread' (**mir** is in dative). **Him wæs geomor sefa** (Old English) 'their minds were sad' (literally: 'them(D) was sad mind' – **Him** is in dative).

"Dative sickness" — An Icelandic phenomenon where native speakers use dative case on subjects in exception to prescriptive grammar rules, posing challenges to syntactic and other linguistic analysis. Referred to in Icelandic as **þágufallssykki** (literally, 'dative sickness').

e-ð, etc. — Icelandic dictionary abbreviations used for indicating case of arguments. Used in Appendix A.

e-ð **eithvað** 'something' (A)
e-m **einhverjum** 'somebody, some' (D)
e-n **einhvern** 'somebody, some' (A)
e-r **einhver** 'somebody, some' (N)
e-s **einhvers** "somebody's, of some' (G)
e-u **einhverju** 'some' (D)

fe, fo — Chi square symbols for "frequency-expected" and "frequency-observed," resepectively.

G — Genitive case. In Icelandic, **eignarfall**

GFs — Grammatical Functions

GRs	Grammatical Relations
Impersonal Constructions	Verbs with no expressed subject, such as weather verbs. Also, verbs with an argument which may or may not act syntactically as subject, but which is marked with oblique case rather than nominative case.
I	Instrumental case. Indicates the thing or person by which the action of the verb is performed. Example: В коридоре, Анна руками дала Ивану голубую книгу Игоря (Russian) 'in the hallway, Anna gave Igor's blue book to Ivan with her hands (I)' (руками is in instrumental case) This case answers the question "by what means?" Like other Germanic languages, Icelandic and English formerly had instrumental case. For example, Middle English **hwy** was the instrumental case of **hwæt** 'what'. In Germanic languages, instrumental case is understood to have collapsed into dative.
Intrans.	Intransitive
Irregular Case Marking	See **Standard Case Marking**
LFG	Lexical-Functional Grammar
LS	Logical Structure; RRG term. An LS expresses a verb class of a predicate and the arguments a predicate would take.
MBNOA	Moves But (is) Not Otherwise Affected. This phrase is at the core of the tests on objects of actual and artificial Icelandic verbs. Since it is repeated often, its acronym is often used.
MI	Modern Icelandic. The modern period is said to date from the translation of the New Testament in 1540 A.D. by Oddur Gottskálksson. Before that date the language is considered Old Icelandic.
MR	Macrorole; RRG term. Actor or Undergoer, which subsume a number of argument roles or thematic relations. [-MR] would indicate an atransitive verb taking no macroroles. [+MR] identifies a verb taking just one macrorole (roughly, intransitive).
N	Nominative case. In Icelandic, **nafnháttur**.
Natural Set	A set of actual Icelandic verbs with variable case

	marking on objects was identified. These verbs were used in tests to check native speaker intuitions about semantics and case marking.
NP	Noun phase
Non-Standard Case Marking	Case marking other than the expected standard marking; see **Standard Case Marking**.
Norw.	Norwegian (Modern)
Oblique Case Marking	See **Non-Standard Case Marking**
OHG	Old High German
OI	Old Icelandic (prior to 1540 A.D.)
ON	Old Norse
Orthography	See Appendix A for a pronunciation guide of Icelandic. This may be useful to facilitate reading examples; not intended to be comprehensive.
PSA	Privileged syntactic argument. RRG term in part like the concept of syntactic subject. Different languages require different criteria for an argument to be an eligible PSA.
RG	Relational Grammar
RRG	Role and Reference Grammar
Standard Case Marking	For the purposes of this thesis: nominative marking on subjects, accusative marking on direct objects, dative marking of indirect objects.
Trans.	Transitive
Verba dicendi	Verbs of saying, such as 'say, talk, speak, discuss, declare,' etc.
YMJ	Yip, Maling, and Jackendoff (1987). An Autosegmental analysis of Icelandic.
ZMT	Zaenen, Maling, and Tháinsson (1985). An LFG analysis of Icelandic.

Chapter I

Introduction

1.1 Overview of the Problem

Icelandic presents a number of challenging morpho-syntactic phenomena. Foremost among these is what has been labeled "quirky"[1] case – e.g., accusative, dative, and genitive subjects, and nominative, dative and genitive objects. It is clear, through a variety of criterial tests that will be discussed, that non-nominative constituents may meet the functional definitions of subjecthood. Conversely, nominative constituents may meet none of the criteria for subjecthood. Since we do not have the comprehensive set of tests for "objecthood" that we have for subjecthood, discerning the status of Icelandic objects and the rules of case marking on objects poses challenges.

Further, there is evidence of productive language rules that run counter to prescriptive grammar and which challenge analyses of Icelandic. For example, there is the purported overuse of the dative case by native speakers of Icelandic. This has been referred to as **þágufallssykki**, or "dative sickness."[2] As will be seen, there are also a number of verbs that assign dative case to their direct objects.

These facts bring into question the fundamental basis of and relationship between case marking and grammatical relations in Icelandic, with implications about the rules native speakers may be applying, and possible reasons for those rules.

1.2. Central Questions of the Thesis

The existence of "quirky" case marking, "dative sickness," and their implications regarding the relationship between case marking and grammatical relations lead to the central questions of this thesis.

[1] Icelandic's quirks or peculiarities may, in some instances, have semantic explanations. This will be explored in this thesis. Hence "quirky" may not be an entirely fitting term.
[2] "Dative sickness" refers primarily to the replacement of accusative case-marked subjects with dative case-marked subjects, but use of dative is believed to be on the rise in general in Icelandic.

First, is there an explanatory analysis that can illuminate reasons for “quirky” case marking rather than assigning the irregularities to lexicalization? Or is this irregularity idiosyncratic and inexplicable, reflecting only diachronic processes which are no longer productive?

Second, is there an analysis capable of being tested with native speakers? If so, is the analysis consistent (or at least not inconsistent) with native speaker intuitions? Are there discoverable rules surrounding “quirky” case, which are productive for current native speakers?

Finally, note will be made of case marking patterns in other Germanic languages. Both diachronic and some synchronic examples will be reviewed. If similar irregular case marking phenomena do, or did, exist in other Germanic languages, the following questions arise. Is it meaningful to call the phenomena “quirky” if they are well attested in Germanic languages? And, if “quirkiness” is well attested, is a descriptive treatment that assigns the irregularity to the lexicon adequate, as opposed to a treatment that seeks an explanatory analysis?

1.3 Theoretical Framework

This analysis will be based on Role and Reference Grammar (RRG). In RRG, functional roles derive from the integration of three concepts: (1) the layered structure of the clause; (2) macroroles and their relations to thematic roles, case roles, and concepts such as those of Actor and Undergoer; and (3) the logical structure (LS) of verbs, which serve both to classify verbs into an *Aktionsart*, or verb type, as well as to determine thematic roles of the arguments of the verbs.

Analyses of Icelandic data in two other theoretical frameworks will be reviewed as well: Lexical-Functional Grammar (LFG) and an autosegmental-type analysis.

As part of the analysis within the RRG framework, three tests have been performed with native Icelandic speakers. These tests were designed to: (1) determine whether verbal semantics could provide data for statistical analysis; (2) measure, at least

roughly, the psychological adequacy of the analysis being advanced (does the theory posit explanations that intuitively fit for native speakers?); and (3) see if there is indication of a productive rule regarding specific types of "quirky" case marking on objects, and what the nature of such a rule might be.

1.4 Identifying and Creating Verbs to Test

Three sets of verbs were used. One set consisted of actual Icelandic verbs. The other two sets consisted of artificial verbs constructed with an eye to specific semantics for the purpose of this thesis. For clarity of reference, the actual Icelandic verb set will be referred to as Natural Set; the artificial sets will be referred to as Artificial Set #1 and Artificial Set #2.

1.4.1 Natural Set of Verbs to Test

The aim was to collect verbs in a comprehensive, non-skewed fashion. Therefore, reliance only on verbs already discussed in the literature seemed insufficient. Since this thesis seeks to explicate certain types of irregular case marking on objects, the first step was to identify a comprehensive corpus of verbs with irregular case marking on objects. To identify such a body of verbs, two large Icelandic-English dictionaries were thoroughly reviewed for verbs that employ irregular case marking.

The next step was to cull from that overall list a subset of verbs that exhibit alternating dative and accusative case marking on their objects, since that was the alternation chosen for this study. This would give an opportunity to study case variation with the chief variable (the verb) held constant. Thus utterances could be obtained which amount to near minimal pairs. A list of verbs with irregular object case marking is available in Appendix A.

When slightly or greatly different senses of the verb dictate that the object take different case marking, this thesis will examine semantic factors (such as thematic roles), verb classes, and LSs of verbs to seek principled explanations of the differences.

Specifically, this thesis will employ a verbal semantics-based analysis, the concepts and theory of which, as reviewed in this paper, rely critically upon the verbal classification strategies laid out by Vendler (1967), Dowty (1979), Foley and Van Valin (1984), Van Valin and LaPolla (1997), and others.

1.4.2 Artificial Sets of Verbs Tested

Artificial Set #1 and Artificial Set #2 were each created to produce verbs which do not actually exist in Icelandic, but which are consistent with Icelandic orthography and morphology. The meanings of the verbs were designed to have semantic implications that might be reflected in the LSs of the verbs, and which might result in predictable case marking choices made by native speakers.

There is some overlap between the two sets. This was intentional. The purpose was to see if different native speakers would respond to the same or similar verbs in the same way, while also introducing new words with similar verbal semantics.

1. 5 Overall Aims of the Research

Icelandic case marking phenomena have been treated extensively in the literature, primarily from a LFG perspective (Zaenen, Maling, and Thráinsson — referred to herein as 'ZMT' — [1985] and Andrews [1982]), and from a RRG viewpoint (Van Valin [1991]). Yip, Mailing, and Jackendoff ([1987] henceforth YMJ) undertook an analysis based on formalisms derived from autosegmental theory. The analyses of Icelandic under these theories will be explored below. (See Chapter II for additional references to the literature.)

It will be argued that far from being "quirky," the Icelandic case marking phenomena hark back to a long-existing pattern in the Germanic languages. More importantly, it will be argued that artificial verbs can be crafted to elicit predictable native speaker case choices. This strongly implies the presence of a productive rule, not "quirkiness." While "quirky" case might not be predictable throughout the entire Icelandic

lexicon, once a verb is known to be "quirky" it can often be shown to fall in certain semantic classes.

As mentioned, it will be seen that artificial verbs can be crafted to predictably elicit from native speakers a predisposition toward accusative case marking on objects, or "quirky" dative case marking, as the test designer wishes. This is significant since this predictability indicates that irregular case marking is not just a relic of defunct, diachronic processes. Rather, to at least a certain extent, there is evidently an active, currently productive rule for some irregular case assignment. The rules of this process are presumably acquired as part of native speaker competence. It will be seen that RRG provides a distinctly advantageous analysis, both of the data and to offer possible explanations of why certain types of "quirky" case marking can be predicted.

In Chapter II, examples of irregular case marking in Modern Icelandic (MI) will be reviewed.[3] Where applicable, reference is made to some of the diachronic features of the Germanic languages (however, historical aspects are treated primarily in Chapter IV). Different analyses of irregular case marking in Icelandic will be reviewed.

Chapter III will review and discuss tests of both actual and artificially created Icelandic verbs with native speakers. Verbs with alternate case marking on objects were tested to detect differences and identify patterns related to grammatical or thematic relations. Artificially created verbs were designed to test native speaker intuitions about case marking. The hypothesis was that if case marking is based in any significant part on an argument's thematic role, and if there are currently productive case marking processes at work in MI for what is considered irregular case marking, then artificial verbs ought to be able to be crafted to trigger predictable native speaker case marking choices – even when those would be termed "quirky."

In Chapter IV, a general review of other Germanic languages will be undertaken. If irregular case marking constitutes a pattern in Germanic, at least diachronically, that is

[3] See Appendices C and D for information on Icelandic case marking and orthography.

an argument that either irregular case marking in Icelandic is not "quirky," or that many or all of the Germanic languages are also "quirky" – either now or at some time in the past. The question would then not be one of quirkiness. Rather the question is in what stage is MI relative to the other Germanic languages? Is there indeed a synchronically productive rule? Or, are we seeing lexicalized relics of old, nonproductive rules?

We will see evidence that there are synchronically active rules, and we will see that irregular case marking is well attested in Germanic. Therefore, this thesis will proceed on the assumption MI is most likely demonstrating a currently productive rule that bears a kinship to similar rules evident in earlier stages of other Germanic languages.

In Chapter V, the conclusion, the data presented will be summarized. First, it will be argued that an analysis of Icelandic must take into account verbal semantics to account for certain syntactic behavior, overt morphological case marking, and native speaker intuition reflecting productive processes in the language.

Second, it will be posited that there is evidence of a productive rule of irregular case marking in Icelandic that, in predictable instances, will produce so-called quirky case.

Third, it will be affirmed that if Icelandic is deemed "quirky," so must many other Germanic languages in various stages of their history. It seems Icelandic may represent the diachronic norm, not the exception, in its language family.

Fourth, it will be argued that RRG presents a distinctly advantageous method of accounting for critical factors in case marking, semantics, and syntactic behavior. Rather than relegate verb behavior to the realm of quirkiness or idiosyncrasy, RRG offers an explanatory framework to address most of the verbs under consideration in this paper. RRG further offers a theoretical framework in which an overarching concept of why any of the verbs studied should behave in a "quirky" fashion.

It will be demonstrated that RRG provides a distinctly clearer, predictive, and less *ad hoc* analysis of these data than the other theoretical frameworks reviewed below. RRG allows a way to reduce the residue of verbs that cannot be accounted for by standard case

marking rules and which would therefore need to be noted as exceptions in the lexicon. It will become evident below that there is evidence of a psychological fit between the analysis advanced in this thesis and native speaker intuitions. Such informant feedback is relevant to the question of psychological adequacy of the theory. Indeed, testing informants' intuitions is entirely in keeping with the psychological grounding of RRG, which holds that a theory should be consistent with other testable theories of language acquisition, understanding, and competency.

Data were collected from, and many thanks go to, Icelandic informants Kristján Thórarinsson, Freyr Thormó□sson, Thorbjörg Krstinsdóttir, Gylfi As□jartsson, and Hrönn Helgadóttir. Their time and insights are deeply appreciated. The data collected will show the pertinence of the semantic classification of verbs when analyzing Icelandic data and will show how naïve (non-linguist) native speakers respond to some of the issues of this thesis.

Finally, it is predicted that not all the theories considered below can equally well account for irregular case marking. Some, as will be seen, primarily describe it as idiosyncratic behavior. Such a solution is not very satisfying, as it lacks explanatory value – both synchronically and diachronically. The goal of this thesis is to identify a possible foundation for an explanatory analysis of the observed irregular case marking on objects based on the principles of RRG.

Chapter II

Icelandic Case Marking Patterns and Analysis

2.1. Case Marking in Modern Icelandic and Other Scandinavian Languages

Of the modern Scandinavian languages, there are a number of instances where Icelandic alone has preserved case marking characteristics that were once typical of Germanic languages in their earlier stages.[4] As Haugen (1976) explains, Icelandic is considered the "classical" language of Scandinavia, having retained much of the structure and lexicon of Old Norse or Old Scandinavian (generally, we will use the term Old Icelandic in this thesis). Modern Icelandic uses four cases: nominative, accusative, genitive and dative.[5] The following sections introduce specific case marking problems.

2.1.1 Impersonal Constructions in Icelandic and other Scandinavian Languages

A chief difference between Icelandic and all other Scandinavian languages (except Faroese) is that it has preserved "impersonal" constructions.[6] The term "impersonal" is used in this thesis to describe verbs which: (1) fail to take subjects in the expected position (i.e., the subject follows the verb in language with canonical SVO word order; (2) do not take subjects at all or only a 'dummy subject'; or (3) take subjects marked in non-nominative case. For example, compare the following.

(1) a. Nú snjóar. (MI)

now snows

'Now it's snowing.'

b. Nå snør det. (Norwegian)

now snows it

[4] Faroese displays similar features, such as impersonal sentences with non-nominative subjects, and non-nominative subjects that meet tests for subjecthood.
[5] See Glossary for Icelandic terms for these cases, and see the appendices for limited case morphology examples.
[6] Faroese alone among the other Scandinavian languages permits impersonals with no expressed subject per Haugen (1976:79).

‘Now it’s snowing.’

In (1a) there is no overt subject, whereas in (1b) the pronoun **det** must appear. Faroese, which lies linguistically somewhat between Icelandic and the western Norwegian dialects, exhibits behavior similar to that shown in Icelandic, behaviors which are not seen, for example, in Swedish.

(2) a. Illa stendur til. (Faroese)
badly stands to/for
‘Things are in a bad way.’

b. Det står illa till. (Swedish)
it stands/is badly to/for
‘Things are in a bad way.’

In Faroese, no overt subject is necessary, where it is mandatory in Swedish that the pronoun **det** must appear as in (2b) above. While (1a) and (2a) are “impersonals” in the truest sense (see definition 2 above), there is another class of constructions that is also termed “impersonal” in the literature. In Icelandic, subjects of impersonals typically have non-nominative case marking and lack subject-verb agreement, with the verb defaulting to third person singular. This will be seen in the following section.

2.1.2 Impersonals With Non-Nominative Subjects

A chief distinguishing feature of Icelandic is that it permits sentences with non-nominative subjects.[7]

(3) a. Mér er illt í höfði. (MI)
me(D) is painful in head

[7] Compare irregular case marking in Faroese: **mær vantar eitt** *me(D) lack something* ‘I am lacking something.’ Whereas Icelandic uses accusative case for the subject in its comparable phrase **mig vantar…**, Faroese uses dative. This is one example of many throughout the Germanic languages that shows that Icelandic is neither alone nor unique in some of its use of case marking.

‘I have a headache.’

b. Mig þyrstir.[8]

me(A) is thirsty/thirsts

‘I am thirsty.’

c. þykkir mér[9]

thinks me(D)

‘I think.’

d. Mér er kalt.

Me(D) is cold

‘I am (getting) cold.’

e. Mér sjárnað i það.

me(D) grieved it

‘It grieved me/It gave me pain/It hurt me.’

f. *Ég/mig langar í sígarettur.

**I(N)/me(A) wants for cigarettes*

‘I want cigarettes.’

In the preceding examples, the lack of nominative case marking on the subject correlates with lack of subject-verb agreement. The verbs are in the impersonal form, third person singular.

That the non-nominative arguments of impersonal verbs do indeed function as subjects syntactically can be shown through a variety of criterial tests (see Van Valin, 1991; ZMT, et al).

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[8] The form **ég er þyrstur** *I(N) am thirsty* ‘I am thirsty’ is also used. Compare Swedish **Jag törstar/jag är törst** *I(N) thirsts/I am thirsty* ‘I am thirsty’ where in both cases the personal pronoun **jag** ‘I’ is nominative (Haugen, 1982:154).

[9] This form occurs both in Old Icelandic and MI. Compare Danish **jeg synes** ‘I think,’ **det synes** ‘it appears’; Swedish **jag tycker** ‘I think,’ **det tycks** ‘it appears’; in Swedish and Danish the pronoun or noun always occurs in nominative case (Haugen, 1982:154).

2.1.3 Accusative Case Marking on Impersonals

The following additional examples of impersonal sentences in (4-6) are from Karttunen (1986), and illustrate that non-nominative subjects participate in other syntactic behavior typical of nominative subjects:

(4) a. Mig vantar peninga.
me(A) lacks money(A)
'I lack money.'

b. Hana virðist vanta peninga.
she(A) seems to-lack money(A)
'She seems to lack money.'

c. Hann telur mig vanta peninga.
he(N) believes me(A) lack money(A)
'He believes I lack money.'

d. Mig er talið vanta peninga.
me(A) is believed to-lack money(A)
'I am believed to lack money.'

2.1.4 Dative Case Marking

As seen in the following, impersonals occur with dative case marking.

(5) a. Barninu batnaði veikin.
child-the(D) recovered-from disease-the(N)
'The child recovered from the disease.'

b. Barninu virðist hafa batnað veikin.
child-the(D) seems to-have recovered-from disease-the(N)
'The child seems to have recovered from the disease.'

c. Hann telur barninu hafa batnað veikin.

he(N) believes child-the(D) to-have recovered-from disease-

he(N)

'He believes the child to have recovered from the disease.'

d. Barninu er talið hafa batnað veikin.

child-the(D) is believed to-have recovered-from disease-the(N)

'The child is believed to have recovered from the disease.'

2.1.5 Genitive Case Marking

Impersonals also appear with genitive case marking, as in the following.

(6) a. Verkjanna gætir ekki.

pains-the(G) is-noticeable not

'The pains are not noticeable.'

b. Verkjanna virðist ekki gæta.

pains-the(G) seems not to-be-noticeable

'The pains seem not to be noticeable.'

c. Hann telur verkjanna ekki gæta.

he(N) believes pains-the(G) not to-be-noticeable

'He believes the pains to be not noticeable.'

d. Verkjanna er talið ekki gæta.

pains-the(G) is believed not to-be-noticeable

'The pains are believed to be not noticeable.'

As in the other impersonal examples above, non-nominative subjects do not trigger verb agreement. The verb defaults to third person singular. Nonetheless, the impersonal subjects meet the criterial tests for subjecthood (see ZMT, for example). This shows that, for Icelandic, nominative case marking is a sufficient but not necessary condition of subjecthood. In RRG terms, this relates to the requirements for "privileged syntactic argument" (PSA) (see Van Valin and LaPolla [1997:176-7]). The fact that Icelandic allows

non-standard case marking on subjects or PSAs may have implications related to this thesis. Namely, Icelandic may also have unique allowances and rules for case marking on objects.

2.1.6 Non-Accusative Case Marking on Objects of Verbs

In addition to the above examples of accusative, dative, or genitive case marking on subjects, Icelandic provides instances of objects that are marked with dative, genitive, or even nominative case. While the above examples show a corpus of data that is challenging to any theory of language, the following examples move toward the specific area that is the focus of this paper. As shown in the following examples, direct objects can appear in genitive, dative, and nominative case.

(7) Jón saknaði Guðrúnar.
Jón(N) missed Guðrúnar(G)
'John missed Gudrun.'

(8) Ég hjálpaði honum.
I(N) helped him(D)
'I helped him.'

(9) Henni hefur alltaf þótt Sigga leiðinlegur.
she(D) has always thought Sigga(N) boring
'She has always thought Sigga boring.'

2.1.7 Passivization

A distinguishing characteristic of verbs with objects that receive non-standard case marking is the preservation of the irregular case marking in passive forms, as in the following examples:

(10) a. Hennar var saknað.
she(G) was missed

‘She was missed.’

b. Honum var hjálpað.

he(D) was helped

‘He was helped.’

The type of passive in (10a-b) above, with non-nominative case marking, is quite common in MI. It occurs uniformly when the object of the active sentence takes a dative or genitive object (i.e., in instances of irregular case marking). This case marking is then preserved in the passive form. This does not currently occur in other Scandinavian languages as a rule.[10]

Haugen (1957:174), in his treatment of Norwegian, gives examples of passives, a large class of which are formed with **bli** or one of its functional variants. In contrast to Icelandic, the following sentences all have regularly case marked (nominative) subjects, and thus show a comparison between MI and a different, but closely related Scandinavian language.

(11) a. I natt blire musene tatt av vår katt.(Norw.)

to night will-be mice(N) taken by our cat

‘Tonight the mice will be taken by our cat.’

b. Det ble fortalt dem at de kunne ro. (Norw.)

it(N) was foretold them that they could row

‘It was told them that they could row.’

c. Ikke all hester blire solt. (Norw.)

not all horses(N) will-be sold

‘Not all horses get sold.’

d. Når ble kirken bygget? (Norw.)

when was church(N) built

[10] Again, Faroese supplies instances of irregular case marking akin to Icelandic.

‘When was the church built?’

There is also a group of Norwegian passives formed with the verbal suffix **-es**:[11]

(12) a. Hester selles her. (Norw.)
horses(N) sell here
‘Horses (are) sold here.’

b. Det bygges mange kirker. (Norw.)
it builds many churches(N)
‘Many churches are being built.’

c. I nød skal venner prøves. (Norw.)
in need shall friends(N) be-tested
‘Friends are to be tested (when one is) in need.’

Examples such as these show ways in which MI is unique among the modern Scandinavian languages in the type and degree of case marking it employs in impersonal constructions, with only Faroese showing some comparable behavior.

2.1.8 Summary of Irregular Icelandic Case Marking

The expected, standard case marking would be nominative case on subjects, accusative case on direct objects, dative case on indirect objects, and genitive case in constructions involving some aspect of possession or other function expressed through genitive case. In the preceding, we have seen a number of examples showing that Icelandic employs non-standard, or irregular case marking.

The facts of Icelandic thus run counter to standard expectations about grammatical relations, and pose a distinct challenge to the syntactician correlating case marking with grammatical forms. In the next sections, we will review three analyses of Icelandic.

[11] This is a middle form, and these are reflexive passives.

2.2 Review of the Literature

In the following sections, a review of three analyses of Icelandic under different theories will be undertaken. A number of other studies of Icelandic have also been undertaken. Notably, see Maling (1990), Sigurðsson (1989), and Smith (1996). Those studies will not be addressed in this thesis.

Generally, studies of Icelandic have tended to treat dative case as "quirky" when it appears on direct objects or subjects. The thrust of this thesis is that dative case assignment on objects has an underlying semantic basis that is reflected in the case marking.

First, we will review Icelandic through the theory of LFG, then through an autosegmental analysis, and then RRG.

2.3 LFG Analysis

In their analysis of case and grammatical functions in Icelandic, Zaenan, Maling, and Thráinsson (1985) (ZMT) analyze Icelandic data in an LFG framework. ZMT's concern was that, at the time of their research, there were primarily two types of analyses aimed at explicating universal characteristics of passives. One analysis rested on the presumption that "passive morphology inhibited case marking" and therefore that advancing objects to subject through passivization was a direct consequence of a constraint that all NPs must have case. The other approach was based on grammatical functions, as in Relational Grammar (RG) and LFG, the claim being that such an analysis could adequately account for case marking. For example, as (10b) above shows, when **honum** is advanced to subject in passivization, it retains its dative case marking. This presents a counterexample to a theory presuming that passive morphology impedes case marking.

Another challenge is presented by verbs, such as many of those considered later in this thesis, which vary between dative and accusative case marking on their direct objects. The verb **skjóta** 'to shoot' is an example:

(13) a. Hann skjótaði fugl.

he(N) shot bird(A)

'He shot a bird.'

b. Hann skjótaði honum fyrir gluggana.

he(N) shot him(D) before window-the

'He shot him before the window.'

c. Honum var skjótað fyrir gluggana.[12]

he(D) was shot before window-the

'He was shot before the window.'

In (13a) we see that verb **skjóta** 'to shoot' takes standard case marking, with a nominative subject and an accusative object. However, in (13b) we see a case of the same verb taking irregular case marking, dative case. In (13c) we see that in the passive form, the irregular dative case marking is preserved. What accounts for the difference? For one thing, there is a difference in meaning between (13a) and (13b). Example (13a) means the bird was shot (i.e., it was impacted by a projectile). Example (13b) means the object ('him' in this case) was shot in the sense of *being* the projectile. That is, the object is not impacted by a projectile, but rather is shot through space (as, say, out of a circus cannon) and is itself the projectile. Because of examples like those in (13), simply marking a verb as idiosyncratic is insufficient. Why is it irregular in the one instance (13b) but not the other (13a)?

In their presentation of the data, ZMT first demonstrate that, in most instances, Icelandic exhibits regular case marking, with nominative subjects, accusative direct objects, and nominative case markings on the subjects of passive constructions. For example, they show that the accusative case marking on subjects, as in (4), is not the norm, as shown in passive sentences as in (14b).

[12] (13c) was attested by native speakers assisting with this research.

(14) a. Lögreglan tók Siggu fasta.
police-the(N) took Sigga(A) fast
'The police arrested Sigga.'

b. Sigga var tekin föst af lögreglunni.
Sigga(N) was taken fast by police-the(D)
'Sigga was arrested by the police.'

Sentences (14a-b) illustrate the more common case marking for passive sentences in MI, with the subject appearing in nominative (not accusative) case, and the agent of the action optionally appearing in dative case (governed prepositionally) in an **af** + nominal format. Thus it is clear that there is no simple rule in Icelandic that says all passivized objects keep their "underlying" case (as assigned in the object position) when they appear as subjects in the passive construction.

ZMT also explore the role of the impersonal passive construction in Icelandic, as in their following examples:

(15) a. það var dansað í gær.
it was danced on yesterday
'There was dancing yesterday.'

b. I gær var dansað.
on yesterday was danced
'Yesterday there was dancing.'

c. *I gær var það dansað.
on yesterday was there danced

d. *I gær það var dansað.
on yesterday there was danced

Through the contrasts in (15), ZMT showed that **það** is restricted in its occurrence: it appears as a "dummy" element in sentence initial position only. When it cannot appear

there, as in (15c-d), it cannot grammatically appear at all. In essence, as shown by Van Valin (1991), **það** is not a dummy *subject,* as it cannot participate in any of the activities that typically denote subject behavior in Icelandic (passivization, raising, etc.). Rather, **það** is a placeholder that enables an adherence to the V/2 structure of Icelandic in constructions that lack an overt subject.

2.3.1 Raising

In contrast to **það**, the irregularly case marked subjects above, in (4), (5), (6), and (10), all do behave syntactically as subjects, and not merely as topicalized elements, as shown by ZMT in the following tests (see also examples from Karttunen, et al [1986], above). First, only subjects can undergo raising.

(16) a. Ég tel henni hafa alltaf þótt Ó´lafur leiðinlegur.
I(N) believe her(D) to-have always thought Olaf(N) boring
'I believe her to have always thought Olaf boring.'

b. Guðrún saknar Haraldar.
Gudrun(N) misses Harold(G)
'Gudrun misses Harold.'

c. Haraldar saknar Guðrún.
Harold(G) misses Gudrun(N)
'Harold misses Gudrun.'[13]

d. *Ég taldi Haraldar/Harald saknar Guðrún/Guðrúnu.
I believed Harold(G)/Harold(A) to-miss Gudrun(N)/Gudrun(A)
*'I believed Harold to miss Gudrun.'

e. Ég taldi Guðrúnu í barnaskap mínum sakna Haraldar.
I(N) believed Gudrun(A) in foolishness my to-miss Harold
'I belived Gudrun, in my foolishmness, to miss Harold.'

[13] 'Harold' is topicalized.

f. Ég tel þeim hafa verið hjálpað í prófinu.

I(N) believe them(D) to-have been helped in exam-the(D)

'I believe them to have been helped in the exam.'

Sentence (16a) shows that an oblique subject can be raised, while (16d) illustrates that oblique objects cannot be raised.

2.3.2 Reflexivization

Another test of subjecthood employed by ZMT is reflexivization. Since, according to ZMT, many speakers of Icelandic allow only grammatical subjects to be the antecedents of reflexive pronouns, the failure of a reflexive pronoun correlates with non-subject grammatical function, as shown in the following examples.

(17) a. Sigga barði mig með dúkkuni sinni/*hennar.

Sigga(N) hit me(A) with doll-the(D) her([-REFL])*

'Sigga hit me with her doll.'

b. Ég barði Siggu með dúkkuni hennar/*sinni.

I(N) hit Sigga(A) with doll-the(D) her ([+REFL])*

'I hit Sigga with her doll.'

c. Henni$_i$ þykir bróðir sinn$_i$(+REFL)/*hennar$_i$(D,-REFL) leðinlegur.

*she(D) thinks brother(N) her(+REFL)/*her(-REFL) to be boring*

'She finds her brother boring.'

d. Honum var oft hjálpað af foreldrum sínum/*hans.

him(D) was often helped by parents his ([-REFL])*

'He was often helped by his parents.'

2.3.3 Indefinite Subject Postposing[14]

[14] According to ZMT, only when a subject is indefinite can it be postposed in this manner with the insertion of the filler **það**.

Indefinite subjects can be postposed, with **það** insertion as necessary to fulfill the V/2 constraint.

(18) a. **Það** hefur þjófur stolið hjólinu mínu.
there has thief-a(N) stolen bicycle(D) mine(D)
'A thief has stolen my bicycle.'

b. Hjóli hefur þjófurinn stolið.
bicycle-a has thief-the(N) stolen
'A bicycle has the thief stolen.'

c. *Það hefur hjóli þjófurinn stolið.
there has bicycle-a thief-the(N) stolen
'There has a bicycle the thief stolen.'

d. **Það** hefur mörgum stúdentum verið hjálpað í prófinu.
there have many(D) students(D) been helped on exam-the(D)
'There have been many students helped on the exam.'

2.3.4 Subject Ellipsis

In MI, the subject of a coordinated clause can be deleted under identity with the subject of the preceding clause.

(19) a. Hann segist vera duglegur, en finnst verkefnið of þungt.
he(N) says-self to-be diligent, but _____(D) finds work-the too hard
'He says he is diligent, but finds the homework too hard.'

b. *Hann segist vera duglegur, en mér finnst _____(N) latur.
he(N) says-self to-be diligent, but me(D) finds _____(N) lazy
'He says he is diligent, but I find [him] lazy.'

c. Hann segist vera saklaus en _____ hefur víst verið hjálpað í prófinu.

he(N) says-self to-be innocent but _____(D) has apparently been helped on exam-the(D)

'He says he is innocent, but has apparently been helped on the exam.'

The preceding examples show that subject ellipsis can occur without agreement in case marking as in (19a), and that agreement of case marking is insufficient to enable ellipsis to occur between arguments with different grammatical functions, as in (19b).

2.3.5 Infinitive Complements

ZMT assert that only subjects can be the target of EQUI-NP-Deletion, as in the following.

(20) a. Mig vantar peninga.
me(A) lacks money(A)
'I lack money.'

b. Ég vonast til að vanta ekki peninga.
I(N) hope for _____(A) to lack not money
'I hope not to lack money.'

c. Ég vonast til að verða hjálpað.
I(N) hope for to be helped
'I hope to be helped.'

ZMT use the above tests for subjecthood (cf. also Kartunnen et al) to establish that not only do the above behave as subjects, but also that oblique, irregularly case-marked NPs uniformly meet these same criteria for subjecthood. Were oblique arguments found not to have subject properties, there would be no need to account for the phenomena in synchronic syntactic descriptions of MI. The verbs in question might have certain historical properties of interest, but in the syntactic description of the language they might simply be recorded as idiosyncratic in the lexicon.

2.3.6 Lexical Entries of Verbs and LFG Treatment of Icelandic

ZMT, in having established that the NPs in question do indeed function grammatically as subjects, show that it then becomes necessary to account for their case marking as part of the syntactic description.

The basis for the LFG analysis of these data is the lexical entry of the verb. The verb **taka** 'take', for example, is entered by ZMT (463) as follows:

(21)

		agent	theme
taka:	V, 'take'	(SUBJ,	OBJ)
tekinn:	V[+part]	(AF-OBJ,	SUBJ)

The preceding defines the verb **taka**, whose behavior (along with the behavior of all regularly case marked verbs in Icelandic) in passivization is then shown by the rules:

(22) a. SUBJ › AF-OBJ/Ø

b. OBJ › SUBJ

This leaves unsolved the problem of how to account for "quirky" case in certain verbs.

ZMT allow three general ways of assigning case: (1) semantic, (2) functional, and (3) lexical or idiosyncratic. Semantic assignment is illustrated in (23):

(23) Strákurinn beið allan daginn.

boy-the(N) waited all(A) day-the(A)

'The boy waited all day.'

This is an example of the "accusative of time," which is widely evident throughout both the earlier stages of Germanic and also modern Germanic languages.

The second type of case marking, which is functional, is what is commonly referred to as "regular "or "default" case marking. This is the marking that predicts nominative subjects and accusative objects, and is sensitive to surface grammatical

relations, as ZMT put it. Thus, in LFG, it applies after association rules and principles, or, said another way, semantic or idiosyncratic case marking overrides the functional assignment of case.

The third method of LFG case assignment in ZMT is lexical or idiosyncratic. This is assumed by ZMT to be associated with a particular thematic role. This type of case marking, in essence, simply observes instances not predicted by the general rule and notes the exceptions in the lexicon in some manner or another. It is therefore the least satisfying solution to problematic case marking as it is fundamentally descriptive and not explanatory.

It will be argued below that, although one cannot predict in general which verbs will have irregular case marking, if one knows that the verb is quirky, and knows the semantics of the verb, in a number of instances the "quirky" case can be predicted. Even more tellingly, one can create verbs that largely predict – due to their semantics and LS – how native speakers will assign irregular case to objects.

The following is an example of ZMT's analysis of lexical or idiosyncratic case assignment.

(24) a. **gæta** 'take care of' <*agent, theme* >
GEN

b. **lofa** 'promise' <*agent, theme, goal* >
DAT DAT

Sentence (24a) indicates that **gæta** has two arguments, one of which is a theme that is marked with genitive case. **Lofa**, on the other hand, has three arguments, and both theme and goal are marked with dative case.

ZMT then give a set of association principles for Icelandic that determines which thematic role is mapped onto which grammatical function. Their principles are:

(25) a. If there is only one thematic role, it is assigned to SUBJ; if there are two, they are assigned to SUBJ and OBJ; if there are three, they are assigned to SUBJ, OBJ, 20BJ. *(Universal)*

b. AGENTS are linked to SUBJ. *(Universal)*

c. Case-marked THEMES are assigned to the lowest available GF. *(Language Specific)*

d. Default Case Marking: the highest available GF is assigned NOM case, the next highest ACC. *(Universal)*

Note that in this rule set, language-specific principles take priority over universals.

As Van Valin (1991) points out and as ZMT acknowledge, in LFG the assignment of thematic relations to a verb is not accomplished in a principled way. Though there is an assumption that principles of such assignment exist, they had not been formulated in LFG in any detail.

This leaves a gap in the theoretical understanding of the arguments of a verb and their roles. Yet it is the "polyadicity," or variable number of arguments of the verb, that determines the mapping between theta-roles and grammatical functions in LFG. Without a methodology for determining those theta-roles (or thematic relations) for a verb's arguments, LFG as applied in this analysis to Icelandic risks *ad hoc* solutions and missed generalities. As this thesis will demonstrate, verbal semantics and thematic relations can be shown to play a distinct and often predictable role with certain types of irregular case marking.

In the next step of the ZMT analysis, association principles are applied to link thematic and grammatical relations. ZMT use the word **gefa** 'give' as an example to show how alternate linkage can account for dative shift in ditransitive Icelandic verbs:

(26) **gefa**: V <*agent theme goal*>
[+dat]

a. SUBJ OBJ 2OBJ

b. SUBJ 2OBJ OBJ

Thus LFG accounts for the variability in the order of direct and indirect objects, and by (25b) above the subject/agent receives nominative case, the theme/OBJ/2OBJ receives accusative case by (25d), and the goal/2OBJ/OBJ receives dative case as specified in the lexical entry.

Using the LFG framework, ZMT show that only NPs assigned to OBJ can passivize:

(27) Þess var óskað (*henni).
*this(G) was wished (*her(D))*
'This was wished.'

If **Þess** alone is present as an argument, it receives OBJ grammatical function under (25c). If **henni** is present, it and not **Þess** is linked to the OBJ function. In that circumstance, a passive with **Þess** as the subject is not acceptable.

As seen in (13) above, some verbs in MI may take both dative and accusative direct objects. Both objects can passivize and achieve subjecthood. However, the accusative object would appear with nominative case in the passive sentence. The dative object, in contrast, would preserve its dative case when it becomes the subject of a passive construction. How might LFG account for this variation?

The options would appear to be the following. One possibility is positing two separate verbs. That would complicate the lexicon and lack explanatory value. It would not be satisfying semantically, either. The different instances of 'shoot' in (13) are much closer semantically than say 'bear' (the animal) and 'bear' (hold up under) in English. What would the criteria be to judge when two uses of the same word differed enough to merit separate lexical entries?

Another option might be a more complicated set of associations, with options for the verb to take agent and patient arguments in the case of accusative case marking, and

agent and some other thematic role argument for dative objects. Here again, LFG is hampered by lack of a formal, principled way to identify thematic roles.

A third solution might be assignment of verbs to classes with language-specific case assignment rules for each class. However, it would be challenging to have verbs cross-listed in two or more classes, and doing so would not explain the reasons for the different case assignment.

Other verbs listed by ZMT that behave similarly to **óskað** in (27) are **biðja** 'ask' ACC GEN and **synja** 'deny' DAT GEN. Each of these verbs, and a number of others, has an argument case-marked in the genitive. One possible semantic pattern involves *verba dicendi* (literally, 'verbs of saying'). In English, 'of'' has taken over some functions of the former genitive case[15] (Diamond, 1970:19). Some English *verba dicendi* allow 'of' paraphrasing (e.g, 'I asked him/I asked of him' versus 'I hit him/*I hit of him'). If such verbs form syntactic patterns in English, might there be an identifiable pattern to Icelandic's "quirky" use of genitive case?

This question is of some interest to this thesis. As will be shown, there is an evident sensitivity to semantics for some "quirky " dative case marking. Clearly, not all grammatical relations or case marking can be reduced to semantics. For one thing, as Sapir once said, "all grammars leak" (Sapir, 1921:38). Identifiable patterns will have exceptions. Still, if languages form congruent systems, Icelandic may yield other semantic sensitivities related to genitive "quirky" case. That would be a tentative prediction of this thesis, a position quite different from that of the ZMT analysis.

In short, an LFG analysis that labels verbs idiosyncratic and lists case as part of the lexical entry may miss a possible generality. For example, verbs that take genitive objects might, to some degree, involve possession or ownership in some sense, or be

[15] In Modern English, genitive 's' on nouns and NPs, possessive pronouns, and prepositions ('of,' 'on,' 'for,' 'from,' etc.) typically denote relations formerly shown with genitive case in Old English (e.g. **…ðancodon mycclum ðæs (G) Gode(D)** '…thanked much this(G) God(D),' or '…thanked God greatly for this' (Fischer et al:43).

verba dicendi, or relate to emotional states. In a similar way, this thesis examines whether a generality may have been missed about verbs with dative objects.

One cannot necessarily look at a given verb and tell from its meaning that it will employ irregular case marking. However, if one were given a list of "quirky" verbs with their meanings, but no information on their case assignment, it should be possible to infer the correct case marking in a great number of cases. This is a supposition that will be tested in this thesis, and that challenges some linguistic theories.

To capture case based on semantics or thematic roles, LFG could insert a verb class notation in the lexical entry. For example, verbs of possession that take irregular case marking might be designated "Class G." A language-specific association principle assigning the case could be devised. For the verbs treated in this thesis, a "Class D" rule might designate verbs assigning irregular dative case. However, while this approach might describe the appropriate object case marking, it would buy no simplification of the analysis, and would not in itself explain the nature of the phenomena involved. Also, it is not clear how such an approach, which is only tentatively proposed as an LFG solution, would address verbs that alternate cases on their objects.

Let us now look at the verb **þykja** 'seem, appear, be thought to be,' which takes irregular subject case marking. In LFG it is represented as:

(28) **þykja** V <*experiencer* *theme*>
[+dat]
(SUBJ, OBJ)

Though ZMT analyze this, and certain other verbs, as transitive, there is ample reason to conclude that the verb is intransitive. Van Valin (1991), in his RRG analysis, argues that the verb in (28) is intransitive. Lacking a macrorole, dative case is assigned to the "experiencer" argument. This shifts the irregularity from the lexicon to transitivity, a known area of idiosyncrasy.

While the verb was historically an intransitive inverse verb, and behaves as such in many ways still in Icelandic, there are also instances where it seems to be evolving to a form with standard case marking on the subject (Einarsson, 1945:134):

(29) þeir þykja latir.
they(N) seem(3rd. Pers. Pl.) lazy
'They are considered lazy.'

Example (29) can be analyzed in LFG if the lexical entry is revised to delete an experiencer and have only a theme as a thematic role. The reduction to theme only would result in (25a) linking the theme to SUBJ and (25d) assigning nominative case by default. This would work, but would require two lexical entries for the verb in LFG. Also, there would be no inherent explanation of why such an alternate case-marking pattern should exist. As will be seen below, RRG does offer an explanation of such phenomena through thematic roles established in a principled way, macroroles, and determinations of transitivity.

Another example from Einarsson[16] poses a different problem:

(30) Mér þótti þú fljótir
me(D) thought you(A) quick
'I thought you were quick.'

In this case, we see a subject appearing in dative and an object in accusative. One solution, in LFG, would be to stipulate yet another lexical entry, complicating the lexicon, and specifying that (30) shows an idiosyncratically dative case-marked subject (experiencer), with an object case-marked in the accusative by the universal default case marking principle stipulated above.

[16] Einarsson (1945:134) says "the verb **þykja** is usually used in the third person singular, although the subject is in the plural, when it means: 'seem, think,' and takes the logical subject in the dative. However: **þeir þykja latir.** *they(N) to-seem lazy* 'They are considered lazy.'

As will be seen below, the autosegmental analysis would also fail on (30). Under its rules, it would apply lexical case to the dative subject. Rules would then associate nominative case incorrectly with the object, which is in the accusative. Spreading or "percolation" rules could not draw the correct case from the subject and apply it to the object, because the two are in different cases. This would probably be an instance where an autosegmental analysis would require two instances of lexical case.

In contrast, the RRG analysis of the verb may allow a simpler solution. First, the verb, when employed with a dative subject, would have no macroroles (to be defined below). Its case marking would follow from this and its lack of transitivity. Second, when the subject appears in nominative case, the verb would be assigned one macrorole. Rather than three lexical entries, there would only be a one lexical entry with variable macrorole assignment. In other words, case variation may be understood in this instance to be a reflex of the real determinant factor: variability in transitivity, with dative case serving as default case marking when no macrorole is assigned.

2.3.7 Summary of LFG Analysis

In summary, the LFG account by ZMT accounts for "quirky" case through the designation of idiosyncratic case. This is assigned directly to the thematic representation in the verb's lexical entry (or in Andrews [1982] as a composite grammatical function that links, for example, SUBJ DAT in the verb's representation). The lack of verb agreement with non-nominative subjects, as noted above, is realized as a default to third person singular/impersonal form when the subject fails to appear in nominative case. While the LFG analysis accounts for this and other facts, it does so mainly in a descriptive rather than an explanatory manner. And it does so at the cost of stipulating case marking in either lexical entries or tying them to GFs when there may be explanatory generalities that can be captured. Further, the handling of verbs as in (29-30) may further complicate matters, creating an unnecessarily complex lexicon.

2.4 Autosegmental Analysis

Like LFG, the autosegmental analysis of Icelandic (Yip, Maling, and Jackendoff [1987], henceforth YMJ) had two strata of rules for case marking. First there are the general, default rules for nominative and accusative case. The second layer is specific exceptions noted for verbs that take irregular or "quirky" case.

The analysis looks at "surface case," using a formalism similar to that of the autosegmental theory of phonology and morphology. An example from Arabic provides an illustration of the theoretical framework. The pattern of vowels and consonants in Arabic (the "CV skeleton") comes from the derivational class of the verb. The consonants come from the verb root. The vowels are established by mood and aspect. Autosegmental principles then function in a left to right, top to bottom fashion to instantiate specific instances of the verbal phonology.

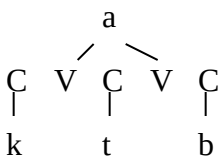
2.4.1 Examples of Autosegmental Notation and Formalism

The following examples from YMJ show how different forms of the Arabic verb root **ktb** 'write' are realized. One derivational class (perfective active) supplies the phoneme /a/ to the verb root. Rules require a left to right process assigning consonants to C slots, and vowels to V slots. Associations are made to tiers above and below the CV skeleton, with crossovers prohibited. Thus we have:

(31) Lexical details:

Verb root	**ktb**	'write'
Perfective active	CVCVC	a
Perfective passive	CVCVC	u i

(32) Autosegmental representation:



katab ‘write’ (perfective active)

In (32), there are the same number of CV slots as there are assigned phonemes, and the correct output is generated. If there are more slots than elements, YMJ apply a “spreading” rule that fills the hole with existing elements. In the opposite case – more phonemic elements than CV slots, some elements go unrealized. Using these concepts, YMJ apply the autosegmental formalism to case in Icelandic.

2.4.2 Applying Autosegmental Notation to Case

YMJ suggest that surface case forms a layer or tier that is autonomous to phrase structure (YMJ:217). That tier is then associated with an NP via rules that are analogous to how tones, for example, are associated with phonological and morphological segments. The theory provides such elements as a parameterization of cases, rules concerning lack of an NP with which to associate a case, and the concept of spreading (“percolation” [17]), whereby a feature might spread onto adjacent elements.

YMJ stipulate that, just as certain phonological elements can be lexically associated, so can case. Lexical case is case assigned by the verb, linked to a specific thematic element, and occupies a specific syntactic location. Lexically assigned case is held to be the reason for idiosyncratic or “quirky” case marking in Icelandic. Regular verbs do not assign case and in those instances case is assigned structurally (or syntactically). An example of regular case marking from YMJ follows:

(33) V. **baka** ‘to bake’

Dagmamman bakaði brauðið.

[17] YMJ claim that spreading accounts for some case marking in another Scandinavian language (Swedish). However, they first hold that spreading is not required in Icelandic since any extra NP is always assigned case in the lexicon. Later, they argue that in just the case of “quirky” verbs that take accusative subjects and accusative objects, spreading may be involved. Such verbs would presumably have to be either marked in the syntactic tier below the NP level or elsewhere in a different tier.

day-mommy-the(N) *baked* *bread-the(A)*[18]

NP NP
| |
N A

'The day-mommy baked the bread.'

In (33), a left to right association assigns nominative case to the first NP, and accusative to the second. Next, let us look at a verb that assigns genitive case to its object.

(34) V. **sakna** 'to miss' (NG)[19]

G
|
Ég saknaði hans.

I(N) *missed* *him(G)*

NP NP
| |
N A

'I missed him.'

In this instance, the second NP is not associated with accusative case, as signified by the lack of a vertical line between the noun phrase and the case tier. The association is blocked by the assignment of lexical case (here, genitive). This follows from a rule that no NP may be assigned more than one case, and lexical case, if any, is assigned first. Hence, accusative case marking is left unrealized, overridden by lexical case in the above example. This would be the autosegmental analysis of many of the verbs treated in this thesis, specifically those that take dative objects.

YMJ posit that lexical case is associated with specific arguments, and not with syntactic positions. By this reasoning, lexical case stays with an argument, thus

[18] Lexical case is written above the NP tier. Syntactic case is written below the NP tier. Lexical case is applied first. No NP can be assigned case more than once. Notations after the verb also indicate any irregularities (e.g., "NDA" would designate a verb with nominative-dative-accusative NPs, in that order).

[19] "NG" indicates that the verb takes a nominative argument followed by a genitive argument. By this formalism, the autosegmental analysis shows the sequential pattern of case on arguments of verbs.

accounting for non-nominative subjects in some passive forms in Icelandic. For example, with the verb **hjálpa** 'to help', the object would be assigned lexical case (dative) from the tier above the NP. Upon passivization, lexical case remains associated with the NP. Since lexical case marking applies first, the autosegmental rule associating the first NP with nominative case would be blocked by the rule that says case marking can only be assigned once. The subject would thus appear in the lexically assigned case, as the MI sentence **honum var hjálpað** 'he(D) was helped' illustrates.

With the verb **skjóta** 'to shoot' (in [13] above), YMJ would encounter the same problem as ZMT's LFG account. Since **skjóta** can take either a dative or an accusative direct object, YMJ would be forced to decide if there were really two verbs (say, **skjóta** #1 and **skjóta** #2**)** that are morphologically identical but differ in case marking for some reason unspecified in the autosegmental analysis. Alternately, there could perhaps be different sets of tiers to capture the variation. Even then, an account explaining under what circumstances each tier set would be used would be needed. This would, as will be seen below, require reference to thematic roles to avoid an otherwise inexplicable variation of case marking. It is precisely the verbal semantics and thematic roles that correlate to "quirky" case marking in the case of **skjóta**.

2.4.3 Applying Autosegmental Analysis to "Quirky" Case

Now we will look at an autosegmental analysis of "quirky" case-marked subjects. As shown above, non-nominative subjects occur in Icelandic not only in passive forms that had "quirky" case on objects, but also in non-passive sentences. YMJ account for such data as is shown in the following example.

(35) V. **batna** 'to recover' (DN)

D
|
Barninu batnaði veikin.

child-the(D) recovered-from disease-the(N)

‘The child recovered from the disease.’

In the preceding example, we see the key features of the autosegmental analysis. We will look at the tiers of (35) to illustrate those features.

(36) a. The verb is designated as “quirky” or irregular in the lexicon, through the designation of the “DN” case marking pattern in this instance.

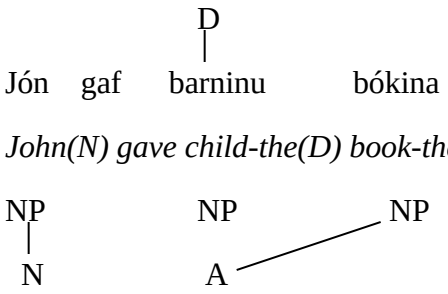
b. The top tier after the lexical entry then applies any lexical case to the NP prior to a lower tier being able to act on case marking.

c. The Icelandic sentence and English gloss reflect the irregular case marking.

d. The first NP in the NP tier has already been assigned lexical case from a higher tier; it is therefore blocked from receiving syntactic or structural nominative case from the bottom tier; the result is that nominative case “seeks” the next NP to the right, which in this case is **veikin** ‘disease(N).’

YMJ argue that an autosegmental account of nominative objects as in (35) contrasts positively with other analyses by not incorrectly claiming accusative to be the default case for direct objects. They illustrate this in the following example.

(37) V. **gefa** ‘to give’ (NDA)



‘John gave the child the book.’

In (37), **barninu** is assigned lexical dative case from the higher tier. This causes the association of accusative case from the syntactic tier to fail to attach to the second NP. Under autosegmental rules, the structural accusative case seeks out the first NP to the right

that does not already have case assigned. That NP is **bókina**, which is then correctly assigned accusative case.

In the passive of (37), the lexically marked dative case is preserved, the subject of the active sentence becomes an optional '**af**' phrase,[20] and **bókina**(A) becomes **bókin**(N):

(38) D

Barninu	var gefin	bókin	(af Jóni)
child-the(D) was given		*book-the(N)*	*(by John(D))*
NP		NP	
N		A	

'The child was given the book (by John).

While the preceding analysis accounts for certain case marking patterns, it does not account for all. YMJ review all the possible combinations of NADG case marking in a three-argument system. Of the 64 logical possibilities[21] many are unattested, most with logical reasons for being so. One reason is that Icelandic has an apparent rule that no agent can receive lexical case marking. While most unattested combinations can be explained, some attested ones pose problems, such as verbs with an AA case-marking pattern.

Vanta 'to need, lack, want' is one such example, taking both an accusative subject and object:

(39) Mig vantar peninga.

I(A) need money(A)

'I need money.'

[20] Icelandic **af** 'by, of' is used to denote the agents in passivized sentences. In this example, if **Jón** appeared, it would be in the prepopositional phrase **af Jóni**.
[21] Four possibilities for the first choice, times four for the second, times four for the third choice yields 64 case combinations.

In an autosegmental analysis, the solution would be lexical assignment of accusative case to the subject argument. That would, however, leave syntactic nominative case below the NP tier unassigned. Autosegmental rules would then assign nominative case to the object – yielding the wrong result. Assigning lexical case to both arguments is not an option in this autosegmental analysis: "[…] no verb may have two idiosyncratic lexical cases: where there seems to be more than one, the second is supplied by a lexical rule based on the thematic role that the argument bears" (YMJ:229).

Given this theoretical constraint, YMJ proceed as follows. First, they reject the assertion (as in Andrews [1982]) that case marking on both the subject and object in verbs like **vanta** is irregular. Instead, two alternatives are considered. One is the thematic assignment of case.[22] A second alternative is the one chosen. It invokes the spreading (or "percolation") rule mentioned above. A rule would provide that just for "quirky" accusative subjects, the spreading rule would assign accusative case to the object, drawing it or "percolating" it from the subject.

Such a rule would not explain utterances like (30) above, or the following, however:

(40) Mig iðrar þess.
I(A) repents this(G)
'I repent of this.'

The spreading rule cannot spread genitive case from the first argument to the second because the first argument has accusative case – not genitive. Also, verbs like **vanta** and **iðra** do not permit passivization. This makes it impossible to see if the case marking on

[22] YMJ (p. 229) argue that thematic relations determine some case marking in Icelandic. For example, they assert that dative case on goal arguments is neither lexically nor syntactically – but rather thematically – assigned. YMJ avoid adding a thematic tier by stipulating that two lexical cases can be assigned if one of them is semantically predictable, thus holding the formal notation and theory to just the tiers already discussed. Put another way, thematic relations can dictate lexical case assignment.

the object is preserved, which would be taken as an indication of lexically assigned case. It is not clear how an autosegmental analysis resolves this.

In (35) we saw a verb, **batna** 'to recover,' which takes a nominative object. YMJ note that **þágufallssykki**, or "dative sickness," results in objects often being expressed in nominative case. This fits the YMJ analysis above, and gives some indication that object case marking for such verbs is not lexically assigned. If it were, a switch to nominative case on the object (e.g., in instances of "dative sickness" when the subject is dative) would not seem likely. However, these contentions appear to be in conflict. If accusative objects of **vanta** and genitive objects of **iðra** are not lexically marked, by what rule do they appear? And if such verbs lexically assign case to objects, that would appear to violate the YMJ restriction against verbs assigning more than one lexical case: lexical case is already assigned to the subjects.

The solution seems to be the following. YMJ would posit a thematic reason for the genitive case marking. Then they would make an exception to allow more than one lexical assignment of case. For example, under one of their rules "two lexical cases are possible only if one of them is semantically predictable, i.e., based on the thematic role that an argument bears" (YMJ:232). In this way, just as for LFG, some accounting of thematic roles was seen as necessary or advantageous. However, in neither the LFG nor the autosegmental analysis were principles laid out for determining thematic roles, other than the implied judgment of the analyst and linguistic convention.

The autosegmental analysis thus suffered the same drawback as LFG. By painting the default case marking rules with a broad brush, and labeling all other cases exceptional, there was little opportunity to define principles by which irregular case marking might to some extent be predictable. Any predictably could reduce some of inexplicable "quirkiness" in the lexicon.

At the same time, it is of interest that both the LFG account and the autosegmental account saw the necessity of invoking semantics and thematic roles. They only seemed to lack a powerful enough mechanism to capture such factors in a non-*ad hoc* way.

2.4.4 Summary of Autosegmental Analysis

Both ZMT and YMJ take thematic roles into account to some degree. YMJ allow for the possibility of case assignment when semantically predictable, even if that means that some verbs assign more than one lexical case. Like ZMT, YMJ acknowledge at least one thematic designation of case. They posit that all objects with a "goal" theme are automatically assigned dative case by a general rule. (This is captured in ZMT by the connection of OBJ2.) However, neither YMJ nor ZMT provide a principled, non-arbitrary way of determining thematic roles as a key component of their analyses. In contrast, as will be seen below, RRG avoids this pitfall. Far from approaching dative case usage as a sickness, RRG approaches the problem with a view of dative case as a regular case.[23]

2.5 RRG Analysis and Dowty's Verb Classification

RRG is based on semantic representations which derive from Dowty's (1979) system of verb classification, which was in turn built upon the Vendler (1967) categorization of verbs into four classes: states, activities, achievements, and accomplishments. In contrast to both LFG and the autosegmental frameworks, RRG provides an explicit, principled means of establishing verb classes, and their arguments and thematic relations.

The primitive or irreducible elements are taken to be states and activities, with achievements and accomplishments deriving from those primitives (an achievement is the act of coming to be (becoming) in a certain state, e.g., 'the ice melted' and an

[23] See Silverstein (1976, 1981, and 1993) and Van Valin (1991:172) for discussion on the possibility that dative is one of two fundamental cases, and is the unmarked default in opposition to nominative.

accomplishment is the act of causing a change in state, e.g., ‘he melted the ice’). Sample verbs of each class are shown in the following table:

(41)

States	Activities	Achievements	Accomplishments
hear	listen	tell	realize
love	pay	count	measure
be molten	slosh	melt (intrans.)	melt (trans.)
be wet	water	sink (intrans.)	sink (trans.)
perceive	feel	touch	move (trans.)

The verb class to which a verb is assigned is based on its acceptability in contextual tests that logically follow from the basic concept of the class. The primitives are taken to be states (e.g., ‘know’) and actions (e.g., ‘run’, ‘talk’, etc.). Achievements are changes into states (e.g., ‘learn’ is ‘come to know’ with ‘know’ being a stative verb) and accomplishment is the result of the causative evolution into a state (e.g., ‘teach’ is ‘cause to come to know’). Dowty (1979:60) developed a table of tests to distinguish the class of the verb:

(42)

Criterion	States	Activities	Accomplishments	Achievements
1. meets non-stative tests	no	yes	yes	?
2. has habitual interpretation in simple present tense	no	yes	yes	yes
3. *X for an hour* *spend an hour Xing*	OK	OK	OK	bad
4. *X in an hour,* *take an hour to X*	bad	bad	OK	OK
5. *X for an hour* entails *X at all times in the hour*	yes	yes	no	n/a

6.	*one is Xing* entails *one has Xed*	n/a	yes	no	n/a
7.	complement of *stop*	OK	OK	OK	bad
8.	complement of *finish*	bad	bad	OK	bad
9.	ambiguity with *almost*	no	no	yes	no
10.	one *Xed in an hour* entails *one was Xing during that hour*	n/a	n/a	yes	no
11.	occurs with *studiously, attentively, carefully,* etc.	bad	bad	OK	bad

For example, test 4 above is illustrated by '*he read in an hour' which is semantically anomalous, whereas 'he read the book in an hour' is acceptable. In this example it becomes clear that the transitivity of the verb is a factor in determining the verb class. Whereas 'reading' in its intransitive form is an activity verb (hence, 'he read for an hour' would be okay), in its transitive form it becomes an accomplishment verb. Verbs can be categorized in the above classes through systematic application of these tests to the verb and its arguments. The above table shows that Dowty had developed a principled way of categorizing verbs that was not *ad hoc* and which could be tested by any researcher.

2.5.1 RRG Tests for Verb Classification

The above tests were designed to distinguish four classes of verbs. RRG (Van Valin and LaPolla [1997:101]) developed an expanded array of 10 verb classes as seen in the following table.

(43)

Class	Test 1	Test 2	Test 3	Test 4	Test 5	Test 6
State	No	No	No	Yes	No	No

Activity	Yes	Yes	Yes	Yes	No	No
Achievement	No	No	No	No	No	No
Accomplishment	Yes	No	Yes	N/A	Yes	No
Active Accomplishment	Yes	Yes	Yes	N/A	Yes	No
Causative state	Yes	Yes	No	Yes	No	Yes
Causative activity	Yes	Yes	Yes	Yes	No	Yes
Causative Achievement	No	Yes	No	No	No	Yes
Causative Accomplishment	Yes	Yes	Yes	N/A	Yes	Yes
Causative Active Accomp.	Yes	Yes	Yes	N/A	Yes	Yes

The tests referred to in (43) are shown in the following table:

(44)

Test*	States	Achievements	Accomplishments	Activities
1.	No	No	Yes	Yes
2.	No	No	No	Yes
3.	No	No	Yes	Yes
4.	Yes	No	N/A	Yes
5.	No	No	Yes	No

1. Occurs with progressive
2. Occurs with adverbs like *vigorously, actively,* etc.
3. Occurs with adverbs like *quickly, slowly,* etc.
4. Occurs with *X for an hour, spend an hour X-ing*
5. Occurs with *X in an hour*
6. Causative paraphrase[24]

Note that (43) and (44) are intended as a summary, and therefore do not include detail on certain potential difficulties or pitfalls with some of the tests. See Van Valin and LaPolla (1997) for a full exposition.

By using such contextual tests, verbs are sorted into states, achievements, activities, or accomplishments and the other classes above in a principled, non-*ad hoc* way. This enables both independent corroboration and direct access to native speaker competence and intuition. No comparable formalism was seen in either the LFG or autosegmental analysis. Note that the primitives are activities and states. Achievements and accomplishments have these at their core.

[24] The causative paraphrase is necessary to distinguish the causative classes from the non-causative, since both generally respond the same to other tests. 'He scared the cat' can be paraphrased as 'he caused the cat to be afraid,' with the same number of NPs. Compare 'he felt hungry' and *'he caused (self) to be hungry.'

2.5.2 Logical Structure (LS)

Once the verb class is known, the LS can be determined, as shown in the following array (Van Valin and LaPolla [1997:102]).

(45)

Verb class	Logical structure
State	**predicate'** (x) or (x,y)
Activity	**do'** (x, [**predicate'** (x) or (x,y)])
Achievement	INGR **predicate'** (x) or (x,y)
Accomplishment	BECOME **predicate'** (x) or (x,y)

INGR and BECOME are modifiers of the predicate. INGR stands for 'ingressive' and refers to instantaneous changes. These could be changes in states or activities. BECOME codes changes over some span of time. For example:

(46) a. 'The ice melted.'

BECOME **melted'** (ice)

b. 'The glass shattered.'

INGR **shattered'** (glass)

c. 'The glass is shattered.'

shattered' (glass)

d. 'The singer sings.'

do' (singer [**sing'** (singer)])

As (46a-d) show, RRG captures differences between accomplishments, achievements, states, and activities.

The causative classes of verbs have an LS that includes CAUSE. Here are some examples.

(47) a. 'The man's shooting scared us.'

i. [**do'** (man, [**shoot'** (man)]) CAUSE [**feel'** (us, [**afraid'**])]

ii. [**do'** (x)] CAUSE [BECOME **shot'** (man)] & CAUSE [**feel'** (us, [**afraid**'])]

b. ‘John broke the glass.’

[**do’** (John, ∅)] CAUSE [BECOME **broken’** (glass)]

In (47a) we see a sentence that is ambiguous. Were we afraid because the man was shooting? Or were we afraid because he was shot? (47a.i) shows that we are afraid because the man is shooting. Sentence (47a.ii) shows we are afraid because the man was shot. In (47b) we see the notation for an unknown activity: ∅. This indicates that John did something that caused his arm to be broken, but we do not know what. That unspecified predicate is indicated as a zero. As can be seen, RRG offers a rich framework in which to capture both generalities and nuances.

2.5.3 Macroroles and Thematic Roles Scale

Once the LS of a verb is established, the thematic roles of the arguments can be determined. The first task is to define those roles, and they are as follows. Thematic relations are spread along a continuum from agent to patient as follows (Van Valin, 1991:163).

(48) Actor / Undergoer and Thematic Roles Scale

ACTOR					UNDERGOER
Agent	Effector	Experiencer	Locative	Theme	Patient

ACTOR is not the same as an agent. ACTOR is a macrorole and could be held by an effector, for example. However, the further to the right on the scale one goes, the more marked would be the assignment of ACTOR macrorole. It would be the most marked to have a patient functioning as ACTOR macrorole, and it is hard to envision how that could occur. The reverse is true for the UNDERGOER macrorole. The further to the left on the scale, the more marked would be the selection for UNDERGOER. An agent would

present the extreme markedness for an UNDERGOER, and that circumstance too would be hard to visualize.

A verb can have 0, 1, or 2 macroroles. How many macroroles a verb takes is primarily determined from its LS: if it has two or more arguments, the default is that it would have two macroroles. Verbs with single arguments usually have one macrorole, and verbs, like **snow'**, with no arguments have no macroroles. If a verb does not have the expected number of macroroles, that must be specified as part of the lexical entry for the verb. As will be seen, macroroles correspond in a rough way to transitivity, and "quirky" case marking in Icelandic can often be ascribed to irregularity in transitivity.

2.5.4 Participant Roles

Here are definitions of participant roles (Van Valin, LaPolla, 1997:84). These roles are similar to some versions of case grammars, and they capture a variety of roles an argument may have in a situation or some state of affairs. These are not, however, the definitions of thematic relations in RRG. Thematic relations in RRG are defined purely in terms of argument positions in LSs.

(49) Participant Roles (Not Equal to Thematic Relations Assigned in LS)

Agent	A willful, purposeful instigator of an action or event
Effector	The doer of an action, which may or may not be willful or purposeful
Experiencer	Sentient beings that experience internal states, such as perceivers, cognizers, and emoters
Location	A place or a spatial locus of a state of affairs
Theme	Things which are located or are undergoing a change of location (motion)
Patient	Things that are in a state or condition, or udergo a change of state or condition
Instrument	Normally inanimate entities manipulated by an agent in the carrying out of an action
Force	Somewhat like instruments, but they cannot be manipulated
Benefactive	Participant for whose benefit some action is performed
Recipient	Someone who gets something
Goal	Destination, which is similar to recipient, except that it is often inanimate
Source	The point of origin of a state of affairs
Path	A route

The value of the preceding is that it provides a way to conceive of states of affairs and what the participant roles might be. Such conceptions play a role in examining the corpus of verbs this thesis treats below.

Different categories have been established in other works (e.g., Anderson, 1977:20). Anderson posited, after Fillmore (1968:24-5), the following cases: Agentive, Instrumental, Dative, Factitive, Locative, and Objective. While numerous theoretical categories could be created, the key constraint is necessarily which ones are motivated by the functions of language.

2.5.5 Thematic Relations Assigned by LS

Next we will see the thematic relations of the arguments that accompany each verb type. In RRG, the LS of the verb determines the thematic relations of its arguments, as can be seen. The following is from (Van Valin and LaPolla, [1997:115]).

(50) a. State verbs

i.Single argument

1. State or condition	**broken'**(x)	x=patient
2. Existence	**exist'**(x)	x=entity

ii.Two arguments

1. Pure location	**be-LOC'**(x,y)	x=location, y=theme
2. Perception	**hear'** (x,y)	x=perceiver, y=stimulus
3. Cognition	**know'**(x,y)	x=cognizer, y=content
4. Desire	**want'**(x,y)	x=wanter, y=desire
5. Propositional attitude	**consider'**(x,y)	x=judger, y=judgment
6. Possession	**have'**(x,y)	x=possessor, y=possessed
7. Internal experience	**feel'**(x,y)	x=experiencer, y=sensation
8. Emotion	**love'**(x,y)	x=emoter, y=target
9. Attrib./identificat'l	**be'**(x,y)	x=attributant, y=attribute

b. Activity verbs

i.Single argument

1. Unspecified motion	**do'**(x,0)	x=effector
2. Motion	**do'**(x, [**walk'**(x)])	x=mover
3. Static motion	**do'**(x, [**spin'**(x)])	x=st-mover
4. Light emission	**do'**(x,[**shine'**(x)])	x=l-emitter
5. Sound emission	**do'**(x,[**gurgle'**(x)])	x=s-emitter

ii.One or two arguments

1.	Performance	**do'**(x,[**sing'**(x,(y))])	x=performer, y=performance
2.	Consumption	**do'**(x,[**eat'**(x,(y))])	x=consumer, y=consumed
3.	Creation	**do'**(x,[**write'**(x,(y))])	x=creator, y=creation
4.	Repetitive action	**do'**(x,[**tap'**(x,(y))])	x=effector, y=locus
5.	Directed perception	**do'**(x,[**see'**(x,)])	x=observer, y=stimulus
6.	Use	**do'**(x,[**use'**(x,y)])	x=user, y=implement

In (50), we have a detailed bridge with which to connect the arguments in a verb's LS with thematic relations. Another piece that will be relevant to the discussion of Icelandic is the thematic relations scale. This is listed in an elementary fashion in (48), above. It should be noted that the thematic relations in (50) are distributed along the agent-patient cline of thematic relations (Van Valin and LaPolla [1997:127]). For example, movers and effectors are located, with other thematic roles, closest to the agent end of the spectrum. This is important to the discussion of Icelandic in this thesis, since many objects with "quirky" dative case may fall into those types of thematic relations.

The preceding review of the structure and resources for RRG analysis establishes a significant point. Verb classes can be determined from tests done with native speakers. Each verb type has a LS that shows the number of arguments of the verb, as well as other details. The thematic relations of the arguments are determined by (50). And the ranking of thematic relations on the agent-patient spectrum creates a ground for principled decisions on macrorole status, which in turn gives a way to address transitivity issues, and indirectly, it is hoped, "quirky" case marking.

Significantly, RRG is not *ad hoc* as to how a verb is analyzed. In contrast, the LFG analysis and the autosegmental analysis – even though they both invoked thematic relations – had no clear means of applying those relations in a principled way. Instead,

thematic roles appeared to hinge on traditional participant roles and individual judgment for the category to choose.

2.5.6 RRG Treatment of Icelandic

Next we will see how RRG addresses some of the problems which both LFG and autosegmental analyses mainly relegated to lexical entries. The RRG rules for Icelandic case marking are (Van Valin, 1991:171):

(51) RRG Case Marking Rules for Icelandic

a. Highest ranking macrorole takes nominative case
b. Other macrorole takes accusative case
c. Non-macrorole arguments take dative case

Turning to the Icelandic verb **sökkva** 'to sink,' an RRG analysis is applied (Van Valin, 1991:175) as follows.

(52) a. Skipstjórinn sökkti skipinu.

captain-the(N) sank ship-the(D)

'The captain sank the ship.'

b. **sökkva**: [**do'** (x)] CAUSE [BECOME **sunk**' (y)] [+MR]

We will discuss the significance of (52a-b) momentarily. First, let us compare an LFG analysis. LFG would define **sökkva** as follows, identifying dative case marking as idiosyncratic, and assigning the irregularity to the lexicon.

(53) **sökkva** 'sink' <agent, theme>

[+DAT]

SUBJ OBJ

The autosegmental analysis, as in (34-35) above, also assigns the idiosyncrasy to the lexical entry of the verb.

The RRG analysis differs in the following ways. RRG could assume two macroroles for the verb. This would violate RRG's case marking rules in (51), since (51b) would assign accusative case incorrectly to a verb that takes a dative object. That would mark the verb as "quirky" just as LFG and the autosegmental analyses did. The chosen alternative is to identify the verb as idiosyncratic not in case marking, but in macrorole assignment.

The verb is judged in to be irregular in that one of its arguments is denied macrorole status, making it essentially intransitive. The notation [+MR] designates the irregular transitivity indirectly by stating that the verb takes only one macrorole. The agent (the 'captain') outranks the theme (the 'ship') and takes the Actor macrorole. There is no other macrorole, and therefore the theme defaults to dative case marking in the RRG analysis under the rules in (51) above.

Whereas both the LFG and autosegmental analyses of (53) require it to be noted as a lexical exception due to dative case marking on the object, RRG has a different approach. The verb is irregular, yes, but not in case marking. It is irregular in transitivity or macroroles. By this means, RRG assigns the irregularity to a known area of linguistic variability: transitivity. By doing so, RRG also avoids other problems – such as accounting for dative case on subjects of some passive sentences.[25] Being a simpler analysis that still accounts for the facts and avoids other problems, it would rank higher as a solution than either the LFG or autosegmental analyses.

While RRG identifies **sökkva** 'to sink' as irregular, it allows for the possibility that semantic principles may be discovered that account for some instances of irregular case marking (Van Valin, 1991:177). This thesis treats a class of verbs that takes dative objects and which appear to have a common semantic thread: that of necessary motion of the object without necessary effect on the state or condition of the object. For example, a

[25] E.g., **skila** 'return to" and **hjálpa** 'help,' both of which have dative subjects in their passivized forms.

ship can be sailed (caused to move) with no implication that the ship would be any different when it returned to the dock.

The verb **sökkva** 'to sink' might participate in this semantic class: a boat may not necessarily suffer damage or intrinsic change of anything except location when it sinks.[26] It may also be relevant that **sökkva** is inflected differently if it takes an object or not, but that is not certain.[27] Different morphology could imply that other differences about the verb might exist.

As will be shown below in tests done with native speakers of Icelandic, their language competency leads them to distinctions between simply moving something from one location to another, which often takes dative case, versus actually changing the state or condition of an object.

2.5.7 Summary of RRG Analysis

In the LFG and autosegmental analyses, dative subjects and dative objects are irregular and count as examples of "quirky" case. In the RRG analysis, no dative subject and no dative object count as "quirky" case. Instead, they are explicable through an analysis of verbal LS, thematic relations, and macrorole assignment.

As will be seen in the following section, those findings are consistent with native speaker intuition and the tests that will be discussed in the following chapter.

[26] It is of course likely that a ship that sinks has been damaged, but it is not necessary.
[27] This is per personal communication from informant, K. Thorárinsson. The syntactic difference could signal an underlying semantic difference, or it could be a lexicalized, historical pattern.

Chapter III

Testing and Comparing Icelandic Verbs

3.1 Overview of Verb Selection and Creation Processes for Tests

In the previous chapter, it was seen that LFG and autosegmental analyses were capable of describing case marking that did not fit the standard model, but neither approach demonstrated a theoretical framework that provided an explanatory analysis. While descriptive adequacy is an important level of accomplishment, it does not meet the higher standard of explanatory solutions.

While the LFG and autosegmental treatments led to a more complicated lexicon and failed to capture any generalities about "quirky" case, RRG's approach explicitly did not label dative case as "quirky" and did not overly complicate the lexicon. The main complication for RRG is that macrorole and transitivity exceptions must be noted – but transitivity is a well-known area of idiosyncrasy in many languages. In short, RRG assigned the complexity to where it might more logically reside: transitivity. This allows it to capture case marking generalities that would remain unseen in an LFG or autosegmental analysis. Specific questions raised by this thesis follow.

(54) Is there either a semantic or a thematic relation commonality to arguments marked with quirky case? If so, how might such a commonality be captured in RRG?

3.1.1 Selecting Verbs to Test

To address (54), a series of research steps and tests with native speakers of Icelandic were carried out. The research involved establishing an unbiased corpus of verbs with irregular case marking, then extracting from that corpus a subset of verbs showing case marking alternations on objects. That set of verbs with alternating case on objects would then be treated as near minimal pairs to elicit native speaker intuitions about the verbs. These "minimal pairs" were then scrutinized for semantic similarities that might play a role in their case marking. Next, two sets of artificial verbs were created.

Some of the artificial verbs had objects intended to be indisputable patients. This set would be predicted to take accusative case. The other set of artificial verbs was created to take objects that were not clear patients at all. The aim was to create verbs with objects that were not directly or greatly affected by the verbs at all, at least not in terms of the object undergoing a change in state or condition. Objects on such verbs were predicted to take dative case. This prediction was based on the observation that many of the actual Icelandic verbs that assigned dative case did so with objects that did not necessarily undergo any change. Such verbs, it is conjectured, may share common semantics, and possibly common thematic roles – they may have unique LSs such that, by an RRG analysis, their irregular case marking becomes explicable.

The sets of verbs to be tested will be referred to as follows. Natural Set refers to the corpus of actual Icelandic verbs that were tested. Artificial Set #1 refers to the first set of artificial verbs that were designed and tested with native speakers. Artificial Set #2 refers to the second such set that was tested with a native speaker.

3.1.2 MBNOA: Moves But Not Otherwise Affected

Another term should also be introduced because of the role this concept came to play: MBNOA.

(55) MBNOA: "Moves But Not Otherwise Affected." The acronym is shorthand for what appears to be a key semantic thread involved in many cases of "quirky" dative case assignment in Icelandic. The object necessarily moves (changes location) but is not necessarily affected in any other way.

A diligent effort was made to avoid any unconscious selection of verbs that might tilt the data toward one analysis or another. The verb selection proceeded as follows. First, two large dictionaries were reviewed and all instances of exceptional case marking were noted. This list was then narrowed. Verbs that allowed direct objects in more than one case were identified. That set was then reduced to verbs that alternated between accusative and dative case on objects (see Appendix A for list of verbs). Ditransitive verbs with D-A

or A-D patterns were generally excluded. The goal was to find verbs that alternately took one dative object or one accusative object. Also excluded were instances that were analogous to English constructions of object plus prepositional phrase (locatives, recipients, beneficiaries, etc.). What was sought was a corpus of monotransitive verbs with direct objects allowed in both dative and accusative case.

This smaller set of verbs with alternating case marking (dative and accusative) on its objects became the basis for this thesis, and for a test. In the test, a native speaker was asked her intuitions regarding the "affectedness" of the objects in each utterance. Many of the dative-marked objects appeared to entail motion. Since change of location is consistent with the likely thematic roles being investigated, the question to the informants was put in a way to check for "MBNOA."

(56) In this phrase, must the object necessarily move, and is it probable it is not otherwise affected? (Not changed, damaged, broken, ruined, bent, etc.)

In other words, the questions were crafted to make sense to a linguistically naïve informant and also to elicit possible semantic differences between uses of case marking.

In addition to the Natural Set of verbs that was tested, the two artificial sets were tested. In both Artificial Set #1 and #2, care was taken to create verbs that had the "look and feel" of Icelandic verbs, through attention to orthography, morphology, and phonology. The artificial verbs were constructed with semantics such that some took clear effectors, movers, or other non-patients as objects. Other verbs took clear patients. Intuitions on acceptability of accusative versus dative case marking in each case were then recorded and evaluated. The aim of these tests was to determine if there is a semantic basis for some "quirky" case marking. The intent was also to see if there might be productive case assignment rules for irregular case marking – otherwise, on what linguistic competency would native speakers judge dative case to be a better fit than accusative on a verb they had never heard before?

3.1.3 Example of Artificial Verb

Here is an example of one of the artificial verbs.

(57) a. **hurða** 'to spin something around like a wheel, one way, then the other'

b. **ég hurðaði honum**

I(N) spun him(D) around

'I spun him around.'

c. LS: [**do**' (I,∅)] CAUSE [**do'** (him,[**spin'** (him)]) [+MR]

Under (51a), the highest-ranking macrorole (here, 'I') takes nominative case. The verb is marked for irregular transitivity. There is no other available macrorole. Hence, under (51c), the object takes dative case.

A fair question is how is this simpler than noting an exception in the lexicon. There are several advantages. First, many instances of irregular dative case are handled without further attention under (51c). That is a simplification compared to annotating each lexical entry with dative case. Second, the irregularity is assigned to transitivity, which is known to be cross-linguistically variable. Third, by assigning the irregularity to macroroles and transitivity, a new line of inquiry is opened. Is there any predictability to why a verb would be irregular in its transitivity? This thesis will conjecture, based on verb test results and native speaker intuitions, that there may indeed be some predictability that might follow from some of the key principles of RRG.

In summary, an effort was made to establish a new, comprehensive corpus of verbs with irregular case marking, to then extract a subset of verbs which take alternating dative and accusative case on their objects to form a minimal pair to discern differences in verbal semantics and thematic roles, and finally to construct artificial verbs to assess whether there are productive aspects to irregular case marking in MI. The following sections provide the results of these tests.

3.2 Testing Verbs with Alternating Case Marking on Objects

Further below is the full table of all checked utterances. Discussion and analysis follows that table. The utterances were derived from Icelandic dictionaries. Typically there is more than one utterance per verb. This is because of how the verbs were identified. They were culled from dictionaries that indicated they took either dative or accusative case. Most of the time, dictionaries gave examples. Where only one utterance is shown below for a verb, it is possible its counterparts were excluded from the test due to irrelevance. See Appendix B for a list of excluded utterances.

The utterances tested all involved alternating dative and accusative case on their objects. The subset of those verbs that was excluded were verbs that appeared to have uses of dative which involved well-known patterns other than those being investigated here – primarily, locatives and beneficiaries ("ethical" datives). The test results for the Natural Set follow. Comments on specific utterances appear in the footnotes.

(58) Tests Results for Verbs Taking Objects with Alternating Case

The right hand column of the table indicates the native speaker's intuition as to whether the verb must entail movement of the object, and does not necessarily entail that anything else happens to the object beyond undergoing a change in location.

	Verb	**Examples**	**Case**	**Object Necessarily Moves ("MBNOA")?**[28]
1.	**ausa** 'dip, scoop, ladle'	**a. skömmum yfir e-n** 'pour abuse(D) on somebody(A)' (literally: 'pour shame/disgrace(D) on somebody(A)')	D	Yes
2.	**ausa** 'dip, scoop, ladle'	**a. bát** 'bail a boat(A)'	A	No
3.	**ausa** 'dip, scoop, ladle'	**a. barn vatni** 'baptize a child(A)'	A	No

[28] The advance coaching to the informant was as follows. Does the object necessarily move, *and* is it probable that nothing else happens to the object other than being moved?

4.	**blikka** 'wink, blink, flash'	**b. stelpurnar** 'wink (at) the girls(A)'	A	No
5.	**blikka** 'wink, blink, flash'	**ég blikkaði ljósonum á bílnum** 'I flashed the lights(D) on the car(D)'	D	?[29]
6.	**brenna** 'burn'	**brenna e-u** 'burn something(D)'	D	No[30]
7.	**brenna** 'burn'	**brenna e-n** 'burn somebody(A)'	A	No
8.	**brenna** 'burn'	**b. sig á fingrunum** 'burn oneself(A) on the fingers(D); 'burn one's fingers'	A	No
9.	**brenna** 'burn'	**b. kolum** 'heat up with coals(D)' (literally: 'burn coal(D)')	D	No[31]
10.	**drepa** 'kill; dip'	**ég drap hann** 'I killed him(A)'	A	No
11.	**drepa** 'kill; dip'	**d. fingri í vatn** 'dip a finger(D) in water'	D	Yes
12.	**gryta** 'throw, stone'	**g. e-n** 'stone somebody(A)' **ég grytaði hann** 'I stoned him(A)	A	No
13.	**gryta** 'throw, stone'	**ég grytaði steinnum** 'I flung the stone(D)'	D	Yes
14.	**halda** 'hold, keep, think, consider, hold; give, deliver, celebrate, proceed'	(gloss not available) 'hold (a party, meeting), give (a lecture, speech, concert); think, believe'	A	No
15.	**hleypa** 'gallop; curdle'	**hleypa hesti** 'make a horse(D) gallop' (literally: 'gallop a horse(D)')	D	Yes

[29] The informant first felt there was no movement of the lights, then thought maybe the beams moved. Since the answer was not certain, it is indicated with "?" above.
[30] According to the informant, animacy may play a role. She felt that if an animate creature were burned, accusative would be used. But if an inanimate object, like coal, is burned, the dative would be used. After further discussion, it appeared different senses of 'burn' are involved: in MI, 'an iron burns a shirt(A)' but 'a man burns coal(D)', for example. This may reflect a difference between patient and instrument. See discussion in Chapter V.
[31] The sense of this phrase is more that coals are used to 'heat with' than that coals are simply burnt. Semantically, this would seem to place the argument **kolum** in the 'effector' range, giving a basis for dative case marking – instrumental case was subsumed by dative in Icelandic.

16.	**hleypa** ‘gallop; curdle’	**h. e-u á** ‘turn something(D) on’	D	Yes
17.	**hleypa** ‘gallop; curdle’	**h. e-m að** ‘make room for somebody(D)’	D	Yes[32]
18.	**hleypa** ‘gallop; curdle’	**h. e-u af stað** ‘start something(D) off’	D	Yes
19..	**hleypa** ‘gallop; curdle’	**h. brúnum** ‘move brows(D)’ ‘frown’	D	Yes
20.	**hleypa** ‘gallop; curdle’	**h. e-m inn** ‘let somebody(D) in’	D	Yes
21.	**hleypa** ‘gallop; curdle’	**h. e-m lausum** ‘let somebody(D) loose’	D	Yes
22.	**hleypa** ‘gallop; curdle’	**h. e-m upp** ‘make somebody(D) angry’ (literally: ‘gallop somebody(D) up’)	D	?[33]
23.	**hleypa** ‘gallop; curdle’	**h. víni úr tunnu** ‘let wine(D) flow out of a barrel’	D	Yes
24.	**hleypa** ‘gallop; curdle’	**h. e-m út** ‘let somebody(D) out’	D	Yes
25.	**hleypa** ‘gallop; curdle’	**h. e-n** ‘curdle something(A)’ **h. mjólk** ‘curdle milk(A)’	A	No
26.	**hæfa** ‘hit’	**skotið hæfði manninn** ‘the bullet hit the man(A)’	A	No
27.	**jafna** ‘level, equalize, compare’	**jafna reikning** ‘balance an account(A)’	A	No
28.	**jafna** ‘level, equalize, compare’	**jafna bókhald** ‘balance the books(A)’	A	No
29.	**jafna** ‘level, equalize, compare’	**jafna e-u saman** ‘compare something(D) with something’ (literally: ‘balance something(D) together’)	D	Yes[34]

[32] In this instance, the person would be moving, which is why one would have to make room for the person.
[33] This is figurative usage. The object would not have to physically move.
[34] The informant felt that movement was definitely involved in that the two objects being compared had to be moved into proximity as part of the comparison.

30.	**klessa** ‘blotch, smudge, smear’	**klessa málningu á vegg** ‘slap paint(D) on a wall’	D	Yes
31.	**klessa** ‘blotch, smudge, smear’	**klessa e-u á e-ð** ‘smear something(D) (reputation, honor, etc.) with something(A)’ (literally: ‘smear something(D) on something(A)’)	D	Yes
32.	**klessa** ‘blotch, smudge, smear, smash’	**klessa bíl** ‘smash (up) a car(A)’	A	No[35]
33.	**kræk**ja ‘hook’	**kræk**ja **e-u í e-ð** ‘hook something(D) into something (A)’ ‘hook into something’	D	Yes
34.	**kræk**ja ‘hook’	**k. gluggann aftur** ‘fasten the window(A)’	A	No
35.	**leggja** ‘lay, place, put; lay down, put in shape’	**leggja sig** ‘lay oneself(A)’ ‘lie down; take a nap’	A	Yes
36.	**leggja** ‘lay, place, put; lay down, put in shape’	**leggðu bókina á borðið** ‘put the book(A) on the table’	A	Yes
37.	**leggja** ‘lay, place, put; lay down, put in shape’	**leggja veg** ‘build a road(A)’	A	No
38.	**leggja** ‘lay, place, put; lay down, put in shape’	**leggja garð** ‘build a wall(A)’	A	No
39.	**leggja** ‘lay, place, put; lay down, put in shape’	**leggja e-n í gegn** ‘run somebody(A) through’	A	No

[35] It was felt that the car was probably moving, due to pragmatic knowledge. However, movement is not necessary. Someone could take a bat and smash up a parked car.

40.	**leggja** 'lay, place, put; lay down, put in shape'	**leggja bílnum** 'park the car(D)'	D	Yes
41.	**lysa** 'describe; light up, illuminate'	**lysa e-u (e-m)** 'describe something(somebody)(D)'	D	No
42.	**lysa** 'describe; light up, illuminate'	**lysa kirkjunna** 'illuminate the church(A)'	A	No
43.	**lysa** 'describe; light up, illuminate'	**þetta lysir hugrekki** 'this shows courage(D)'	D	?[36]
44.	**læsa** 'lock'	**læsa dyrum** 'lock a door(D)'	D	?[37]
45.	**læsa** 'lock'	**læsa e-n inni** 'lock somebody(A) up'	A	?[38]
46.	**læsa** 'lock'	**læsa klónum í e-n/e-ð** 'fasten one's claws(D) into somebody / something (A)' (literally: 'lock a claw(D) into something/somebody(A)')	D	Yes
47.	**læsa** 'lock'	**eldurinn læsti sig um húsið** 'the fire spread itself(A) through/engulfed the house'	A	Yes
48.	**maka** 'smear, daub'	**maka e-u á e-ð** 'smear something(D) on something(A)'	D	Yes
49.	**moka** 'dig, shovel'	**moka skurð** 'dig a ditch(A)'	A	No
50.	**moka** 'dig, shovel'	**moka snjónum burt** 'shovel the snow(D) away'	D	Yes
51.	**moka** 'dig, shovel'	**moka saman peningum** 'pile together money(D)' 'make a pile, make a mint'	D	Yes

[36] This phrase carries the sense that something is brought (moved) into visibility.
[37] In the sense that one often closes and locks the door in the same action, there is implicit movement. However, it was not clear to the informant whether this had to be the case.
[38] It could be that someone has to be physically moved first be locked up. The informant could not decide whether that was entailed by the verb, though. In this and other cases, an effort was made to distinguish verbal semantics from pragmatic knowledge.

52	**neyða** 'force'	**neyða e-n til e-s** 'force somebody(A) to do something(G)'	A	No
53.	**neyða** 'force'	**neyða e-u upp á e-n** 'push something(D) on somebody'	D	Yes
54.	**raka** 'rake'	**raka heyi** 'rake hay(D)'	D	Yes
55.	**raka** 'rake'	**raka saman peningum** 'rake together money(D)' 'rake in a lot of money(D)'	D	Yes
56.	**raka** 'rake'	**raka skegg** 'rake beard(A)' 'shave'	A	No
57.	**raka** 'rake'	**raka sig** 'rake oneself(A)' 'shave'	A	No
58.	**ríða** 'ride'	**ríða hesti** 'ride a horse(D)'	D	Yes
59.	**ríða** 'ride'	**ríða veginn** 'ride along the road(A)'	A	No
60.	**ryðja** 'clear'	**ryðja skóg** 'clear the land(A); clear a wood'	A	No
61.	**ryðja** 'clear'	**ryðja veginn** 'clear the road(A) (of snow)'	A	No
62.	**ryðja** 'clear'	**ryðja braut** 'clear the way(A)'	A	No
63.	**ryðja** 'clear'	**ryðja sal** 'empty a room(A) (of people)'	A	No
64.	**ryðja** 'clear'	**ryðja sig** 'clear oneself(A)' 'be extravagant'	A	No
65.	**ryðja** 'clear'	**áin ryður sig** 'the ice breaks up itself(A) on the river'	A	?
66.	**ryðja** 'clear'	**ryðja e-u burt** 'clear something(D) away'	D	Yes
67.	**ryðja** 'clear'	**ryðja e-u úr vegi** 'get something(D) out of the way'	D	Yes
68.	**ryðja** 'clear'	**ryðja sér til rúms** 'spread oneself(D) out', 'branch oneself(D) out' (literally: 'clear self(D) toward bed(G)')	D	Yes
69.	**skjóta** 'shoot'	**skjóta kúlu** 'shoot a projectile(D)' 'shoot a bullet(D)'	D	Yes

70.	**skjóta** 'shoot'	**skjóta fugl** 'shoot a bird(A)'	A	No[39]
71.	**skjóta** 'shoot'	**hann skaut hana** 'he shot her(A)'	A	No
72.	**skjóta** 'shoot'	**honum var skotið fyrir gluggana** 'he(D) was shot before the window'	D	Yes[40]
73.	**skjóta** 'shoot'	**skjóta fugla** 'shoot birds(A)'	A	No
74.	**skjóta** 'shoot'	**skjóta kúlu úr byssu** 'shoot a bullet(D) from a gun'	D	Yes
75.	**skjóta** 'shoot'	**skjóta báti á flot** 'launch a boat(D) fast'	D	Yes
76.	**skjóta** 'shoot'	**skjóta e-u til e-s** 'take something(D) to somebody'	D	Yes
77.	**skjóta** 'shoot'	**skjóta máli fyrir hæstarétt** 'appeal a case(D) to the Supreme Court' (literally: 'shoot case(D) before Supreme Court')	D	Yes
78.	**skjóta** 'shoot'	**skjóta e-u inn** 'put in a remark, insert something(D)' (literally: 'put something(D) in')	D	Yes[41]
79.	**skjóta** 'shoot'	**skjóta e-ð** 'shoot something(A)'	A	No
80.	**skjóta** 'shoot'	**skjóta e-u undan** 'hide something(D); put something away' (litererally: 'shoot something(D) away from')	D	Yes
81.	**slá** 'beat, strike, smite, kick, etc.'	**slá e-n högg** 'give somebody(A) a blow' (literally: 'strike somebody(A) a blow')	A	No

[39] It was recognized that once shot, most animals will move (fall over, etc.). But this was felt by the informant not to be implicit in the shooting – a probable but not necessary consequence. The projectile necessarily moves. The patient struck by the projectile does not necessarily move. This was the informant's reasoning.

[40] This is only possible in rare contexts. This informant gave the following: say the man is a circus clown and is shot from a circus cannon, and flies past your window. If the man were hit by a projectile, **hann** 'he(A)' would be used.

[41] The phrase is figurative. To the informant, it conveyed necessary object movement.

82.	**slá** 'beat, strike, smite, kick, etc.'	**slá e-u í e-n** 'strike something(D) at someone(A)' 'strike somebody(A) with something(D)'	D	Yes
83.	**slá** 'beat, strike, smite, kick, etc.'	**slá (svipunni) í hestinn** 'strike the horse(A) with the whip(D)'; 'spur the horse' (literally: 'strike the whip(D) on the horse(A)')	D	Yes
84.	**slá** 'beat, strike, smite, kick, etc.'	**slá tvær flugur í einu höggi** 'swat two flies(A) at one blow'	A	No
85.	**slá** 'beat, strike, smite, kick, etc.'	**slá boltann** 'strike the ball(A)'	A	No[42]
86.	**slá** 'beat, strike, smite, kick, etc.'	**slá e-n** 'hit somebody(A)'	A	No
87.	**slá** 'beat, strike, smite, kick, etc.'	**slá e-n um lán** 'touch somebody(A) for a loan'	A	No
88.	**slá** 'beat, strike, smite, kick, etc.'	**slá hnefanum í borðið** 'strike fist(D) on the table(A)'; 'strike the table with one's fist(D)'	D	Yes
89.	**slá** 'beat, strike, smite, kick, etc.'	**slá tveimur hlutum saman** 'strike two things(D) together'	D	Yes
90.	**slá** 'beat, strike, smite, kick, etc.'	**slá e-u utan í e-ð** 'hit something(D) against something(A)'	D	Yes
91.	**slá** 'beat, strike, smite, kick, etc.'	**slá e-u föstu** 'settle something(D)' (literally: 'to strike something(D) fixed')	D	?

[42] The informant felt most balls when hit will move. The ball's movement was not part of the 'striking' but a consequence of it. As pointed out by Van Valin (personal communication), the informant's ambivalence is consistent with the fact that 'hit' is a pure contact verb. By comparison 'shoot' is a verb of induced ballistic motion. Ballistic motion is an inference with 'hit' but part of the meaning of 'shoot.' It is crucial to distinguish the meaning of a verb from inferences based on real world knowledge.

92.	**slá** 'beat, strike, smite, kick, etc.'	**slá e-n út af laginu** 'throw somebody(A) off; throw somebody(A) off balance'	A	Yes
93.	**slá** 'beat, strike, smite, kick, etc.'	**slá e-u frá sér** 'give something(D) up; let something go'	D	Yes
94..	**slá** 'beat, strike, smite, kick, etc.'	**slá e-m gullhamra**[43] 'flatter somebody(D); pay somebody a compliment'	D	?[44]
95.	**slá** 'beat, strike, smite, kick, etc.'	**slá e-n niður** 'knock somebody down' (literally: 'strike someone(A) down')	A	Yes
96.	**slá** 'beat, strike, smite, kick, etc.'	**slá e-u saman** 'combine something(D)' (literally: 'strike something(D) together')	D	Yes
97.	**slá** 'beat, strike, smite, kick, etc.'	**slá e-ð sundur** 'beat something(A) to pieces' (literally: 'strike something(A) apart')	A	No
98.	**slá** 'beat, strike, smite, kick, etc.'	**slá e-u upp** 'make big headlines of something(D); blow something out of proportion' (literally: 'strike something(D) up')	D	?
99.	**slá** 'beat, strike, smite, kick, etc.'	**slá e-n út** 'get the better of somebody(A)' (literally: 'strike someone(A) out')	A	No
100.	**slá** 'beat, strike, smite, kick, etc.'	**slá e-u við** 'hit something(D) against a wall' (literally: 'strike something(D) with')	D	Yes
101.	**splæsa** 'splice; treat'	**splæsa kaðal** 'splice a rope(A)'	A	?[45]
102.	**sprauta** 'inject, spray, squirt'	**sprauta bíl** 'spray paint a car(A)'	A	No

[43] **Gullhamra** is literally 'gold-hammer' with 'hammer' being a verb. To 'to strike to goldhammer someone' is then an idiom for paying a compliment. A hammer would be an instrument. Instrumental case is known to have collapsed into dative in Icelandic. It is possible that the dative case in this instance is related to this: if the "instrument" being hammered (with) is now the person being 'gold-hammered' the object would be dative.
[44] The informant felt the object probably necessarily moved. However, it has been changed to a "?" due to the figurative nature of any movement.
[45] If pieces are brought together, there is movement, but this is not necessary: the pieces may already be positioned together.

103.	**sprauta** ‘inject, spray, squirt’	**sprauta málingu** ‘spray paint(D)’	D	Yes
104.	**stappa** ‘mash, stamp’	**stappa kartöflur** ‘mash potatoes(A)’	A	No
105.	**stappa** ‘mash, stamp’	**stappa fótunum** ‘stamp one’s feet(D)’	D	Yes
106.	**stinga** ‘prick, stab, sting, pierce, put, thrust, stick’	**stinga bréfum í póstkassa** ‘put letters(D) into the mailbox’	D	Yes
107.	**stinga** ‘prick, stab, sting, pierce, put, thrust, stick’	**stinga sig** ‘prick oneself(A)’	A	No
108.	**stinga** ‘prick, stab, sting, pierce, put, thrust, stick’	**stinga gat á e-ð** ‘prick a hole(A) in something(A)’	A	No
109.	**stinga** ‘prick, stab, sting, pierce, put, thrust, stick’	**Þetta stingur mig í hjartað** ‘this cuts me(A) to the quick’ (literally: ‘this cuts me to the heart’)	A	No
110.	**stinga** ‘prick, stab, sting, pierce, put, thrust, stick’	**stinga hnífum í tréð** ‘stick the knife(D) into the tree’	D	Yes
111.	**stinga** ‘prick, stab, sting, pierce, put, thrust, stick’	**stinga e-u í vasann** ‘slip something(D) into one’s pocket’	D	Yes
112.	**stinga** ‘prick, stab, sting, pierce, put, thrust, stick’	**stinga bókinni í hilluna** ‘put the book(D) onto the shelf(A)’	D	Yes
113.	**stinga** ‘prick, stab, sting, pierce, put, thrust, stick’	**stinga sér** ‘dive, plunge oneself(D)’	D	Yes
114.	**stinga** ‘prick, stab, sting, pierce, put, thrust, stick’	**stinga e-n af** ‘give somebody(A) the slip’ (literally: ‘put somebody(A) off’)	A	No

115.	**stinga** 'prick, stab, sting, pierce, put, thrust, stick'	**stinga e-m inn** 'put somebody(D) in prison' (literally: 'put somebody(D) in')	D	Yes
116.	**stinga** 'prick, stab, sting, pierce, put, thrust, stick'	**stinga e-u undan** 'retain something(D) for oneself' (literally: 'put something(D) underneath')	D	?[46]
117.	**stinga** 'prick, stab, sting, pierce, put, thrust, stick'	**stinga e-u upp í sig** 'pop something(D) into one's mouth' (literally: 'put something(D) up in self')	D	Yes
118.	**stinga** 'prick, stab, sting, pierce, put, thrust, stick'	**stinga saman nefjum** 'put together noses(D)' 'whisper together'	D	Yes[47]
119.	**stinga** 'prick, stab, sting, pierce, put, thrust, stick'	**stinga e-u undir e-ð** 'run (thrust) something(D) under something(A)'	D	Yes[48]
120.	**troða** 'tread (on), trample (on)'	**troða e-n undir** 'trample somebody(A) underfoot' (literally: 'trample somebody(A) under')	A	?
121.	**troða** 'tread (on), trample (on)'	**troða e-ð út** 'stuff something(A)' (literally: 'stuff something(A) out')	A	?
122.	**troða** 'tread (on), trample (on)'	**troða e-u í e-ð** 'stuff something(D) into something(A)'	D	Yes
123.	**troða** 'tread (on), trample (on)'	**troða e-u inn í e-ð** 'squeeze something(D) into something(A)' (literally: 'squeeze something(D) in(Adverb) in(Preposition) something(A)')	D	Yes

[46] The object would not necessarily move in any way, not even figuratively. However, as noted above, there are cases where prevention of movement is expressed in dative. This may be comparable to verbs of "denial" that sometimes take genitive objects.
[47] Figurative movement.
[48] The object of **stinga** is in dative case with or without a prepositional phrase. This does not appear to be a locative use of dative.

124.	**troða** 'tread (on), trample (on)'	**troða e-u upp á e-n** 'force something(D) on somebody' (literally: 'force something(D) up(Adverb) to(Preposition) somebody(A)')	D	Yes
125.	**vökva** 'water (flowers, etc.)'	**vökva blóm** 'water flower(s)(A)'	A	No

3.3 Analysis of Test Results in Preceding Utterances (58)

The first study involved the subset of 28 verbs that were identified as allowing alternating case marking on objects. A series of 146 utterances was developed based on these verbs, taking all available examples from two Icelandic dictionaries. The goal was to create sets of "near minimal pairs" for comparison of case marking. No verbs or utterances were intentionally excluded, except for the following. A corpus of 21 utterances was tested, but was later removed from the test results. This was meant to improve the significance of the data by eliminating instances where case assignment was most likely due to thematic roles like locative, beneficiary, and so forth – roles not central to this thesis and already well understood.

The next step was to examine the data for patterns. One pattern that became evident was that verbs taking objects in the dative case often had objects that were logically not patients, but movers or effectors. They fell into the "MBNOA" category described in (55).

In many cases, MBNOA was seen with dative case correlating to movement (change of location) of the objects but no necessary other change to or effect on the object. The sense in these instances was that the object was not intrinsically altered (not broken, dented, killed, stabbed, surface or interior changed, etc.), but rather was just moved (or in some cases, restrained from moving). In other words, the dative marked objects that often were clearly not prototypical patients, and that did often appear to be movers or effectors, or in some cases themes.

After identifying this apparent correlation between dative case and non-patient status / MBNOA in the corpus of verbs being tested, the next step was to determine if this would be a visible pattern to a native speaker who was not a linguist. Several such informants were secured and consulted during the course of several tests.

One informant tested on the Natural Set. Without being briefed in advance on the reasons for the questions, she was asked, for each of the 125 utterances, whether the verb entailed that the object "MBNOA" – being asked of course as described above in (56). The results are tabulated below, and a chi square "goodness of fit" test was performed using tables designed for two categories, thus one degree of freedom.[49]

3.4 Overview of Test Results

In one test, it was determined that the sample of utterances is a random sample, not skewed toward one case-marking pattern or another.

In another test, it is shown that the correlation between MBNOA and dative case marking on the object well exceeds the level of significance that would be expected from chance. The correlation between dative case marking and verbs entailing motion of the object was statistically affirmed.

Another test checked for a correlation between "lack of intrinsic movement of object" in verb meaning and accusative case marking on the object. A correlation between accusative case and some action other than simple movement of the object is evident.

The group of "MBNOA = ?" answers was excluded. Still, it was clear that in many of those cases, movement of the object was part of the verb meaning. The informant could not determine if it was obligatory or not. Excluding the uncertain utterances did not affect the conclusions of the study.

[49] By definition, "degrees of freedom" equal *k*-1, where *k* is the total number of categories. In the chi square tests "fo" is observed frequency, and "fe" expected frequency. The observed frequency is based on the attested data. The expected frequency is what would be expected in a random distribution.

Overall, in verbs that can alternate case marking between accusative and dative, there is a strong correlation between dative case marking and MBNOA – in other words between dative case and effectors and movers, and not between dative case and patients.

Conversely there is a distinct correlation between accusative case marking and some effect on the object other beyond mere movement of the object.

Although the chi square tests performed below predict, in the null hypothesis, equal frequency of dative and accusative case marking, this actually introduces a bias into the analysis. Accusative case is often presumed to be the default case and dative case in some analyses of Icelandic is labeled "quirky." By this reasoning, the frequency of dative case on objects should be much less, and the level by which the actual sample exceeds expected frequencies would be far greater than expected. In other words, the study conservatively treats the correlations between dative case and "MBNOA" objects.

The RRG thematic relations hierarchy (theme, effector, etc.) is both explanatory and predictive of patterns in the test results. Objects that are affected by the action of a verb (objects which are broken, impaled, burnt, shattered, etc., that is to say, prototypical patients) fall toward the end of the spectrum for patients. They are thus predictably more likely to have Undergoer macrorole status since they are not marked relative to that macrorole. Such objects would then normally take accusative case marking.

Objects that are not as affected, but which are just moved from one location to another, are often effectors or movers or themes and fall higher on the spectrum toward agent. They are therefore more marked as choices for the Undergoer macrorole. This markedness may be part of why they are denied macrorole status. (One could hypothesize a language specific tolerance level for markedness of macrorole assignment.) Additionally, such objects would usually be competing with other objects that are even closer to agent for macrorole status. They might be too marked for Undergoer, and superseded by another argument for Actor. This would result in (51c) assigning dative case – and it might provide an explanation why verbs like **skjota** 'to shoot' take two macroroles in some

instances, but only one in others. In the one-macrorole situations, the projectile being shot (arrow, bullet, etc.) is arguably an effector, or maybe mover. It may be too marked, in Icelandic, to achieve Undergoer status. And yet it could not outrank the subject (the person or thing shooting) for Actor.

In reviewing the test data below, the instrumental case of Old Icelandic (sometimes called Old Norse) may come to mind. The instrumental case is known to have collapsed into dative, as it did in English. By the time of Old English, the instrumental case was considered a function of dative, and instrumental case marking was indistinguishable from dative case marking in all but a few instances (Diamond, 1970:19). Instrumental case answers the question “by what means is an action performed?” When one drives a car, one is not so much doing something “to the car” so much as “with the car.” One does not alter a boat when sailing, but rather “changes the location of” or “moves” the boat. The act of sailing is accomplished by means of a machine, a sailboat.

Such distinctions may be hard to see in English, which has lost so much of its morphological case marking. However, distinctions can be elicited in some contexts. “I drove the car to Portland – how will I ever restore it to the original condition?” is only logical if one presumes facts not stated in the utterance – namely that there was an accident, breakdown, or some similar problem. In contrast, “I drove my car into a pole on my way to Portland -- how will I ever restore it to the original condition?” is perfectly logical without assuming any information not explicitly given in the utterance. In Icelandic, 'car' in the former utterance would be a likely candidate for dative case, where in the latter it would be pretty sure to receive accusative case marking.

Finally, the case marking pattern seen in Icelandic verbs which alternate between dative and accusative case marking might logically be predictive of another pattern. Specifically, verbs that take dative case but do *not* alternate in any utterances in their case marking could be examined in another study. The prediction would be that they too show one or more patterns in which the object was significantly left of the patient end of the

spectrum, causing a failure to receive macrorole status, with (51c) then triggering dative case. This is one example of how RRG can lead to predictions that can be worked out in theory, and also tested with native speakers.

3.5 Procedure of the Verb Tests

The procedure for this test was as follows. The native informant, Hrönn Helgadóttir, was asked to consider the following question (56) about each utterance. Was the effect of the verb always and necessarily that the object was moved in some way, and was it the case that the effect on the object did *not* necessarily entail any change in state or condition of the object, other than to alter its physical location?

On the grounds of likely locative, beneficiary, recipient, or other similar thematic roles that would predictably trigger dative case, 21 of the utterances were excluded from analysis of the test results (see Appendix B). That reduced the initial 146 utterances to a corpus of 125. Comments and reasoning of the informant are often worked into the footnotes. Some additional comments are added here.

In (58-1,2) we have the verb **ausa** 'to dip, scoop, or ladle.' In the idiom (58-1) **a. skömmum yfir e-n** 'pour abuse(D) on somebody(A)' the informant had a strong sense that even though 'abuse' is figurative, it is 'moving' in some manner. In contrast, in utterance (58-2), we see that in 'bailing a boat (out)' there is no implication the boat must move.

With utterances (58-6, 7) (**brenna** 'to burn') a distinction is seen in Icelandic. At first the distinction appeared to be between sentient beings (perceivers or experiencers) opposed to inanimate objects. Further discussion established that the difference is this. If one is burning something as fuel, it will usually appear in dative. It is an effector. If something were being burned in other circumstances, the object would be in accusative. For example, an iron burning a shirt, a laser burning a cornea, etc. would require accusative objects. If the "shirt" appeared in dative, it would imply that it was in flames, not that it was scorched.

Verbs like **skjóta** ‘shoot’ present a distinct challenge for the LFG and autosegmental analyses. In some cases, the object is dative, and the meaning of the verb is that referent of the object is being propelled through space – but not necessarily changed in any way. In other cases, the object appears in accusative case. In those instances, the object was impacted and underwent a change of state by being hit by a projectile. Both ZMT and YMJ provide formalisms to capture how a verb assigns “quirky” or irregular case. Short of taking thematic roles into account, both analyses would face two equally poor choices. First, they could posit two entries for the verb. However, without reference to thematic roles, an explanation of the circumstances under which to apply each variant would not be clear. Second, they could assume that two morphologically identical verbs were involved, each with its own case marking pattern. They could argue, for example, that **skjóta** ‘shoot’ assigning dative case to objects was an intransitive verb and that **skjóta** ‘shoot’ assigning accusative case to objects was a transitive verb. In the autosegmental analysis, then, the verb could have only one NP argument, which would receive syntactic nominative case. The object NP would either have to be assigned lexical case, or perhaps a rule could be devised to stipulate that dative case is a default case when case is not assigned either lexically or syntactically.

In the RRG analysis of such verbs, the verb **skjóta** ‘shoot’ would have only one macrorole (actor) in instances of dative objects (correlating to intransitivity), but would have two macroroles for **skjóta** ‘shoot’ in the examples of accusative objects, which would be assigned Undergoer macrorole status (correlating to transitivity). The difference between the RRG analysis and the others is this. RRG takes thematic relations into account in a principled, non-*ad hoc* way and defines them in the LS of the verb, from which they are associated with the arguments. Therefore, once RRG establishes that a semantic pattern is reflected in thematic roles, and that the pattern results in predictable morphology and syntax, those facts could be accounted for in an RRG analysis. As discussed above, the agent-patient spectrum already provides a markedness scale that may

help explain, in a principled way, why some arguments are too marked to achieve macrorole status, and then appear in dative case.

In contrast, neither the LFG nor the autosegmental analysis captured a broad generalization on "quirky" case for the following key reasons: (1) there is no path toward a principled denial of macrorole status (or transitivity); and (2) there is no verbal decomposition to determine verb types (*Aktionsart*) and thematic relations of arguments determined in LS. RRG provides these theoretical tools and thus might establish rules to account for the topics under discussion.

Having considered the general issues and possible rules that might be involved, let us now look at the following question: does a statistical analysis of the data support that there is a case marking and semantic pattern that statistically is likely not due to chance or random occurrence?

A word of caution: the statistical tests will show correlations. However, they do not prove the *type* of connection. Is it causal? Or is it an association based on other factors broader or deeper than the ones being examined? Those questions would provide inquiry for further study, and are answered in part here.

3.6 Statistical Analysis of the Test

The purpose of this chi square analysis is to determine whether the sample of utterances is skewed toward dative or accusative case. The initial corpus consisted of 146 utterances (21 were subsequently excluded – see Appendix B).

(59) Summary of Test Results for All 146 Utterances

	Accusative		Dative		
	No.	% of Total	No.	% of Total	Totals
Object Moves	5	7.58%	61	92.42%	66
No Movement	48	78.69%	13	21.31%	61
Uncertain	5	26.32%	14	73.68%	19
Totals	58	39.73%	88	60.27%	146

A cursory look at (59) shows a strong association between dative and object MBNOA (92.42%). Likewise, a clear association is seen accusative case and *lack of* MBNOA (78.69%). It is noteworthy that the patterns are clear even before any exclusion of utterances (see Appendix B for statistical confirmation).

The corpus of utterances was first reduced as follows. Twenty-one utterances were eliminated from the analysis. This was done because they were deemed likely to involve dative case for reasons like locative, recipient, or beneficiary objects – uses of the dative case not relevant to this thesis (see Appendix B). With those exclusions the corpus of tested utterances, reduced from 146 to 125, can be summarized as follows:

(60) Summary of Utterances Tested Less Those Excluded (Appendix B)

	Accusative		Dative		
	No.	% of Total	No.	% of Total	Totals
Object Moves	5	7.94%	58	92.06%	63
No Movement	46	93.88%	3	6.12%	49
Uncertain	5	38.46%	8	61.54%	13
Totals	56	44.80%	69	55.20%	125

At this point, it can still easily be seen that there remains a strong association between dative case and objects that MBNOA (92.06%). The correlation between accusative case and objects that are *not* MBNOA is more evident than before (93.88%).

The next step was to address the "uncertain" category. Those were cases where the informant could not decide if movement was necessarily entailed by the meaning of the verb (as compared to pragmatic knowledge, for example). It was decided to exclude those 13 utterances from further consideration. The following table summarizes the resulting data:

(61) Utterances Used in Statistical Analysis

	Accusative		Dative		
	No.	% of Total	No.	% of Total	Totals

Object Moves	5	7.94%	58	92.06%	63
No Movement	46	93.88%	3	6.12%	49
Totals	51	45.54%	61	54.46%	112

In (61), the dative-MBNOA and the accusative-non-MBNOA associations remain clear. In other words, eliminating the uncertain answers did not skew the data.

The next step will be to test the statistical validity of those correlations. First we will test whether the corpus of utterances is skewed toward dative or accusative case. Since we are treating verbs, which, by definition, alternate between accusative and dative case, we would expect a random distribution of both cases approaching 50% of the total utterances (112), or 56. The observed frequency is 51 accusative, and 61 dative utterances. The null hypothesis is that this is within the range of random occurrence. The alternate hypothesis is that there the data are not random, and overly represent either dative or accusative case.

(62) Is There a Random Distribution of Dative and Accusative Case?

	fe	fo	fo-fe	fo-fe squared	(fo-fe)squared/fe
D	56	61	+5	25	25/56 = 0.446
A	56	51	-5	25	25/56 = 0.446

Chi squared is sum of last column = 0.892

At the 0.05 probability level, the critical value for the level of significance is 3.841. The computed chi square value is 0.892, which is well below 3.841. Therefore, the null hypothesis is accepted, and the alternate hypothesis is rejected. The probability is 95% or better that the distribution of case marking in the study is within random occurrence, and is not skewed toward dative or accusative case.

The next question is whether the distribution of objects that move ("MBNOA") is within a random occurrence range. Since all the verbs in question alternate between dative and accusative case marking, an equal distribution of 50% of the 112 utterances is posited.

This would yield 56 utterances that entail MBNOA, and 56 that do not. Of the 112 utterances, 63 entail MBNOA, and 49 do not. The null hypothesis is that this is within random occurrence. The alternate hypothesis is that the data are skewed toward either objects that MBNOA, or objects that are not MBNOA. Here are the statistical results.

(63) Is There a Random Distribution of Dative and Accusative Case?

	fe	fo	fo-fe	fo-fe squared	(fo-fe)squared/fe
M[50]	56	63	+7	49	49/56 = 0.875
no-M[51]	56	49	-7	49	49/56 = 0.875

Chi squared is sum of last column = 1.750

At the 0.05 probability level, the critical value for the level of significance is 3.841. The computed chi square value is 1.750, which is well below 3.841. Therefore, the null hypothesis is accepted, and the alternate hypothesis is rejected. The probability is 95% or better that the distribution of objects where motion is entailed versus those that are not is within a random occurrence range, and that the corpus of utterances is not skewed toward one type of object or the other.

The third test checks the evident correlation between dative case and objects that move (MBNOA). As seen above, over 92% of MBNOA objects are associated with dative case. The expected frequency in this instance is not 50%. That is because there are more dative case marked objects than accusative (54.46% versus 45.54%, respectively). Therefore, in an even distribution, we would expect 54.46% of the MBNOA utterances to be associated with dative case. This comes to 34 expected utterances with MBNOA associated with dative case (54.46% of 63 MBNOA utterances). The observed frequency is 58. The null hypothesis is that the distribution is within random occurrence. The

[50] Here "M" is short for MBNOA.
[51] Here "no-M" signifies the object does not necessarily move (not-MBNOA).

alternate hypothesis is that MBNOA is significantly associated with dative case. Here is the analysis.

(64) Is There a Random Distribution of MBNOA With Dative and Accusative Case?

	fe	fo	fo-fe	fo-fe squared	(fo-fe)squared/fe	
D	34	58	+24	579	576/34 =	16.941
A	29	05	-24	576	576/29 =	19.862

Chi squared is sum of last column = 36.803

At the 0.05 probability level, the critical value for the level of significance is 3.841. The computed chi square value is 36.803, which is far above 3.841. Therefore, the null hypothesis is rejected, and the alternate hypothesis is accepted. The probability is high that there is a correlation between dative case and MBNOA. There is less than a 5% probability that this pattern is due to chance.

The final question is whether there is a pattern between non-MBNOA objects and accusative case. There are 49 utterances in which no movement of the object is necessarily entailed. Utterances with accusative case on objects make up 45.54% of the total utterances. Applying this percentage to the 49 non-MBNOA utterances yields an expected frequency of 22 utterances with accusative and non-MBNOA. The observed frequency is 46. Here is the analysis.

(65) Is There a Random Distribution of Accusative Case and non-MBNOA?

	fe	fo	fo-fe	fo-fe squared	(fo-fe)squared/fe	
D	27	03	+24	579	576/34 =	16.941
A	22	46	-24	576	576/29 =	19.862

Chi squared is sum of last column = 36.803

At the 0.05 probability level, the critical value for the level of significance is 3.841. The computed chi square value is 36.803, which is far above 3.841. Therefore, the null

hypothesis is rejected, and the alternate hypothesis is accepted. The probability is quite high that there is a correlation between accusative case and non-MBNOA objects. There is less than a 5% probability that this pattern is due to chance.

3.7 Summary of Findings of Statistical Tests on Natural Set

The results indicate a strong statistical likelihood that dative case is associated with objects that "MBNOA" and that accusative case is associated with objects that are not "MBNOA." The tests confirm that the samples are within ranges expected in random occurrence.

3.8 Overview of Test for "Dative Sickness" With Artificially Constructed Verbs

A well-known early test in language acquisition involved demonstrating that the plural marking morpheme {s} in English could be elicited from children and applied to words they had never heard before because the words were artificial and created for the experiment. Children who were asked what more than one "wug" would be responded they would be "wugs." Since the word "wugs" had never been heard by the children, it was evident they were applying a productive linguistic rule to new lexical items as they acquired them (see Berko, 1958). This meant that a plural morpheme rule existed in the minds of the children. Application of that rule by the children did not rest on hearing its application in all possible cases. It was not necessary ever to hear "wugs" before applying the rule to "wug" to create "wugs." Nor is the existence of such a rule dependent upon the ability of a native speaker to be conscious of the rule or to articulate the rule. In fact, the typical native speaker would be unlikely to be aware of language rules built in his or her mind through induction during thousands of hours of the language acquisition process.

The following questions thus arose: is it possible there are productive but unconscious case marking rules used by native speakers of Icelandic which might be inferred from tests of artificial verbs? Might there be such a hypothetical rule to explain what is referred to as **þágufallssykki**, or "dative sickness"?

3.9 “Dative Sickness” in Icelandic

In Iceland, the term “dative sickness,” or **þagufallsykki**, refers to a tendency of native speakers of Icelandic to over generalize the dative case and apply it in instances where it is not correct in terms of a prescriptive grammar – primarily a tendency to replace accusative subjects with dative subjects, but also other supposed overuse of the dative case.

The designation of this phenomenon as a “sickness” may be unfortunate. It labels the linguistic behavior as aberrant, and could thereby miss an opportunity to listen for a productive and valid rule in MI. One tries to cure a sickness. In this case, it would be more profitable to learn what “dative sickness” says about synchronic variation and the diachronic history of such case marking in the Germanic languages.

By way of comparison, English-speaking children would not be accused of “plural sickness” for over generalizing the plural morpheme by saying “childs” or “mouses.” Yet in the course of language acquisition, children make precisely such overgeneralizations.[52]

In MI, any acquired rule of dative case for native speakers may not be as visible or explainable as plural rules in English. However, such a rule, once elicited, would be expected to fit the intuitions of native speakers. In fact, as will be described below, this thesis gives evidence that this may indeed be the case. There may be a rule of “quirky” dative case marking, and native speakers may make judgments on it.

3.10 Developing a Hypothesis to Test “Dative Sickness”

Based on the preceding line of reasoning, it is worthwhile to consider whether “dative sickness” reflects productive language processes. If some unknown rule[53] existed

[52] If a child grew up and continued to level plural rules, then there might indeed be a prescriptive grammarian view that English was faced with “plural sickness.” The situation in Icelandic is that it is not just children who may misassign case, but adults, and the tendency is not to overassign accusative case but to overassign dative case.
[53] A speaker-internal rule or competency is at issue, rather than a prescriptive grammar rule that might be taught to Icelanders.

to the effect of “apply dative case to direct objects in some specified situation or situation similar to it” it might be possible to elicit examples of that rule and deduce what the rule is.

An impression that there might be a pattern in irregular case marking was gained after a review of the verbs studied in this thesis. As discussed above, if a verb assigned irregular dative case marking to its object, there was a high likelihood of that the object in question of the MBNOA type.

Also, it does not appear that the phenomenon of “dative sickness” is a frozen relic or reflection of past diachronic patterns. If it were, it would be unlikely that anyone would characterize the phenomenon as a “sickness,” which implies ongoing differences of speech performance and prescriptive grammar.

Based on such considerations, a specific hypothesis was developed:

(66) If an “object” ranks relatively high on the agent-patient continuum it would be a likely candidate for dative case marking; if an object ranks close to the patient end of the continuum, it would be a likely candidate for accusative case marking. Objects that rank closer to the agent end of the spectrum may be too marked, in Icelandic, to be eligible for Undergoer, and yet would often be outranked for Actor macrorole by arguments that are agents.

3.11 Creation of Artificial Verbs for the Test: Artificial Set #1

A set of ten artificial "Icelandic-like" verbs was created. The verbs were created by the author, who is not a native speaker of Icelandic, with no input from any native speaker of Icelandic, in an attempt to neutralize any unconscious linking of created words to actual words with similar semantics. Such a linking could have been argued to mean the informants were responding by analogy to known words rather than drawing from a productive Icelandic rule concerning dative case assignment for all words, previously learned or not.

Phonologically and morphologically, the words were built to have an Icelandic character. Semantically, they were assigned meanings consistent with either taking objects that were MBNOA or close to prototypical patients. The meanings were communicated to the informants in English at the time of the test. The informants were not told of the

groupings of the verbs or any of the theory or hypothesis surrounding the exercise until after the exercise was complete.

The first group involved verbs whose sense had the effect of moving or altering location of an object, but not otherwise changing it. In other words, the first group was of verbs that took effectors or perhaps themes as objects. The first five verbs on this list were designed to take objects that are themes (or possibly instruments). The second five verbs were designed to take definite patients as their objects.

(67) Artificial Icelandic Verbs, Artificial Set #1

a. **dringla** 'to push something around in a circle
b. **kusla** 'to rock something back and forth'
c. **virpa** 'to throw something over the left shoulder'
d. **trepla** 'to swirl or swish something around in a container'
e. **elka** 'to drive or herd something across country'
f. **blúa** 'to explode something into blue flame'
g. **skrimsla** 'to run over something (as with a tractor) and smash as flat as paper'
h. **trukla** 'to tear out something by its roots'
i. **bítla** 'to break something into bits'
j. **snúta** 'to cut something into thin strips'

If **þagufallsykki**, or "dative sickness," were an unprincipled tendency to apply dative case indiscriminately where it is not expected, the prediction for testing the above verbs would be that there would not be a distinct difference in dative case assignment between the first group (verbs a-e) and the second group (verbs f-j). In fact, one would predict a random distribution of dative case marking. By such a prediction, verbal semantics should not matter. On the other hand, if accusative is a true "default" case, one would expect a preponderance of accusative case for the test verbs.

However, if verbal semantics do play a role in "dative sickness," and if the phenomenon rests in significant part on the participant role distinction, then we would predict that the first group of verbs would be more likely to involve dative case assignment than the second group, and that the second group would be more likely to use accusative case marking than the first. Simply put, the hypothesis of the test is that verbal semantics

would result in differences in native speaker preference for accusative versus dative case marking on objects, and that the accusative case would be preferred for objects closest to being prototypical patients, and that the dative case would be preferred for objects farthest from being prototypical patients and closer to the agent end of the spectrum in (48).

3.12 Placing the Artificial Verbs in Context

The next step of the test was to create sentences to give context to the verbs. Each sentence would have one "direct object." The two informants would see the sentence with the object in dative case and in accusative case. They would then be asked to judge the acceptability of each version. The informants were asked to rank the acceptability of the alternative sentences on a scale from 1-10 with 1 being the least acceptable, and 10 being the most acceptable. The test sentences and the results of the two informants follow.

3.13 Results of the Test on First List of Artificial Verbs

The sets of scores for each sentence follow (both informants independently judged the acceptability of the dative and accusative possibilities, hence there are four scores per sentence).

(68) Native Informant Acceptability Rankings on Case Marking on Artificial Verbs
(Acceptability: 1 = least acceptable; 10 = most acceptable)

Sentence/Gloss	Dative	Accusative
a. Ég dringlaði boltunum/boltinn. *I pushed-around-in-a-circle the ball (D/A)* 'I pushed the ball around in a circle.'	10/10	1/1
b. Ég kuslaði stolunum/stol. *I rocked-back-andforth -the chair (D/A)* 'I rocked the chair back and forth.'	7/5	10/10
c. Ég virpaði saltinum/saltið. *I threw-over-my-left-shoulder salt* 'I threw salt over my left shoulder.'	10/10	1/1
d. Ég treplaði vatninu/vatnið. *I swished-around water (D/A)* 'I swished water around.'	1/1	10/10

e.	Ég elkaði hundinum/hundinn. *I drove-across-country the dog (D/A)* 'I drove the dog across country.'	1/1	10/10
	Average values for verbs 1-5:	*5.6*[54]	*6.4*
f.	Ég blúaði húsinur/húsið. *I exploded-into-blue-flames the house (D/A)* 'I exploded the house into blue flames.'	1/5	10/10
g.	Ég skrimslaði hundinum/hundinn. *I ran-over-and-smashed-as-flat-as-paper-with-a-tractor the dog (D/A)* 'I ran over the dog with a tractor smashing it flat as paper.'	1/1	10/10
h.	Ég truklaði hárinu/hárið. *I tore-out-by-the-roots the hair (D/A)* 'I tore the hair out by the roots.'	1/1	10/10
i.	Ég bitlaði grjótinu/grjótið. *I crushed-to-bits the rock (D/A)* 'I crushed the rock to bits.'	1/1	10/10
j.	Ég snútaði blaðinu/blaðið. *I cut-into-thin-strips the paper (D/A)* 'I cut the paper into thin strips.'	1.1	10/10
	Average values for verbs 6.10:	*1.4*	*10*

In verbs (68a-e), which involved non-patients, accusative case marking was slightly preferred (6.4 to 5.6). Put another way, despite a dominating pattern of accusative case marking on direct objects in Icelandic, accusative case marking on objects in sentences (68a-e) was little more acceptable than dative case marking.[55] Based on the 1-10 scale the informants used to judge acceptability, dative case marking on the objects of these verbs was in a loose sense 56% acceptable.

The informants did have comments on sentences (68d-e), where they gave dative the lowest ranking in the first group of verbs. First, they would not be in the least

[54] However, as discussed below, if the informants had judged the acceptability in *hearing* dative case marked objects on sentences (68a-e) as opposed to judging their own use, they reported their acceptability rating would have risen significantly to 8.4 or higher.
[55] 6.4/5.6 = 1.14: accusative case marking on the objects was found to be about 14% more acceptable than dative case marking (without taking into account acceptability of others' utterances as opposed to those of the informants themselves. This compares to a 614% differential in acceptability of accusative vs. dative case marking in (68f-j).

surprised to hear someone use dative case with such a verb. And second, dative case on those verbs would sound acceptable enough to them that they probably would not bother to correct someone else who used dative case in those instances.[56] Therefore, their low rankings on (68d-e) stemmed primarily from how they personally would choose case marking for their own speech, not how they would judge hearing it from others. If the informants had judged the acceptability of hearing others use dative case on (68d-e), they would have likely assigned an 8 or 9 score. Given an 8 score, the average score for sentences 1-5 with dative case would have been 8.4 — close to fully acceptable.

The verbs in sentences (68a-c) ranked higher for acceptability of dative case marking on the objects. It is noteworthy that these three verbs are very close semantically to actual MI verbs studied that take MBNOA objects.

It could be argued that there are similar verbs (in meaning) that take dative case, and the informants may have judged acceptability based on the grammatical behavior of those verbs. While this may have merit, a counter argument is that there are far more verbs with similar meanings which take accusative case. Further, accusative case marking on direct objects is the dominant case-marking pattern. The fact of 56% acceptability of dative case marking on objects of verbs (68a-e) therefore is interesting. It implies that despite a reported dominant incidence of accusative case, some internal rule or native speaker intuition nonetheless judged dative case marking to be roughly acceptable in his or her own speech, and even more acceptable in the speech of others.

If verbal semantics plays no role in case assignment, we would have expected similar results for sentences (68f-j). However, a very clear pattern emerged, with an average score of 1.4 for the acceptability of dative marking on the objects, and 10 on the accusative case marking on the objects. As predicted, when an object is a clear patient,

[56] Culturally, excellent language skills are expected in Iceland, and incorrect language is met with significant disapproval. For an Icelander to be accepting dative case marking on such verbs as to not correct the speaker carries some significance.

dative case marking becomes strongly unacceptable, and accusative case marking is almost exclusively preferred.

For sentence (68f) (the only one where dative case marking was deemed somewhat acceptable with a patient object), one informant felt that dative case was all right if one were in the house and blew it up oneself. The other informant strongly disagreed with that assessment.

3.14 Results of the Test on Second List of Artificial Verbs: Artificial Set #2

A second set of artificial verbs was constructed along the same lines as the first, and a different native speaker of Icelandic was consulted. The verbs were presented in the following order, as defined here, with informant choices noted as to case preference.

(69) Artificial Verb List for Test, List 2

a. **hurða** 'spin something around like a wheel, first one way, then the other'
ég hurðaði honum
I(N) spun-like-a-wheel him(D)[57]
'I spun him like a wheel.'

b. **blúa** 'blow something up into bits too small to see'
hann blúaði hann
he(N) blew-up-into-bits-too-small-to-see him(A)
'He blew him up into bits too small to see.'

c. **spíða** 'cause something to move at 100 miles an hour'
hann spíða bílnum
he(N) made-go-100-miles-per-hour the car(D)
'He made the car go 100 miles per hour.'

d. **skaga** 'cut into thin strips of equal size'
hann skagaði pappirinn
he(N) cut-into-thin-strips-of-equal-size the paper(A)
'He cut the paper into thin strips of equal size.'

e. **blukka** 'herd from high pastures to the valley'
hann blukkaði hestinum
he(N) herded-from-high-pastures-to-the-valley horses(D)
'He herded the horses from high pastures to the valley.'

f. **butta** 'burn in a super hot incinerator'
hann buttaði rúslinu
he(N) burned-in-a-super-hot-incinerator the garbage(D)

[57] However, the informant felt that accusative **hann** might sound better in present tense.

‘He burned the garbage in a super hot incinerator.’

g. **sugla** ‘send by sailboat’
hann suglaði bréfinu til America
he(N) sent-by-sailboat a letter(D) to America
‘He sent a letter to America by sailboat.’

h. **fluka** ‘kill by means of foxglove (flower) poisoning’
hann flukaði hundinn
he(N) poisoned-by-foxglove the dog(A)
‘He poisoned the dog with foxglove.’

i. **sliða** ‘make slide down the surface of a glacier’
hann sliðaði steininum
he(N) made-slide-down-the-surface-of-the-glacier the rock(D)
‘He made the rock slide down the surface of the glacier.’

j. **mara** ‘send flying from Earth to Mars’
hann maraði skipinu
he(N) sent-flying-from-Earth-to-Mars the ship(D)
‘He sent the ship flying from Earth to Mars.’

In the preceding list of test verbs, (69a,c,e,g,i,j) were designed to take objects which would be non-patients (themes, effectors, movers, etc.), and which then would be likely to allow dative case marking. Of these six utterances, all sounded best to the informant with dative case. The other four utterances, (69b,d,f,h) were designed to take objects that would be clear patients, and which would therefore be patients and be assigned accusative case. Of these four phrases, three sounded best with accusative case, as predicted. One phrase sounded better using dative case, and that was (69f), the verb involving burning. It is of note that the actual Icelandic verb for burn, **brenna**, also has irregular case marking, taking both dative objects and accusative objects, as discussed elsewhere in this thesis. The test verb results may have been influenced by the actual verb in this instance, or by instrumental use of the object.

3.15 Conclusions Drawn from the Tests of Artificial Verbs

Two tests of native speakers, one done with a couple, the other done separately with largely different artificial verbs, yielded essentially the same results, despite the fact that the third informant did not know the first two, and despite the fact that none of the

informants were informed of the theory behind the tests until after the tests were concluded. Though the tests were small in scope, the fact that dative case was consistently chosen for objects that were themes and were not patients indicates that there may be a presently productive process for dative case assignment.

In general, verbs that take objects that are clear patients would likely nearly without exception be seen as acceptable with accusative case marking. They would likely be almost without exception seen as unacceptable with dative case marking. Verbs that take objects that are not patients (effectors, movers, etc.) did not present so clear a picture. The informants found both dative and accusative case marking acceptable to a certain extent. However, when considering not just his or her own speech, but what would be considered acceptable from others, or what they expected they might hear in common speech in Iceland, dative case marking would have shown a strong preference over accusative case marking.

It could be inferred that there is some linguistic rule which native speakers of Icelandic have in their speech competency, a rule that involves judgment of when to assign dative case to objects. This rule appears to be productive: why else would the informants have accepted dative case on any of the utterances? For judgments about dative case on wholly new verbs such as those in the test above, there must be a rule accessible to the native speaker. This would seem evident also from the fact of so-called dative sickness.

After the tests, the general concepts were discussed with the informants. They all felt the line of reasoning was intuitively right: that objects that were changed in state or condition would normally receive accusative case, and objects that were not much or at all affected would receive dative.

It seemed apparent that whatever the nature of the rule, it is probably not a rule that is taught to children growing up in Iceland. (Two of the informants expressed that they wished someone had explained this to them earlier – it would have made learning some verbs much easier.)

It does appear that the dative case-marking rule in Icelandic is nuanced relative to verbal semantics and thematic roles that result from those semantics; the informants agreed.

Prior to the test, the informants were given no theory, no hints, and no clue as to outcomes of the test. After the test was completed, a debriefing and discussion included a description of the purpose of the test and the semantic differences between the two sets of verbs. Both informants remarked that this made sense and fit their feelings about the acceptability of the different sentences well. They also commented that in their schooling they had never received a description classifying verbs in the manner of this test. They had been required to learn irregular case marking by rote memorization. While this experience implies that some case marking is a lexicalized, fossilized relic of earlier, diachronic rules, it is also clear that there are still rules which are at least partially productive, and which are accessible to native speakers' intuitions. The theory behind the test resonated well enough with these Icelandic speakers that they both commented that they wished someone had pointed out the pattern to them earlier as it would have made their memorization easier and would have provided some sense to many irregular verbs' case marking.

Most importantly, the fact that artificial sets of verbs can be designed, to some degree, to predictably elicit preferences of dative or accusative case strongly indicates that there are active rules at work in Icelandic, which in turn implies that "dative sickness" – and therefore some irregular case marking – is not entirely aberrant or idiosyncratic, but to some extent rule-driven and semantics-sensitive.

Chapter IV

Irregular Case Marking in Germanic Languages

4.1 Reasons to Look at Diachronic Trends

This chapter will survey several Germanic languages diachronically and synchronically, asking this question. If irregular case marking in Icelandic is attested throughout the history of the Germanic languages, is it meaningful to relegate the phenomena to the category of idiosyncratic or "quirky"? As will be seen, many examples of irregular or "quirky" case marking verbs are attested in Gothic, Old High German, Old Icelandic, Old English, and so on. Even Modern Faroese exhibits some "quirky" behavior. While it is not the main purpose of this paper to explore historical linguistics, it is germane to this paper to raise the point of diachronic trends and language family commonalities for three reasons.

First, it is an aim of this research to show how effective linguistic theories offer a means to address irregularities and reduce them as much as possible to newly found patterns. This principle asks that we not be wholly satisfied with descriptive analyses, seeking instead explanatory adequacy.

Second, if an entire family of languages, such as the Germanic, exhibited what is now called "quirky" behavior in MI, is it Icelandic that is "quirky," or Germanic in general? Or is it the case that analysis has not yet progressed to the point of providing an explanatory treatment to reduce at least some of the irregular behavior?

Third, the terms synchronic and diachronic imply a separation that is not in reality absolute. There is no synchronic present instant completely divorced from diachronic aspects of a language. Language does not function in an instant. Rather it is learned and used over spans of human lives and interchanges. Within the human time scale, synchronic variation can be found. That variation may represent the trailing edge of a past diachronic process, the leading edge of a new process, or may just represent synchronic

variability. In any of these cases, it may be possible to identify rules that drive, or once drove, the observed linguistic phenomena.

In the case of MI, lexicalization of earlier processes must naturally be taken into account. Whether MI "quirky" case is the irregular application of a more inflected past, or the arising of a new trend,[58] or just "quirky" synchronic variation, the fact that it is visible and persistent enough to be called "sickness" strongly implies productive rules are at work. If the roots of such rules lie in history, then history may provide clues to replacing "quirkiness" with an explanatory analysis.

It is for these reasons that a short review of irregular case marking in Germanic is undertaken here.

4.2 Indo-European and Proto-Germanic

Case marking is an historic feature of the Germanic languages. An essential trait of Indo-European languages, forms of which were probably spoken in Scandinavia as early as 3000 BC (Haugen, 1976:97), was the necessity of showing a grammatical feature in every form of a word, according to Meillet (1970:61). Meillet describes the gradual journey from heavily inflected Indo-European to less inflected Germanic languages as follows:

> The Indo-European word was also at the same time a grammatical form, constituted by the union of a stem and an ending. It materialized, so to speak, the notion to be expressed, furnishing it with indications of number, gender, and case or of person, voice, and so on, which made it a whole sufficient unto itself. In Germanic, on the contrary, the tendency was to create a word independent of any grammatical form […]
>
> (Meillet [1970:65])

Lehman, in "Proto-Germanic Syntax" (1972: 240-268), analyzed proto-Germanic using a case grammar approach, wherein the verb is regarded as the central entity of sentences. Lehman postulated that the functions of nouns are related to particular verbs

[58] This thesis provides enough data from other Germanic languages to suggest that Icelandic irregular case marking is a reflection of earlier trends in Germanic in general.

either by semantic or syntactic means, regardless of overt markers. Thus prepositional phrases and morphologically marked cases are grouped together in terms of common function relative to particular verbs. The cases that Lehman uses are semantically based and thus bear affinity with the topics of this thesis, though many of the categories Lehman used came from the morphological labels, thus opening the door for confusion over terminology.

Early Germanic verbs follow several distinct patterns, though these patterns were of only limited complexity. Of the seven "cases" Lehman discusses for Proto-Germanic (PGmc.) (agent, receptor, means, target, source, time, place, or roughly, nominative, dative, instrumental, objective/dative, (animate)/factitive, locative, respectively), more than four with one particular verb is rare. These are similar to the same patterns deduced and applied to linguistic theory in RRG, as shown in the agent-patient scale of thematic relations.

The evolution in most Germanic languages has been a reduction in overt case marking over time. For example, Modern English approaches being an analytic or isolating type language (Comrie, 1981:39), and has come to rely ever more crucially on word order to convey meaning. The use of morphological case marking systems declined in most Germanic languages (collapsing from eight cases to four as in German, and less than four in English, for example).

Some reduction has occurred in Icelandic. For example, Icelandic has not retained the instrumental case. At the same time, conservation of relatively archaic features is evident, and is likely due to two main factors: (1) geographical isolation, and (2) cultural pride that has made Icelanders work to preserve their language.

4.3 Gothic Irregular Case Marking

Gothic preserved many earlier Germanic features: "Judging by the earliest Gothic inscriptions, we can assume that common Germanic was very archaic. With relation to

Indo-European, many important changes had already taken place, but many others were only being initiated" (Meillet, 1970:6).

Gothic is the most generally archaic representative of Germanic to appear in extensive specimens. (The only prior records of Germanic are from a relatively small number of runic inscriptions [Bennett, 1980].) The archaism of Gothic is ascribable not only to the antiquity of the records, but also to the fact that Gothic became separated from the other Germanic dialects at an early period. Consequently, Gothic shows no traces of some developments that occurred in other Germanic languages.

At the same time, Gothic shows case marking patterns that existed in other Germanic languages at various stages, and which are still evident in MI. Braune (1895), developed a lexicon of Gothic that included verbs that take non-standard case marking. The following support a claim that irregular or "quirky" case marking in MI reflects broader and older trends in the Germanic languages. Gothic had many verbs that assigned irregular case marking to subjects and objects alike.

Wright (1954:182-183) shows that an accusative subject was used with impersonal verbs in many cases, much as MI employs such verbs today. One must ask, what is the likelihood that two related languages, so remote from each other in time, would independently develop impersonal constructions with accusative subjects – and employ that case marking on cognate verbs? The odds against that happening by chance would seem quite large. Examples of this sort of irregular case marking in Gothic are seen in the following.

(70)	a.	gre:do:n	'to be hungry'
	b.	huggrjan	'to hunger'
	c.	þaúrsjan	'to thirst', also with genitive of the thing being thirsted for
	d.	kar(a) ist	'there is a care, it concerns', as in: **ni kar-ist in þize: lambe:**

not careth he(A) the sheep(G)

'He careth not for the sheep.'

We have seen in this thesis that MI has a corpus of verbs that alternately take dative or accusative objects. So, too, did Gothic. The following, according to Wright, take either dative or accusative objects, but with a change in meaning.

(71) a. anaháitan (with dative) 'to scold'
(with accusative) 'to invoke'
b. uskiusan (with dative) 'to reject'
(with accusative) 'to prove, test'
c. hausjan (with dative) 'hear, obey'
(with accusative) 'hear, perceive'[59]

Indeed, Modern German may have some limited but relevant examples wherein the case of the object affects the meaning.

(72) a. Sie gab ihn frei.
she(N) gave him(A) free
'He gave him up.'
b. Sie gab ihm frei.
she(N) gave him(D) free
'She gave him time off (vacation).'

In general, Gothic exhibited numerous instances of irregular case marking, with genitive, dative and accusative objects, accusative subjects, and so forth. These patterns would be considered irregular, but they show a genetic relationship to patterns still evident in MI, the most conservative of the modern Germanic languages.

[59] This example is from Coetsem (1972:252) and Van der Meer, M.J.

4.4 Old English Irregular Case Marking

The general evolution of the Germanic languages has been from complex morphology to simpler morphology. The consequence has been greater reliance on syntactic structure, especially word order, and prepositional structures, to convey the grammatical relations.

Modern English has moved perhaps farthest away from the early Germanic structure. As Meillet puts it, “The extreme limit of development is seen in modern English. The ancient finals of words are so reduced that almost nothing remains; the accented part of words is about all that subsists. Hence, the ancient Indo-European morphology is destroyed” (Meillet, 1970:8). Despite the modern state of English, it, like the other Germanic languages, once exhibited a fully developed case marking system.

The case system in Old English (OE) was similar to that which exists in MI. The following shows the case marking of the masculine noun **stán** ‘stone.’

(73) OE Case Marking on a Masculine Noun

N	sg. **stán**	pl. **stánas**
G	sg. **stánes**	pl. **stána**
D	sg. **stáne**	pl. **stánum**
A	sg. **stán**	pl. **stánas**

A number of verbs in OE took objects case-marked in other than the expected manner. Examples follow (Cassidy, [1971], Diamond [1970]).

As one instance, take **bregdan** ‘draw, pull, pluck out.’ This verb assigned dative case to its objects. This particular verb would seem to have a semantic kinship to many of the MI verbs discussed in this thesis. If something is drawn, pulled, or plucked, there would not appear to be a necessary condition that anything happened to the object other than it was moved. That would be precisely the MBNOA semantics involved in so many of the uses of dative case in this thesis. OE must, like Gothic and other Germanic languages, was therefore also “quirky.”

As discussed above, Icelandic has verbs like **hjálpa** 'to help' which take dative objects. Those objects retain their dative case marking when they become the subject of passive constructions. OE had similar "quirky" case. The following examples are from Fischer, et al (2000:42).

(74) a. Helpað earmum (and) hæfenleasum
help poor(D) and needy(D)
'Help the poor and the needy.'

b. Acðem mæg beon suiðe hraðe geholpen from his lareowe
but that(D) may be very quickly helped by his teacher
'But that may be remedied very quickly by his teacher.'

In (74a) we see that 'help' took a dative object. In (74b) we see that dative case on the preserved in a passive form, just as in MI.

Besides verbs that took dative objects, some took genitive objects. For example, **bi:dan** 'wait for, await.' Compare MI **biða**'wait, stay, wait for' which in certain forms (e.g., **beiðast**) also takes a genitive object. Again, the odds that two related languages would independently evolve and assign the same irregular case to cognate verbs would seem quite small.

Just as in Icelandic, OE had instances of impersonal verbs. For example:

(75) gelystan 'desire'; impersonal verb with accusative of the person and genitive of the thing;
hine na:nes ðinges ne lyste
he(A) no thing(G) desired
'he desired nothing/nothing pleased him'

The functions of dative in OE, like those of genitive, are complex, according to Quirk and Wrenn (1957). Of dative, they say, "this case had largely come to express the

functions of the old instrumental in addition to those of the dative proper" (Quirk and Wrenn, 1957:64). According to them, the dative is most often concerned with "sharing." This would appear compatible with the idea that dative marks an argument that is closer to an equal of the subject than an accusative-marked argument (patient) would be, as in terms of the potency scale discussed by Zubin). Quirk and Wrenn (1957:65) contend "The dative was used for the sole 'object' of many intransitive verbs, the cognates of which in Mod.E. are regarded as transitive (for example, 'help,' 'answer,' 'follow'), and it was used also with several common impersonal verbs and with other verbs used reflexively."

Quirk and Wrenn assert that impersonal verbs in OE constituted a construction all but unparalleled in Modern English.

(76) a. hine na: nes þinges ne lyste
he(A) no thing(G) not desired
'He desired nothing.'

b. æ:lcum menn þuhte
each man(D) seemed
'(It) seemed to each man.'

While such constructions indeed do not exist in Modern English, we have seen examples of them from MI in this thesis. In (76a) we see an impersonal with an accusative subject. We have seen a number of examples of this in MI. In (76b) we have another impersonal with a verb that would seem to be the cognate of **þykja** 'to think, seem, appear' in MI. Again we are faced with this question. If it is Icelandic that is "quirky," how could one claim a unique irregularity for MI when OE had the same "quirkiness" with cognate verbs centuries earlier?

OE had some verbs that, like MI, could take either dative or accusative objects. In some cases, this altered the meaning, but in general, the difference resided in semantics or thematic roles. "The difference involved the degree of affectedness of the object, the dative

signaling a lesser degree of affectedness than the accusative" (Fischer, et al 2000:72). The following example is from Fischer, et al (2000:42).

(77) a. and ða folgode feorhgeniðlan
and then followed deadly foes(A)
'and then he pursued his deadly foes'

b. him folgiað fuglas scyne
him(D) follow birds fair
'Fair birds shall follow him.'

Fischer explains the difference this way.

> If the object of *folgian* 'follow' is accusative […] that indicates that the NP, as the direct object, is engaged in direct interaction with the subject. This is less clearly the case if the object is dative […] We can also tell this from the distinction in meaning: where the verb is followed by a dative, it means 'follow', where it is followed by an accusative, it means 'pursue'.
>
> (Fischer, et al, 2000:42-3)

This expresses an insight that is not unlike that of native Icelandic speakers in discussion of the tests of actual and artificial verbs. The Icelandic "monotransitive" verbs, as Fischer describes their English counterparts, show a difference in affectedness of the object. As seen in Chapter III, accusative objects strongly correlate to an object has been changed in its state or condition. Dative objects correlate strongly to objects that may have nothing happen to them other than being used or moved – and not necessarily being affected in any way beyond that. If OE, German, and other Germanic languages attest to this sense of dative case, in what sense is Icelandic irregular in the uses of dative case we have examined in this thesis?

In fact, with verbs that alternate between dative and accusative objects, we see that Icelandic is only "quirky" compared to contemporary states of related languages. If one could adjust the scale of time for each of the Germanic languages, one could synchronize them in a way that they all contemporaneously showed "quirky" case marking and

syntactic behavior – at which point it would hardly make sense to call such case marking irregular at all.

4.5. Middle English Irregular Case Marking

At the time of ME, only genitive forms (and pronouns) had retained clear, regular case marking. Most of the more elaborate case marking of OE had "withered away by early Middle English" (Fischer, et al, 2000:68). Writers in the period of at least early ME continued to use impersonal forms. Shakespeare (1564-1616) exhibits many examples of the impersonal construction with 'think' (line numbers reference the quotes to text in 'A Midsummer Night's Dream'):

(78) a. Me thinks I see these things, with parted eye, ... (1714)
b. The Moone, me thinkes, lookes with a watry eye ... (1017)
c. For me thinkes I am maruailes hairy about the face. ((1534)
d. Me thinkes, I haue a great desire to a bottle ... (1544)
e. Me thought I was enamourd of an Asse. (1592)
f. Me thought I was, there is no man can tell what. Me thought I was, and me thought I had. But man is but patcht a foole, If hee will offer to say, what mee thought I had. (1734-1737).

Generally, **me/him/etc. think(e)s** is translated as 'it seems to me/him/etc.' Though this construction was widely used in Shakespearean times, it was on its way to becoming a fossilized construction, or idiom. In contrast, similar structures are quite frequent in MI.

Two more examples of impersonal constructions in ME are from Fischer, et al (2000:76):

(79) swetest him ðunche ham

sweetest him-OBJ seems them-OBJ[60]

'they seemed sweetest to him'

(80) me marvaylyyth mychil why God geuyth[61] wyckyd men swych power

me-OBJ marvels much why God gives wicked men such power

'I wonder a lot why God gives wicked people such power.'

The change from dative case marking in OE to objective (accusative) case lacking distinguishing morphology in ME is evident in the following examples from Fischer (2000:73).

(81) for he ðan ðe he wolde gehelpan … þearfum … and wannhalum (OE)

because he would help poor-people(D) and sick-people(D)

'because he wanted to help the poor and the sick'

(82) God helpen kan/O mani wise wif and man (ME)

God help can in many ways woman-OBJ and man-OBJ

'God can help men and women in many ways'

Note the dative morphology on the objects in the OE sample, and the lack of it on the ME example.

4.6 Old High German Irregular Case Marking

Just as in MI, Old High German (OHG) contained verbs which took subjects and objects with irregular case marking (Wright:1906, pp. 90-92). Some verbs governed dative objects.

(83) a. fluohho:n 'to speak evil of'

b. folge:n 'to follow'

[60] By this era, the difference between accusative and nominative forms had largely been leveled. Hence, "OBJ" is used to mean an objective case relationship rather than accusative, since case marking for accusative was not then present on nouns in general.

c. hëlfan ‘to help’

d. thiono:n ‘to serve’

Note that (83b) is cognate with the OE verb **folgian** ‘follow’ that could alternate between dative and accusative case on its objects. It is also cognate with MI **fylgja** ‘follow,’ which also takes a dative direct object. For OHG, OE, and MI to have cognate verbs which all could take a direct object with dative case would not likely be due to chance. Here again we may be seeing, for MI **fylgja** ‘follow,’ the MBNOA principle. If an object is being followed, it must move, but there is no necessary meaning that anything ever happens to the object.

OHG has a number of verbs that take dative or even genitive objects. For example, see **gibozen** ‘to repent,’ which takes dative objects in some senses, and genitive object when the meaning is ‘do penance for something.’ (Schützeichel:1995).

OHG also displayed instances of non-nominative subject case marking, such as are seen in MI impersonals.[62]

(84) mih hungirit

me(A) hunger(3rd-person form)

‘I am hungry.’

4.7 Old Icelandic (With Some Comparisons to Modern Icelandic)

Icelandic today remains more conservative than other Germanic languages, preserving morphological and syntactic patterns that existed throughout Germanic in its earlier stages. In their discussion of Old Icelandic (also referred to as Old Norse), Valfells and Cathey (1981) describe ON as the language of the thirteenth century sagas. The literature of the sagas displays a number of verbs with irregular case marking. Many

[61] The consonant at the start of ‘give’ is not actually a ‘g’; ‘g’ has been substituted due to lack of that font.

[62] Compare MI **mig vantar peninga** ‘I(A) need(3rd-person) money(A).’

verbs, including verbs of "causation," take a dative object. Here are examples from Valfells and Cathey (1981:25-34).

(85) a. sigla/styra skipi
'sail/steer a ship(D)'

b. bana úvini
'kill an enemy(D)'

c. eyða borg
'lay waste to a city(D)'

Also in ON, as in other Germanic, many verbs take other than the expected object and subject case marking. For example, some verbs take a genitive object. Valfells and Cathey (1981:53) state "This group of verbs is not clearly definable by any semantic or syntactic criteria." The examples given by Valfells and Cathey include the following.

(86) a. fá 'to get in marriage'

b. geta 'to mention'

c. hefna 'to avenge'

Valfells and Cathey (1981:265) demonstrate the existence of another category of impersonal constructions in ON where accusative arguments appear in the subject position: "Constructions including verbs that indicate the physical or psychological condition of an animate being or a change in that condition which is <u>involuntary</u> […]"[63] is the factor most regularly involved in constructions with accusatively marked subjects.

Examples of non-nominative subjects from Valfells and Cathey (1981:265) follow:

(87) a. hann varði einskis þetta
he(A) defended not this(A)

[63]. Underlining added.

‘He didn’t defend against this.’[64]

b. Syfjaði hann mjok.

slept he(A) a lot

‘He slept a lot.’

MI may bear this out to a certain extent, demonstrating that accusative case on impersonal subjects may be, at least in some instances, associated with involuntary states or activities (examples from Einarsson).

(88) a. Mig syfyar. (MI)[65]

I (A) be(come)-sleepy (Impers.)

‘I get sleepy.’

b. Ég er syfjaður. (MI)

I (N) am sleepy

‘I am sleepy.’

In (88a), the subject is experiencing an involuntary change of state, whereas in (88b) the subject is simply experiencing the state itself.

On the other hand, there are examples in MI where one might expect accusative subject case marking based on the above assertion about ON, only to find the dative case employed.

(89) Mér er heitt/kalt. (MI)[66]

me(D) is hot/cold

‘I am hot/cold.’

[64] This verb also takes impersonal forms in some usages: **mig varðar litlu** ‘me(A) concerns little,’ or ‘it is of little concern to me,’ or ‘it is of little concern.’
[65] Einarsson (1945), p. 463.
[66] Jónsson, p. 41

The above conception of accusative case encoding an involuntary aspect may be evident in certain variations in Modern German case marking as well. Zubin (1975) provided the following examples (see also [72]):

(90) a. Werner gab dem Mädchen frei.

Werner gave the girl(D) free

'Werner gave the girl a vacation.'

b. Werner gab das Mädchen frei.

Werner gave the girl(A) free

'Werner gave the girl up.'

In (90b), the object is mainly the effect of the action. As Zubin puts it, the recipient of the action in (90a) is higher on a scale of potency. This is another illustration of case marking reflecting thematic roles and semantics.

Valfells and Cathey (1981:265-66) give examples of dative subjects. According to them, the dative occurs in three types of impersonal constructions:

> Verbs indicating a physical or emotional state usually have dative in subject position. Such a construction is also very common with the verb **vera** 'to be' + adjective in the neuter nominative singular, where the adjective indicates a physical or emotional state.
>
> Valfells and Cathey (1981:265-66)

Verbs also took dative subjects in the following circumstances: with the auxiliary verb **verða** 'to become' and the neuter singular form of an adjective or past participle, or with **verða** and noun-phrase, a dative object in an impersonal construction indicates a change of state that is involuntary, accidental, or unpremeditated (Valfells and Cathey [1981]).

Such constructions usually correspond to English sentences that begin with 'he happened to', 'it came about that', 'he came to', and so forth. Example:

(91) þeim varð fátt at orðum

they(D) were few to words

'Few words came to them/they had little to say.'

When thinking of dative in ON, the view of Zubin (1975) is relevant. He concluded, through a review of distributional patterns of case marking in Modern German, that the accusative case denoted less potency and a greater degree of being the effect of an action than did the dative case. This appears to be consistent with many of the facts of irregular case marking in MI as well as ON. It also is consistent with the view of Silverstein (1976, 1981, 1993) that dative is one of two fundamental cases, and is the unmarked case that stands in opposition to the nominative case.

Just as MI does, ON had verbs of lacking and needing that took genitive objects.

(92) a. missa

'lose'

b. sakna

'miss'

c. þurfa

'need, require, must'

MI preserves genitive case marking in some such verbs, as shown in the following:

(93) Jón saknaði Guðrúnar. (MI)

Jón(N) missed Guðrúnar(G)

'John missed Gudrun.'

The evidence of irregular case marking reportedly goes back to the earliest documents in Old Icelandic or Old Norse (see Benediktsson [1972], for example).

Importantly, it should be noted that a pattern of dative case marking on verbs that primarily move (but do not otherwise change) their objects has been noted before. Kossuth (1980) shows that the instrumental may appear as a simple dative or a dative object of **með** 'with.' The following example without **með** is of relevance to this thesis.

(94) at ríða þeim hesti

to ride that(D) horse(D)

'to ride that horse'

Kossuth notes that examples like the preceding can "also mean 'to cause to move'" as in "to cause a horse to move by riding it" (Kossuth, 1980:37). She continues, stating that "very many other verbs meaning "to cause to move" in Old Icelandic also govern a dative. Kossuth refers to Nygaard, who called such examples "instrumental datives" (Nygaard, 1905).

Kossuth, however, holds that if the objects were marked with accusative case, "no case grammarian would hesitate to recognize an underlying Patient in a transport verb with these datives." This is quite different from the conclusions of this thesis.

Another example is **hrinda** 'to push' (Kossuth, 1980:38).

(95) þá hratt hann frá sér spjótinu.

then pushed he from self spear(D)

'Then he pushed the spear away.'

Kossuth concludes that **hrinda** (and other similar verbs) has a "deep structure Patient" which happens to be dative. This is somewhat equivalent to calling such verbs "quirky" or irregular in their case assignment. In contrast, this thesis argues that such verbs fall into a class where the dative objects are explicable from the thematic roles and the LS of verbs. In terms of this thesis, **hrinda** is a possible instance of the type of verb whose object can be described as MBNOA (moves but not necessarily otherwise affected).

The existence of such verbs in OI (or ON) shows that irregular case marking has existed for a considerable time. Further, the tests done with modern native speakers shows that this irregular case marking is not just a frozen, lexical artifact, but to some extent is still a productive rule.

4.8 Concluding Thoughts on Diachronic Patterns

We have seen above that even a casual review of the Germanic languages quickly identifies many verbs and utterances involving irregular case marking. In the light of this broader linguistic history, it does not seem meaningful to regard certain Icelandic case marking patterns as "quirky." It may indeed be that MI has become "quirky" relative to the current state of other Germanic languages, but it certainly is not "quirky" relative to earlier stages of those languages.

Indeed, the fact of similar case marking patterns, similar semantics, and cognate verbs assigning the same case in languages separated by many centuries shows that Icelandic is not "quirky" relative to its Germanic siblings – at worst it must be accused of conserving older features lost elsewhere in Germanic.

If the charge then is that Icelandic is "quirky," Germanic in general must also stand so accused. With a pattern so widespread over languages and time, it would seem better to identify the principles that create the so-called quirkiness. We would not want to craft a theory of language that omitted a spoken tongue a thousand miles away on the grounds of distance. Why would we ignore a spoken tongue a thousand years away, especially when a living relative language is available?

Chapter V

Conclusion

5.1 Revisiting the Central Questions of this Thesis

First, the data presented will be summarized. It will be argued that an analysis of Icelandic must take into account verbal semantics to account for certain syntactic behavior, overt morphological case marking, and native speaker intuition reflecting productive processes in the language.

Second, it will be argued that the native speaker behavior regarding MBNOA-type verbs strongly implies a productive rule of irregular dative case marking in Icelandic that, in predictable instances, will produce so-called quirky case. It will be suggested that one route for ongoing inquiry is to research MI verbs that take just dative objects, and do not alternate case marking on those objects. The expectation would be that a significant number of such verbs would involve MBNOA or similar semantics.

Third, it will be affirmed that if Icelandic is deemed "quirky," so must Germanic languages in general stand so accused, for at various stages of their history, all the languages checked evidenced "quirky" case marking. It seems that far from being peculiar, Icelandic is a reputable representative of its language family.

Fourth, it will be argued that RRG presents a fertile framework for inquiry in this area, and provides a much less *ad hoc* solution than the other two treatments that were studied. It will be considered how RRG might provide further solutions.

5.2 Summary of the Data

This work has reviewed irregular case marking in MI as seen through the frameworks of three theories. The theory found most capable of addressing the facts of Icelandic was RRG. In reviewing the MI data with an eye to participant roles and dative case marking on objects, it became evident that MBNOA was a common theme.

MBNOA was therefore tested with a large corpus of MI verbs and phrases. It was further tested with two sets of artificial verbs designed to mimic the semantics of verbs that would take dative objects, and of verbs that would take accusative objects.

The data were shown to corroborate statistically the following. There is a strong association between accusative case marking and objects that are close to the patient end of the agent-patient continuum. There is likewise a strong association between dative case and objects that fit the MBNOA pattern.

5.3 Evidence of a Productive Rule of Irregular Case Marking

The facts indicate that at least some "quirky" case in MI is actually rule driven. Even more interestingly, the rule is evidently productive, because naïve native speakers (non-linguists) can apply the rule predictably to artificial verbs they cannot have possibly heard before.

Most tellingly, all the native speakers consulted for this study expressed that the conclusions being advanced "felt right" – and two asserted that they wished they had been taught in school more about ways that dative case might be predictable.

The facts indicate that some irregular dative case marking on objects is connected with verbal semantics, and that the rule native speakers acquire can be accessed and applied to novel verbs. The fact of a productive rule is also evident in "dative sickness."[67]

5.4 Quirky Germanic

A survey of several other Germanic languages at different stages of history further confirms that MI is not at all unusual amongst its linguistic relatives – including earlier stages of English.

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[67] Scandinavian scholars are looking at "nominative sickness." "However, there has been a strong tendency in the history of all the Scandinavian languages, including Insular Scandinavian, for oblique subjects to become nominative subjects ('Nominative Sickness' cf. Eythórsson 2000)"(Eythórsson, et al, 2002). Icelandic is not unique in Scandinavian, though it seems different in replacing oblique subjects with dative, not nominative.

It is quite clear that MI does not differ much in so called irregular case marking from other Germanic languages – except in terms of the time period in which the case marking behavior is being seen.

One can envision a sliding scale showing all the Germanic languages and their history of case marking. If one could adjust the scales in time, one could create a situation where all the Germanic languages that have been studied in this paper would be using "quirky" case in the same era, and in similar ways. Then perhaps the only conclusion could be that Germanic is quirky.

5.5. RRG and Icelandic

It would seem odd to call something so widely attested "quirky." This thesis would rather propose that possibly rules could be discerned to explain why an entire language family (at least the members examined herein) has similar case usage. The existence of "quirky" case marking, "dative sickness," and irregular case marking in general called into question the relationship between case marking and grammatical relations. We have seen by a comparison of three analyses that syntactic theories differ significantly in how they account for data, and how effectively they account for data.

Let us look at two specific MI verbs: **brenna** 'to burn' and **skjóta** 'to shoot.' Both verbs are sometimes "quirky," assigning dative case to their objects. Other times, they are regular, assigning accusative case. Based on the evidence in this study, the reasons are fairly clear.

In (51), RRG proposed rules for MI case marking. Those are repeated here for convenience.

(51) RRG Case Marking Rules for Icelandic

a. Highest ranking macrorole takes nominative case
b. Other macrorole takes accusative case
c. Non-macrorole arguments take dative case

The RRG solution to irregular case marking on **brenna** and **skjóta** resides in the question of macroroles. If a verb is converted to macrorole intransitive, case assignment under (51a-b) fails. Take **skjóta**, where the projectile (bullet, arrow, etc.) appears in dative. This is not the result of lexical case assignment. Instead, **skjóta** has only one macrorole (Actor) and that would go to the subject. Under (51c) the object would take dative case.

Why would **skjóta** be sometimes transitive (two macroroles) and sometimes not (one macrorole)? Let us look at (58.73, .74), repeated below.

(58.73) skjóta fugla
shoot birds(A)
'shoot birds'

(58.74) skjóta kúlu úr byssu
shoot a bullet(D) from a gun
'shoot a bullet from a gun'

In (58.73) 'birds' is a clear patient. The verb has the standard two macroroles. The Undergoer macrorole goes to the 'birds.' The verb is transitive, and 'birds' appears in accusative case. In (58.74) 'bullet' appears in dative case. It is not a patient, but rather an effector or perhaps mover. Whereas the LS of (58.73) would include a state or condition predicate, like BECOME **shot'**, the LS of (58.74) would not. The sense of the decomposition is that a bullet was caused to move from a gun in a ballistic fashion. There is no logical reading from (58.74) that the bullet itself was shot by a gun (i.e., hit by a projectile – it is the projectile). To signal such a meaning, 'bullet' would have to appear in accusative case in some unusual context.

The structure for the LS of an instrument or force follows (Van Valin and LaPolla, 1997:122):[68]

(96) a. FORCE: Inanimate 'x' argument in LS configuration

b. INSTRUMENT:IMPLEMENT 'y' argument in LS configuration

[**do'** (x,[…])] CAUSE [[…**do'** (y,[…])] CAUSE [BECOME/INGR **pred'**(…)])

[68] Note that not all parts of the LS need to be expressed in all cases.

How might (96) apply? Most instances of dative case in this thesis can be summarized as follows. An agent or effector interacts with a person or thing that: (1) is capable of doing the caused action on its own, or (2) can be moved with no other necessary effect. The subject either makes the object perform an activity intrinsic to its nature (**brenna** 'burn' – coal (D) is burned), or the subject makes the object move (**gryta** 'throw' – a stone (D) is flung, etc.). For movement we see the MBNOA types. For verbs like **brenna** we see instrumental uses. These principles might apply to MI verbs that do not alternate case on objects. For example, **styra** 'steer' takes only dative objects. It would seem to fall into the MBNOA class, and might be an instrumental. The concepts of MBNOA and instrumental may not be mutually exclusive. Therefore, an explanation might be achieved not only of the verbs in this study, but also of some verbs that take only dative objects. The LS in (96) gives a way to approach the matter.

In a very preliminary way, we could suggest that the LS of **skjóta** and other verbs with MBNOA (and perhaps even non-MBNOA **brenna**) might be a reduced version of (96), where **do'** may be a form of move or perform. Here, "x" does something that causes "y" to do something. The rest of the LS would flesh out what.

(97) [**do'** (x,[…])] CAUSE [[…**do'** (y,[…])] …

For atelic verbs, this may be workable. For verbs with change of location, like 'put,' the LS would expand to indicate location components. The basic concept is this. The object (the "y" argument) is outranked for Actor by the effector or agent of the superordinate predicate. If this analysis is correct, causative activities should pattern in a certain way. They would be predicted to take dative, not accusative objects. Where verbs alternate between dative and accusative objects, or where they take just dative objects, this can be tested. For verbs that take only accusative objects, this could pose a challenge. In such cases, one might conjecture that structural of syntactic case overrides case resulting from the principles above. The reasons why some verbs allow optional case marking on direct

objects, and some do not could also be a subject for further inquiry. The answers might lie, for example, in diachronic issues, or in the competition of two case-marking paradigms active synchronically in MI.

For our present inquiry, it seems there are two general semantic classes involved. Here is an approximation of a possible rule in MI to address both classes.

(98) (a) B can on its own be an Actor (agent, effector, etc.) to perform the action of the verb. A causes B to carry out the action it could otherwise do on its own. In this circumstance, B is not affected enough (too marked) for Undergoer status. A outranks B for Actor macrorole. This converts the verb to macrorole intransitive. That results in dative case under (51c). "A makes B do something B can normally do on its own, and B would be too marked for Undergoer in MI."

(b) B may or may not normally be capable of movement. A does something causing MBNOA for B. B is too marked to be an Undergoer in MI, and is outranked by A for Actor. This converts the verb to macrorole intransitive. Under (51c) B appears in dative. "A makes B do something MBNOA."

In English, compare 'Jane and Rover walk' with 'Jane walked Rover.' Rover is a potential agent. He could perform the action. Jane ranks higher as Actor, and causes Rover to 'walk.' Number (98a) would predict that such a sentence in MI would tend to put Rover in dative if the verb allows an option. That is a key point: the description of MI would still need to note verbs, perhaps by class, which could participate in a rule like (98).

The principle in (98) could explain various MI verbs. A boat can sink on its own. An arrow can shoot across the sky. A chair can rock. A plane can fly. Coal can burn. When an agent "partners" with another potential agent or effector to cause that other argument to do what it typically or easily does, including 'move,' the conditions in (98) would be met, and (51c) would result in the correct dative case marking.

Going back to (97) the LS would show that the 'bullet' was being caused to do move in a ballistic fashion. 'Bullet' is an instrument, implement, etc. It would be too

marked for Undergoer macrorole.[69] It would be outranked for Actor. This would convert the verb to macrorole intransitive under (98). Rule (51c) would result in dative case.

Let us return to verbs that allow only accusative objects even if they are MBNOA. As mentioned, two competing paradigms of case marking may be at work. The question then is this. Over time will the rules be leveled to allow optional dative case marking, or to limit direct objects to accusative case? Dative communicates nuances that would be lost if patients and non-patients were subsumed under accusative. We see in the examples in this study that the verb and its arguments function as an interactive constellation to convey meaning and participant roles. In some ways, it could be argued that it is not dative that is marked, and it is not accusative which is the default case on direct objects – but the reverse. That conjecture is beyond the scope of this thesis, but it brings us back to a central question. What is the role of case and how do verbs use case differentially to express different roles? This thesis has attempted to address that question.

Overall, it can readily be seen that RRG offers a rich theoretical framework for identifying explanations. Far from trading a lexical exception for a macrorole exception, RRG lays the groundwork for a deeper understanding of the dynamics involved.

Coming back to **brenna** 'to burn' we have a verb that appears to take an instrumental object. The object does not fall in the MBNOA category. Coal that is burnt will be changed. The sense of 'burn coal' is that one is making the coal do something – 'burn' – for a purpose (instrumental). This would likely be a causative activity. Since the object itself is carrying out the activity, it is a sort of effector. Icelandic may deem this too far from patient to receive Undergoer macrorole status. Rule (98) would apply, converting the verb to macrorole intransitive. Rule (51c) would assign the correct dative case.

In this way, it seems possible that RRG might identify LSs for a variety of Icelandic verbs. We might describe the class of verbs as causative activities, as a rough approximation. The LSs would have "location predicates" for MBNOA verbs that were

[69] We could posit that languages might have unique tolerances of markedness.

not atelic. The LSs would not include “state” or “condition” predicates. This is because the verbs in question do not (for the MBNOA set) result in any change of state or condition. We might hypothesize, tentatively, a set of LSs like the following.

(99) a. [**do’** (x,[…])] CAUSE [[…**do’** (y,[…])] …
b. [**do’** (x,[…])] CAUSE [[…**move’** (y,[…])] …
b. [**do’** (x,[…])] CAUSE [[…**perform’** (y,[…])] …
c. [**do’** (x,[…])] CAUSE [[…**move’** (y,[…])]] and [BECOME […**be-at’** (y, z)])] …
d. And so forth.

The suggestions in (99) are tentative and would require further study and development. The examples should show, however, that RRG provides a way to explain the phenomena of Icelandic. No comparable tools were seen in either the LFG or autosegmental analyses. The LSs would assign thematic relations, and then macrorole assignment would dictate whether (51c) would apply to trigger dative case. The possible LSs in (99) also show another point. The objects would typically be “doers, movers, performers” – effectors. Such arguments would be eligible, if not outranked by another argument, for Actor macrorole status. In this way, LSs in RRG could capture why MI may consider certain participant roles too marked for Undergoer macrorole status.

Returning to **brenna** ‘to burn’ we see other evidence of the above principles. If “James burned your hand,” “hand” would be in accusative. If “Joan burned two blocks of wood in the fireplace,” “wood” would normally appear in dative. In consultation with one of the informants, animacy was explored. Do animate burnt things appear in accusative, and inanimate things in dative? No. If an iron burnt a shirt, “shirt” would be in accusative. If a laser burnt an eye, “eye” would also be in accusative. The difference comes down to the following. Is the effect of the verb to cause a secondary action or is it to cause a changed state or condition on the object? If I burn my finger, there is no implication that my finger will erupt in flame. If I burn a log, there is exactly that sense.

From an LFG or autosegmental standpoint, this could sound like an argument for two lexical entries for the verb **brenna**. That is not necessary, however, since the

difference between **brenna** (macrorole intransitive, dative object) and **brenna** (two macroroles, accusative object) can be elicited through analysis in RRG. Under a combination of (98), (99) and (51c), case differences might be accounted for without complication of the lexicon.

These conjectures about the best RRG approach are tentative, since that aspect of development is somewhat beyond the scope of this paper. The following points are clear. (1) Icelandic is not "quirky." Germanic in general is "quirky" – which would be akin to admitting theoretical deficiency. (2) "Dative sickness" is an indication of a productive rule. It may reflect a rule from the past, or it may be synchronic variation. It might even represent MI speakers' resistance to a nominative-accusative system. Icelanders are renowned for their resistance to language change. In any event, it is evidently productive. When a linguist can craft artificial verbs that elicit predictable native speaker responses, an acquired, active rule must be at work. (3) RRG provides a rich theoretical ground for linguistic research. By including psychological adequacy, language acquisition, semantics, and lexical decomposition in a principled fashion, it has both the power to explore deeply, and the restraints to prevent unsupportable *ad hoc* analysis. Whereas LFG and autosegmental approaches resulted in a description, RRG opened doors for a line of reasoning toward a possible explanation.

This analysis yields other possible areas of research. (1) Do languages have unique sensitivities to markedness of arguments for macroroles? (2) Can a larger body of Icelandic verbs with irregular case marking be addressed through RRG LSs and thematic relations as postulated in this thesis? (3) Are there other ways that the premises and formalisms of RRG and the conjectures in this thesis can be tested with native speakers?

In conclusion, may "quirkiness" ever be a trail leading us to deeper understanding of languages.

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Appendix A

Corpus of Verbs with Irregular Case Marking

The following is a list of Icelandic verbs that show irregular case. The verbs were culled by a page-by-page review of two Icelandic dictionaries. The Concise Icelandic-English Dictionary (Hólmarsson et al, 1989) is a 519-page resource on Icelandic. It is referred to as HST in the verb list below. The other resource is Icelandic, Grammar, Texts, Glossary (Einarsson, 1945). This 502-page resource is referred to as E below.

The purpose of reviewing large dictionaries of Icelandic for verbs with irregular case marking was twofold. First, it aimed toward a broader corpus of verbs that might then have greater breadth for analysis, and greater validity for any statistical research. Second, it sought a non-skewed selection of verbs may or may not have yet been discussed in literature on Icelandic syntax.

In all, 107 verbs were identified as having irregular case marking in one way or another. Types of case marking are shown in capital letters beneath each verb, and within the usage examples from the dictionaries.

It was from these 107 verbs that a subset of verbs was culled that showed dative-accusative case alternation on direct objects. The verbs chosen were those which seemed most likely to yield "minimal pairs" of utterances with direct objects sometimes in one case, sometimes in another. The specific case alternation sought was dative/accusative.

The full verb list is reproduced here for two reasons. First, it will serve to document the methodology of the thesis. Second, it may be useful for further research. In the second case, however, the original dictionaries should be consulted, as well.

Here is a key for reading the verb list:

1. HST: source of verb is Hólmarsson, Sanders and Tucker (1989)
2. E: source of verb is Einarsson (1945)
3. A: accusative; D: dative; G: genitive

4. In all caps immediately after verb and its gloss: notes on type of case variation and use of verb in tests
5. e-ð: eithvað ‘something’ (A); e-m: einhverjum ‘somebody, some’ (D); e-n: einhvern ‘somebody, some’ (A); e-r: einhver ‘somebody, some’ (N); e-s: einhvers “somebody’s, of some’ (G); e-u: einhverju ‘some’ (D)
6. Some verbs may have additional comments regarding their arguments or possible LS.
7. The following graphic gives additional information:

1. ausa, eys, jós, jusum ausinn (-ið) ‘dip, scoop, ladle’ (E)
CASE VARIATION: DATIVE/ACCUSATIVE OBJECT ALTERNATION
USED FOR NATIVE INFORMANT TEST
Dative (=**taka með ausu**)
a. skömmum yfir e-n ‘pour abuse(D) on somebody(A)’
Accusative
a. bát ‘bail a boat(A)’
a. barn vatni ‘baptize a child(A)’

2. beita (-ti, -t) ‘bait’ (E)
CASE VARIATION: DATIVE/ACCUSATIVE OBJECT ALTERNATION
ACC: ‘bait (a fishing line)’
b. sig hörðu ‘force oneself(A) (to do something)’
DAT: ‘put to pasture’
b. kindum ‘put sheep out to graze’
‘use, employ, apply’
b. brögðum ‘use cunning(D), resort to a ruse’

b. e-n hördu ‘use violence(D) against somebody(A)’
b. e-n órétti ‘do somebody(A) an injustice(D)’
b. maðkiskelfiski ‘use worm/shellfish(D) as a bait’

3. binda, batt, bundu, bundið ‘tie, bind’ (HST)
CASE VARIATION: DATIVE/ACCUSATIVE OBJECT ALTERNATION
Takes accusative object, but in reflexive takes dative:
b-st samtökum ‘join forces(D), form an organization’

4. bjóða, bý, bauð, buðum, boðinn (-ið) ‘offer, invite’ (E/HST)
CASE VARIATION: DATIVE/ACCUSATIVE OBJECT ALTERNATION
IMPERSONAL: DATIVE CASE / EXPERIENCER SUBJECT
b. e-m e-d ‘offer somebody(D) something(A)’
má ég bjóða yður
or impersonal:
má bjóða yður ‘may I offer you’
b. e-m að gera e-ð ‘offer somebody(D) to do something(A)’
Impersonal:
mér býður við e-u ‘I(D) am nauseated at something(D); I abhor something’
from HST:
b. e-m heim ‘invite someone(D) home’
b. e-m í mat ‘ask somebody(D) to dinner’
mér var boðið, ég var bodinn ‘I was invited’
nú er mér nóg boðið ‘I’ve had enough’
IMPERSONAL:
mér býður í grun ‘I suspect’
mér býður við þessu ‘this disgusts me’

5. bía, -aði (HST)
CASE VARIATION: DATIVE/ACCUSATIVE OBJECT ALTERNATION
ACC
b. e-ð út ‘soil something(A)’
DAT
b. barni ‘lull a child(D) to sleep’

6. bjóða, bý, bauð, buðum, boðinn (-ið) ‘offer, invite’ (E/HST)
IMPERSONAL
CASE VARIATION
TRANSFER VERB: DATIVE GOAL, ACCUSATIVE THEME
b. e-m e-d ‘offer somebody(D) something(A)’
má ég bjóða yður
or impersonal:
má bjóða yður ‘may I offer you’
b. e-m að gera e-ð ‘offer somebody(D) to do something(A)’
impersonal:
mér býður við e-u ‘I(D) am nauseated at something(D); I abhor something’
from HST:
b. e-m heim ‘invite someone(D) home’
b. e-m í mat ‘ask somebody(D) to dinner’
mér var boðið, ég var bodinn ‘I was invited’
nú er mér nóg boðið ‘I’ve had enough’

IMPERSONAL:
mér býður í grun ‘I suspect’
mér býður við þessu ‘this disgusts me’

7. blikka, -aði (HST)
CASE ALTERNATION: DAT/ACC
USED FOR NATIVE INFORMANT TEST
ACC
b. stelpurnar ‘wink at the girls(A)’
DAT
‘flash, flash the headlights of a car’

8. blóta, -aði (HST)
CASE ALTERNATION: ACC/DAT
ACC
‘worship pagan gods
DAT
‘curse, swear; sacrifice’
Note: Means ‘worship with sacrifice’ per Zoëga in Old Icelandic; in OI, the thing worshipped appeared in accusative case, while the thing sacrificed appeared in dative. Compare **bana**.

9. brenna ‘burn’ (E/HST) Note: example with different verbal inflections depending on transitivity:
CASE ALTERNATION: DAT/ACC
USED FOR NATIVE INFORMANT TEST
intransitive: **brenna, brenn, brann, brunnum, brunninn (-ið)**
transitive: **brenna, brenndi, brenndur (brennt)**
In the transitive verb:
brenna e-u ‘burn something(D)’
brenna e-n ‘burn somebody(A)’
Though Einarsson does not note case alternation in the transitive verb, HST do:
ACC:
‘burn, set on fire’
b. sig á fingrunum ‘burn oneself(A) on the fingers(D); burn one’s fingers’
DAT:
‘heat up with’
b. kolum ‘heat up with coals(D)’

10. bæta, bætti, bætt(ur) ‘mend, repair, improve, make amends’ (E/HST)
CASE ALTERNATION: DATIVE/ACC
(Similar semantically to batna.)
b. ráð sitt ‘mend one’s ways’
b. fullum bótum ‘make full amends(D)’
Although Einarsson only lists dative objects, HST note an alternation in case:
ACC:
‘improve, get better’
b. fjárhag sinn ‘improve one’s finances(A)’
b. ráð sitt ‘mend one’s ways’
b. e-m tjón ‘compensate somebody(D) for a loss(A)’
DAT:
b. (e-u) við ‘add something(D)’
b. við sig tímum ‘take on more hours(D)’

11. böggla, -aði ‘crumple’ (HST)
CASE ALTERNATION: DAT/ACC
b. e-ð/e-u saman ‘crumple something(A/D) up’

12. drepa, drap, drápu, drepið ‘kill; dip’ (HST)
CASE ALTERNATION: DAT/ACC
USED FOR NATIVE INFORMANT TEST
ACC
In the sense of kill, takes accusative object.
DAT
d. fingri í vatn ‘dip a finger(D) in water’

13. fiffa, -aði ‘fix, arrange’ (HST)
CASE ALTERNATION: DAT/ACC
HST list as taking either dative or accusative arguments, but gave no examples.

14. flökra, -aði, ‘occur, feel’ (HST)
IMPERSONAL
ACCUSATIVE/DATIVE SUBJECT
CASE ALTERNATION
það flökraði ekki að mér ‘it did not occur to me at all’
mig/mér flökrar ‘I(A/D) feel sick (of nausea)’
Zoëga gives the meaning of this verb to be ‘roam about’.

15. ganga, (gá), geng, gekk, gengum genginn(-ið) ‘go, walk, take a walk, climb, pass, go, run’ (of watches, engines, etc.)’ (E/HST)
CASE ALTERNATION: ACC/GEN
SOME IMPERSONAL USAGE
DATIVE SUBJECT
Impersonal: (HST)
e-m gengur vel ‘somebody(D) goes well’ ‘it goes well for somebody; somebody has good luck’
mér gekk vel eftir atvikum ‘I did well considering/under the circumstances’
það fer eftir atvikum ‘that depends on the circumstances’
From HST:
g. leiðar sinnar ‘go one’s way(G)’
honum gekk gott til ‘his intentions were good’

16. geta, get, gat, gátum, getinn(-ið) ‘mention, guess’(E/HST)
CASE ALTERNATION: ACC/DAT/GEN
GENITIVE OBJECT
geta son ‘beget a son(A)
geta e-s ‘mention/guess something(G)’
geta um e-ð ‘mention something(A)’
Impersonal:
þess getur ekki=þess er ekki getið ‘ii is not mentioned’
það getur verið ‘it may be’
það getur orðið ‘it may become (be)’
út af þeirri reglu getur brugðið ‘that rule may be deviated from, broken’
Per HST, there are three cases of object:
ACC:

hann getur gert þetta ‘he can do this’
geta barn ‘father a child(A)’
geta sér orðstír ‘achieve fame, gain a good reputation’
GEN:
ég get þess nærri hvað þeir hafa verið að gera ‘I can guess what(G) they have been doing’
eins og nærri má geta ‘as was to be expected’
DAT:
geta sér til um e-ð ‘make a guess about something’

17. geyma, geymdi, gemdur, (geymt) ‘put away, store, preserve, keep’ (E/HST)
CASE ALTERNATION: ACC/GEN
geyma e-ð or geyma e-s ‘preserve or keep something(A/G)
E notes a case variation; HST list the verb only as taking an accusative object.

18. gjalda, geld, galt, guldum, goldinn (-ið) ‘pay’ (E/HST)
CASE ALTERNATION: ACC/GEN
gjalda e-s ‘pay for something(G)’ (figuratively speaking); ‘have to take the consequences for something’
gjalda skatt ‘pay taxes’
Per HST:
ACC: (pay for)
g. e-m e-ð ‘pay somebody(D) something(A)’
GEN: (pay for, suffer for)
g. fyrri synda ‘pay for one’s earlier sins(G)’

19. greiða, -ddi, -tt ‘pay, solve, unravel, unknit’ (HST)
CASE ALTERNATION: DAT/ACC
GENITIVE OBJECT
ACC:
‘pay’
g. götu e-s ‘give somebody(G) assistance(A)’
DAT:
‘comb’
g. e-m ‘comb somebody’s(D) hair’

20. gryta, -ti, -t ‘throw, stone’ (HST)
CASE ALTERNATION: ACC/DAT
USED FOR NATIVE INFORMANT TEST
ACC:
g. e-n ‘stone somebody(A)’
DAT:
‘fling something(D)’

21. gæða, -ddi, -tt ‘endow’ (HST)
CASE ALTERNATION: ACC/DAT (TRANSFER VERB?)
ACC:
‘endow’
g. e-n e-u ‘endow somebody(A) with something(D)’
DAT:
g. e-m á e-u ‘treat somebody(D) to something(D)’

22. halda, held, hélt, héldum, haldinn (-ið) ‘hold, keep, think, consider, hold; give, deliver, celebrate, proceed’ (E)
CASE ALTERNATION: DAT/ACC
USED FOR NATIVE INFORMANT TEST

halda e-m (e-u) ‘keep/retain/detain somebody(D)(something(D))’
From HST, where the case alternation is noted:
ACC: ‘hold (a party, meeting), give (a lecture, speech, concert); think, believe’
hann heldur að hún sé vitlaus ‘he thinks that she(A) is crazy’
DAT: ‘hold; maintain; keep; travel, go, continue’
halda e-u föstu ‘hold firmly onto something(D)’
halda stefnu ‘stick to a course’
halda áfram ferðinni ‘continue one’s journey’

23. hátta, -aði, -að ‘arrange, dispose; go to bed; put somebody to bed’ (E/HST)
CASE ALTERNATION: DAT/ACC

hvernig e-u er háttað ‘how something(D) is arranged’
HST notes the case alternation as follows:
ACC: ‘go to bed, undress; undress somebody, put somebody to bed’
h. sig ‘take of one’s clothes’
ég er háttaður ‘I have gone to bed’
DAT: ‘arrange’
því er þannig háttað ‘that is how it is, that is how it stands’
Note: Einarsson treats the two instances of **hátta** as having distinct morphology, and so treats them as separate entries.

24. hefja, hóf, hófu, hafið ‘begin; raise, lift; praise; broach’ (HST)
CASE ALTERNATION: ACC/GEN

ACC:
hefja rannsókn ‘start an investigation(A)’
hefja e-ð á loft ‘lift something(A) up’
hefja e-n til skyjanna ‘praise somebody(A) to the skies’
GEN:
hefja máls á e-u ‘broach a subject(G)’

25. heita, heiti, hét, hétum, heitinn (-ið) ‘be called, be named, considered; promise’ (E/HST)
CASE ALTERNATION: DAT/ACC

heita e-m illu ‘promise somebody(D) evil things, threaten somebody’
heita e-u nafni ‘be called by a certain name’
HST notes case alternation:
ACC:
ég heiti Jón ‘my name is Jón(A)’
að láta e-ð gott ‘let something(A) pass’
látum það gott h. ‘that’s (good) enough!’
DAT:
heita e-m e-u ‘promise somebody(D) something(D)’
þangað er ferðinni heitið ‘that is where we are going’

26. henda, -ti, -t ‘throw; catch, grasp’ (HST)
IMPERSONAL: **það**
CASE ALTERNATION: DAT/ACC

DAT: meanings include throw (kasta) and throw away, discard (fleygja).

ACC:
henda e-ð á lofti ‘catch something(A) in midair’
IMPERSONAL
það henti mig ‘it happened to me’

27. hlaða, hleður, hlóð, hlóðu, hlaðið ‘stack, pile, load’ (HST)
IMPERSONAL: **það**
CASE ALTERNATION: DAT/ACC
DAT: ‘stack, pile’
ACC: ‘load (a car, ship, etc.)
h. rafgeymi ‘charge a battery(A)’
h. vegg ‘build a wall(A) (of stones, bricks, etc.)’
IMPERSONAL
það hleður niður snjó ‘it is snowing heavily’

28. hleypa, -ti, -t ‘gallop; curdle’ (HST)
CASE ALTERNATION: DAT/ACC
USED FOR NATIVE INFORMANT TEST
DAT:
hleypa hesti ‘make a horse(D) gallop’
h. e-u á ‘turn something(D) on’
h. e-m að ‘make room for somebody(D)’
h. e-u af stað ‘start something(D) off’
h. brúnum ‘frown’
h. e-m fram ‘let somebody(D) out into the hall’
h. sér í skuldir ‘accumulate debts’
h. e-m inn ‘let somebody(D) in’
h. e-m lausum ‘let somebody(D) loose’
h. e-m upp ‘make somebody angry’
h. víni úr tunnu ‘let wine(D) flow out of a barrel’
h. e-m út ‘let somebody(D) out’
ACC:
‘curdle’

29. hreyfa, -ði, -t ‘move, shift, touch’ (HST)
CASE ALTERNATION: DAT/ACC
ACC: ‘move, shift, touch’
hrefyfa sig ‘stir’
DAT:
hreyfa máli ‘bring up a matter(D)’
hreyfa hugmynd ‘bring up an idea(D)’

30. hæfa, -ði, -t ‘hit’ (HST)
CASE ALTERNATION: DAT/ACC
IMPERSONAL USAGE: **það**
USED FOR NATIVE INFORMANT TEST
ACC:
skotið hæfði manninn ‘the bullet hit the man(A)’
DAT:
fötin h. honum vel ‘the clothes fit him well’
IMPERSONAL
það hæfir honum vel ‘it befits him’

31. hægja, -ði, -t ‘slow down, ease’ (HST)
CASE ALTERNATION: DAT/ACC
REFLEXIVE IMPERSONAL: DATIVE OBJECT
ACC:
hægja ferðina ‘reduce speed(A)’
DAT:
hægja sér ‘relieve oneself(D); move one’s bowels’
REFLEXIVE
e-m hægist ‘somebody(D) is relieved’

32. jafna, -að i ‘level, equalize, compare’ (HST)
CASE ALTERNATION: ACC/DAT
USED FOR NATIVE INFORMANT TEST
ACC: ‘level, equalize, settle a dispute, recover, round off a number’
jafna reikning ‘balance an account(A)’
jafna bókhald ‘balance the books(A)’
DAT:
jafna e-u saman ‘compare something(D) with something’

33. játa, -að i, -að ‘agree; say yes’ (E)
CASE ALTERNATION: DAT/ACC
játa e-u ‘say yes to something(D); agree to something; own, admit something; assent or consent to something’
From HST:
ACC:
j. sig sekan ‘admit one’s guilt’
j. syndir sínar ‘confess one’s sins’
j. trú ‘profess a religion’
DAT: ‘assent to’

34. kaupa, keypti, keypt(ur) ‘buy’ (E)
CASE ALTERNATION: DAT/ACC
kaupa e-ð ‘buy something’
kaupa sér ‘buy (for oneself)’
kaupa e-u ‘make a certain bargain, make a deal, strike a bargain’

35. kenna, kenndi, kenndur, (kennt) ‘teach’ (E/HST)
CASE ALTERNATION
DATIVE+ACC/GEN
IMPERSONAL USAGE
DAT+ACC:
kenna e-m e-ð ‘teach somebody(D) something(A)’
kenna e-m um e-ð ‘blame somebody for something’
kenna e-m að stafa ‘teach somebody to spell, read’
þeim var kennt ‘they were taught’
GEN: ‘feel’
kenna til ‘feel pain’
hann kenndi sér einskis meins ‘he felt quite fit’
IMPERSONAL:
þar kennir margra grasa ‘there is a wide variety’
þar kennir áhrifa ‘an influence is felt’

36. klessa, -ti, -t ‘blotch, smudge, smear’ (E)

CASE ALTERNATION: DAT/ACC
USED FOR NATIVE INFORMANT TEST

klessa málningu á vegg 'slap paint on a wall'
klessa e-u á e-ð 'smear something(D) (reputation, honor, etc.) with something(A)'
klessa bíl 'smash up a car(A)'

37. kosta, -aði 'cost' (HST)
CASE ALTERNATION: ACC/DAT; GEN

ACC/DAT
kosta e-n 'pay the expenses for somebody(A)'
þetta kostar mikla peninga 'this costs a lot of money(A)'
kosta fyrirhöfn 'require an effort(A)'
kosta e-n til náms 'finance somebody's(A) education'
kosta miklu til e-s 'pay out a lot of money(D) for something(G)'
GEN
'try, exert'
kosta kapps um e-ð 'try one's best with something; strive for something'

38. krefja, krafði, krafður, krafinn (-ið) 'demand' (E)
CASE ALTERNATION: ACC/GEN

krefjast e-s 'demand something(G)'
krefja e-n um e-ð; k. e-n e-s 'demand something(G) of somebody(A)'

39. krækja, -ti, -t 'hook' (HST)
CASE ALTERNATION: ACC/DAT
USED FOR NATIVE INFORMANT TEST

krækja e-u í e-ð 'hook into something'
k. gluggann aftur 'fasten the window'
k. e-u saman 'hook something together'

40. kunna, kann, kunni, kunnað 'know, know how, be able to' (HST)
DATIVE OBJECT:
CASE ALTERNATION: ACC/DAT

ACC:
'know, know how, be able to'
kanntu þetta? 'do you know this (by heart)?'
kanntu það? 'do you know how to do it?'
það kann að vera 'that could be, it is possible'
DAT:
kunna e-u vel 'like something'
kunna e-m þakkir fyrir e-ð 'be grateful to somebody for something'

41. leggja, legg, lagði, lagdur (lagt) 'lay, place, put; lay down, put in shape' (E/HST)
CASE ALTERNATION: DAT/ACC
IMPERSONAL USAGE: ACCUSATIVE SUBJECT; DATIVE SUBJECT?
USED FOR NATIVE INFORMANT TEST

ACC:
leggja sig 'lie down; take a nap'
leggðu bókina á borðið 'put the book(A) on the table'
leggja veg 'build a road(A)'

leggja garð 'build a wall(A)'
leggja e-n í gegn 'run somebody(A) through'
DAT:
leggja bílnum 'park the car(D)'
IMPERSONAL:
tjörnina lagði 'the lake(A) froze over'
reykinn lagði um húsið 'the smoke(A) filled the house'
Transitive with accusative:
leggja e-ð innan í bréf 'enclose something(A) in a letter'
Transitive with accusative and dative:
leggja e-ð e-u 'cover/overlay something(A) with something(A)'
þakið er lagt grænum þakhellum 'the roof(N) is covered with green tiles(D)'
Impersonal: 'be moved or carried'
reykinn leggur upp 'the smoke(A) is carried up'
þokuna leggur inn fjörðinn 'the fog(A) is spreading up the fjord'

42. létta, létti, létt 'lighten (a burden, task), brighten up, be relieved' (E/HST)
CASE ALTERNATION; DAT/ACC
IMPERSONAL USAGE: DATIVE SUBJECT
þokunni léttir 'the fog(D) clears'
hann léttir til 'it(A) (the weather) clears'
mér létti 'I(D) was relieved'
Also, from HST:
létta e-u af e-m 'relieve somebody(D) of a burden(D)'

43. ljúga, lygur, laug, lugu, logið 'lie' (HST)
CASE ALTERNATION: DAT/ACC
ljúga e-u upp á e-n 'tell a lie(D) about somebody'
ljúga e-u að e-m 'lie to somebody'
ljúga e-n fullan 'fill somebody(A) with lies'

44. lofa, -aði, -að(ur) 'allow, permit; promise; praise' (E/HST)
CASE ALTERNATION: DAT/ACC; DAT+ACC; DAT+DAT
lofa e-m e-ð (að gera e-ð) 'allow somebody(D) something(A)/to do something'
lofa (e-m) e-u 'promise (somebody(D)) something(D)'
From HST:
ACC:
lofa e-n 'praise somebody(A)'

45. lysa, lysti, lyst 'describe; light up, illuminate' (E/HST)
CASE ALTERNATION: DAT/ACC
IMPERSONAL USAGE: **það**
USED FOR NATIVE INFORMANT TEST
lysa e-u (e-m) 'describe something(somebody)(D)'
lysa kirkjunna 'illuminate the church(A)'
lysa e-u yfir 'declare something solemnly'
HST notes the case alternation:
ACC: 'light, illuminate, expose'
DAT: 'show, manifest'
þetta lysir hugrekki 'this shows courage(D)'

e-ð lysir sér í e-u ‘something reveals itself in something’
IMPERSONAL:
það lysir af degi ‘dawn is breaking’

46. læsa, -ti, -t ‘lock’ (HST)
CASE ALTERNATION: ACC/DAT
USED FOR NATIVE INFORMANT TEST
læsa dyrum ‘lock a door’
læsa e-n inni ‘lock somebody(A) up’
læsa klónum í e-n/e-ð ‘fasten one’s claws(D) into somebody/something(A)’
eldurinn læsti sig um húsið ‘the fire spread through/engulfed thke house’

47. maka, -aði ‘smear, daub’ (HST)
CASE ALTERNATION: DAT/ACC
USED FOR NATIVE INFORMANT TEST
maka sig í sólolíu ‘put on sun lotion’ (on ‘self(A)’)
maka e-n í sólolíu ‘daub somebody(A) with sun lotion’
maka e-u á e-ð ‘smear something(D) on something(A)’

48. missa, -ti, -t ‘lose, miss’ (HST)
CASE ALTERNATION: ACC/GEN
missa e-ð niður ‘drop something(A)’
GEN:
missa fótanna ‘slip and fall’
hafa mikils misst ‘have suffered a great loss’
þetta má missa sín ‘we can do without this; this is expendable’
missa sjónar á e-u ‘lose sight of something’

49. moka, -aði ‘dig, shovel’ (HST)
CASE ALTERNATION: ACC/DAT
USED FOR NATIVE INFORMANT TEST
moka skurð ‘dig a ditch(A)’
moka snjónum burt ‘shovel the snow(D) away’
moka saman peningum ‘make a pile, make a mint’
moka upp fiski ‘fish in great quantities; make a big catch’

50. nema, nam, námu, numið ‘study, learn; perceive; take; amount to’ (HST)
CASE ALTERNATION: DAT/ACC/GEN
ACC: ‘study, learn, perceive, take’
nema land ‘settle a piece of land(A)’
nema e-ð úr gildi ‘annul, repeal something(A)’
DAT:
sem þessu nemur ‘as much as this’
þetta hefur ekki hækkað svo nokkru nemi ‘this hasn’t gone up to speak of’
GEN:
nema staðar ‘stop’, lit. ‘take stand(G)’

51. neyða, -ddi, -tt ‘force’ (HST)
CASE ALTERNATION: ACC/DAT
USED FOR NATIVE INFORMANT TEST
neyða e-n til e-s ‘force somebody(A) to do something(G)’
neyða e-u upp á e-n ‘push something(D) on somebody’

52. nísta, -i, -níst ‘chill; gnash’ (HST)
CASE ALTERNATION: ACC/DAT
kuldinn nísta mig gegnum merg og bein ‘I(A) was chilled to the bone’
nísta tönnum ‘gnash one’s teeth(D)’

53. nægja, -ði, -t ‘be enough, be sufficient’ (HST)
CASE ALTERNATION: ACC/DAT
IMPERSONAL USAGE: ? SUBJECT
láta sér e-ð ‘be satisfied with something’
Impersonal usage:
þetta nægir mér ‘this is enough for me’
No example of accusative use given.

54. orka, -aði, -að ‘be able; have strength; affect, influence’ (E/HST)
CASE ALTERNATION: DAT/GEN
orka e-u ‘e able (have strength) to do a thing’
HST mentions the case alternation (E does not):
DAT: ‘affect, influence’
GEN: **e-ð orkar tvímælis** ‘something is doubtful’, lit., ‘something(A) has effect doubt(G)’

55. ráða, ræð, réð (réði), réðum, ráðinn(-ið) ‘advise, counsel, resolve, decide, rule, wield, have power over, have one’s way’ (E/HST)
CASE ALTERNATION: ACC/DAT
ráða e-m e-ð ‘advise somebody(D) to do something(A)’
ráða e-u ‘have one’s way about something(D)’
From HST:
ACC: ‘employ, engage, hire, solve, interpret’
ráða gátu ‘solve a riddle(A)’
ráða draum ‘interpret a dream(A)’
DAT: ‘command, rule, control, decide, advise, suggest’
hver ræður hér ‘who is in charge here?’
hann ræður öllu hér ‘he makes all the decisions here’
Other phrases:
r. bót á e-u ‘put something right; remedy something’
r. e-ð af e-u ‘infer something(A) from something(D)’
r. e-n af dögum ‘assassinate somebody(A)’
r. e-m frá e-u ‘advise somebody(D) not to do something(D)’

56. raka, -aði ‘rake’ (HST)
CASE ALTERNATION: DATIVE/ACCUSATIVE
USED FOR NATIVE INFORMANT TEST
raka heyi ‘rake hay(D)’
raka saman peningum ‘rake in a lot of money(D)’
ACC:
raka skegg ‘shave’
raka sig ‘shave’

57. renna, renndi, renndur (rennt) ‘let run, make run’ (E/HST)
CASE ALTERNATION: ACC/DAT
renna færi ‘run out a fishing line’

renna e-u undir e-ð ‘run something(D) under something(A)’
From HST:
ACC: ‘turn (on a lathe)’ =**sníða til**
DAT: ‘pour, let flow’
Phrases:
renna e-u niður ‘swallow something(D)’
renna blint í sjóinn ‘do something blindly; take a potshot at something; do something on the off chance’
renna sér ‘slide, glide’
renna sér á skíðum ‘ski’
renna sér á skautum ‘skate’
renna augunum yfir e-ð ‘rglance through something; run over something’

58. ríða, ríð, reið, riðum, riðinn(-ið) ‘ride’ (E/HST)
CASE ALTERNATION: ACC/DAT
IMPERSONAL USAGE
USED FOR NATIVE INFORMANT TEST
Regular verb, but:
ríða hesti ‘ride a horse(D)’
but:
ríða veginn ‘ride along the road(A)’
but:
ríða húsum ‘ride astride the ridge of the roof; rid the house(D) of spooks’
Impersonal:
mér ríður á því ‘it is very important to me(D)’
From HST:
Impersonal:
það ríður á miklu ‘it is verby important’
það reið honum að fullu ‘it finished him(D) off’

59. rugla, -aði ‘confuse, talk nonsense’ (HST)
CASE ALTERNATION: DAT/ACC
rugla e-n ‘confuse somebody(A); throw somebody off’
rugla e-u fyrir e-m ‘mess something(D) up for somebody(D)’
ég hef ruglað þeim saman ‘I(N) have got them(D) muddled up; I have mixed them up’

60. ryðja, ruddi, rutt ‘clear’ (HST)
CASE ALTERNATION: ACC/DAT
USED FOR NATIVE INFORMANT TEST
ACC:
ryðja skóg ‘clear the land(A); clear a wood’
ryðja veginn ‘clear the road(A) (of snow)’
ryðja braut ‘clear the way(A)’
ryðja sal ‘empty a room(A) (of people)’
ryðja sig ‘be extravagant’
áin ryður sig ‘the ice breaks up on the river’
DAT:
ryðja e-u burt ‘clear something(D) away’
ryðja e-u úr vegi ‘get something(D) out of the way’
ryðja e-u braut ‘pave the way for something(D)’

ryðja sér til rúms ‘spread out, branch out’

61. rykkja, -ti, -t ‘shirr, pull, tug’ (HST)
CASE ALTERNATION: ACC/DAT
ACC: ‘shirr’
DAT: ‘pull, tug’

62. salla, -aði ‘shatter’ (HST)
CASE ALTERNATION: DAT/ACC
ACC: ‘shatter’
salla e-n niður ‘totally defeat somebody(A)’
salla fólk niður ‘shoot people(A) down’
DAT: ‘sprinkle’

63. segja, sagði, sagður (sagt) ‘say’ (E/HST)
DATIVE OBJECT
CASE ALTERNATION: DAT/ACC
IMPERSONAL USAGE: DATIVE SUBJECT
segja e-m e-ð ‘tell somebody(D) something(A)’
Impersonal:
nú segir ekki af honum ‘now nothing is said/heard of him’
sagt er ‘it is said, somebody says’
From HST:
ACC: ‘say, bid’
ég segi thrú lauf ‘I bid three clubs(A)’
DAT+ACC: ‘tell, order, declare’
segja (e-m) sögu ‘tell (somebody(D)) a story’
ég sagði honum að gera það ‘I told him(D) to do it’
IMPERSONAL:
í sögunni segir frá tveim bræðrum ‘the story tells of two brothers’
mér segir þungt hugur um það ‘I have dark forebodings about that’
Other phrases:
segja e-ð fyrir ‘predict something(A)’
segja e-m til ‘give somebody(D) instruction’
segja e-m til vegar ‘give somebody directions’
segja e-m til syndanna ‘give somebody(D) a thorough talking to’
segja e-m undan og ofan af e-u ‘tell somebody(D) the gist of something(D)’
segja e-m upp ‘break off with somebody(D), fire somebody’
segja e-ð við e-n ‘say something(A) to somebody(A)’

64. senda, sendi, sendur (sent) ‘send, forward, dispatch; throw, cast’ (E)
CASE ALTERNATION: ACC/DAT
senda bréf ‘send a letter(A)’
senda steini ‘throw a stone(D)’

65. skara, -aði, -að ‘poke, rake’ (E)
CASE ALTERNATION: DAT/ACC
skara e-u frá ‘shove something(D) aside’
skara eld að sinni köku ‘feather one’s own nest; look out for number one’

66. skeyta, -ti, -t ‘join; care, take notice’ (HST)
CASE ALTERNATION: ACC/DAT

IMPERSONAL USAGE

ACC:

skeyta e-ð saman ‘join something(A); assemble something(A)’

DAT:

skeyta e-u ‘take notice of something(D)’

skeyta skapi sínu á e-m ‘vent one’s anger(D) on somebody(D)’

það skeytir engu ‘it doesn’t make any difference; it doesn’t matter’

67. skipa, -aði, -að(ur) ‘order, bid, tell, command’ (E/HST)

DATIVE OBJECT

CASE ALTERNATION: ACC/DAT

skipa e-m e-ð ‘command sombody(D) to do something(A)’

skipa e-n til e-s ‘appoint somebody to do something’

From HST:

DAT: ‘order, command; arrange; unload; have available’

skipa e-u niður ‘arrange something(D); organize something’

skipa fólki til sætis ‘make seating arrangements’

skipa e-u upp ‘unload something(D); discharge something(D)’

skipa e-u út ‘ship something(D); put something on board’

hafa e-m á að ‘have somebody(D) available’

ACC: ‘appoint, occupy’

skipa e-n í embætti ‘appoint somebody(A) to an office’

skipa sæti ‘occupy a seat(A)’

skipa flokk með e-m ‘be in the same party as somebody’

68. skjóta, skyt, skaut, skutum, skotinn (-ið) ‘shoot’ (E/HST)

CASE ALTERNATION: ACC/DAT

IMPERSONAL USAGE: DATIVE SUBJECT

USED FOR NATIVE INFORMANT TEST

skjóta kúlu ‘shoot a projectile, a bullet(D)’

skjóta fugl ‘shoot a bird(A)’

Hann skaut hana/hann/?honum

He(N) shot her(A)/him(A)/?him(D)

‘I shot her/him/him’ (per GA)

Honum var skotið fyrir gluggana

he(D) was shot in front of window-the

From HST:

ACC: ‘shoot, hit’

skjóta fugla ‘shoot birds(A)’

DAT:

skjóta kúlu úr byssu ‘shoot a bullet(D) from a gun’

skjóta báti á flot ‘launch a boat(D) fast’

skjóta e-u til e-s ‘take something(D) to somebody’

skjóta máli fyrir hæstarétt ‘appeal a case to the Supreme Court’

IMPERSONAL:

e-u skytur upp ‘something(D) surfaces’

hér skytur skökku við ‘this does not fit’

Other phrases:

skjóta e-m skelk í bringu ‘frighten somebody(D)’

skjóta e-u á frest ‘postpone something(D)’

skjóta e-m ref fyrir rass ‘outwit somebody(D)’

skjóta e-u inn ‘put in a remark, insert something(D)’

skjóta e-ð niður ‘shoot something(A) down’

skjóta e-u undan ‘hide something(D); put something away’
mér skaust yfir þetta ‘I overlooked this’

69. skrifa, -aði, -að(ur) ‘write’ (E)
CASE ALTERNATION? ACC/DAT
ACC + DAT
skrifast á ‘write to each other’
skrifa bréf ‘write a letter(A) (check case)
skrifa e-m ‘write to somebody(D)’
HST reports this as regular transitive verb with accusative case marking.

70. slá, slæ, sló, slógum, sleginn(-ið) ‘beat, strike, smite, kick, etc.’
CASE ALTERNATION: ACC/DAT
IMPERSONAL USAGE: DATIVE SUBJECT
USED FOR NATIVE INFORMANT TEST
Regular for the most part.
Impersonal:
öllu slær í dúnalogn ‘everthing becomes dead calm’
slá e-u í e-n ‘strike somebody(A) with something(D)’ and
slá (svipunni) í hestinn ‘strike the horse(A) with the whip(D); spur the horse’
Compare **slá e-n högg** ‘give somebody(A) a blow(A)’ and **slá tvær flugur í einu höggi** ‘swat two flies(A) at one blow’
slá e-n högg ‘give somebody(A) a blow’
Per HST:
ACC: ‘strike, hit, beat; mow’
slá boltann ‘strike the ball(A)’
slá e-n ‘hit somebody(A)’
slá trommu ‘beat a drum’
slá e-n um lán ‘touch somebody(A) for a loan’
DAT: ‘strike, hit’
slá hnefanum í borðið ‘strike the table with one’s fist’
slá tveimur hlutum saman ‘strike two things together’
slá e-u utan í e-ð ‘hit something(D) against something(A)’
IMPERSONAL:
það sló mig ‘it struck me’
það sló á mig óhug ‘I was struck by dread’
það sló að mér ‘I was chilled to the bone’
sjúklingnum sló niður ‘the patient had a relapse’
Other phrases:
slá e-m e-ð ‘knock something(A) down to somebody(D) (at an auction)’
slá e-u föstu ‘settle something(D)’
slá e-n út af laginu ‘throw somebody(A) off; throw somebody off balance’
slá e-u frá sér ‘give something(D) up; let something go’
slá e-m gullhamra ‘flatter somebody(D); pay somebody a compliment’
slá e-n niður ‘knock somebody down’
slá e-u saman ‘combine something(D)’
slá e-ð sundur ‘beat something(A) to pieces’
slá e-u upp ‘make big headlines of something(D); blow something out of proportion’
slá e-n út ‘get the better of somebody(A)’
það sló út í fyrir honum ‘he started talking nonsense’
slá e-u við ‘hit something(D) against a wall’

slá e-m við 'do better than somebody(D)'
slá slöku við 'neglect something(D); be slack about something'

71. slíta, sleit, slitu, slitið 'snap, break, wear out, end, close, break off' (HST)
CASE ALTERNATION: ACC/DAT
IMPERSONAL USAGE: DATIVE SUBJECT, ACCUSATIVE SUBJECT
ACC:
slíta sundur 'break in two(A)'
slíta band 'snap a cord(A)'
DAT: 'wear, end, close'
slíta fötum 'wear out clothes(D)'
slíta fundi 'adjourn/close a meeting(D)'
slíta sambandi við e-n 'break off relations(D) with somebody(A)'
slíta trúlofun 'break off an engagement(D)'
slíta tali 'end a conversation(D)'
Impersonal:
e-u slítur 'something(D) comes to an end'
bátinn sleit upp 'the boat(A) was torn loose'
Other phrases:
slíta e-ð upp 'pull something(A) up'
slíta sér út 'wear oneself(D) out'

72. snúa (snú), sny, sneri, snéri, snöri, snúinn (-ið) 'turn' (E/HST)
CASE ALTERNATION: ACC/DAT
IMPERSONAL USAGE: DATIVE SUBJECT
snúa e-u 'turn something(D)'
snúa sér í hring 'turn (oneself(D)) around in a circle'
snúa e-u á íslensku 'translate/render something(D) into Icelandic'
snúa e-m 'change somebody's(D) mind'
ACC:
snúa sig 'twist one's(A) ankle/elbow'
Impersonal:
honum snérist/snerist hugur 'he changed his mind'
Other phrases:
snúa e-m á sitt mál 'persuade somebdody(D) to take up one's own viewpoint, convert somebody to one's own view'
snúa e-u að e-u 'turn something(D) toward something(D)'
snúa e-u upp í grín 'make a joke of something(D)'
snúa e-m til kristni 'convert somebody(D) to Christianity'
snúa e-n úr hálsliðnum 'break somebody's(A) neck'

73. sóða, -aði 'dirty, mess' (HST)
DATIVE OBJECT
CASE ALTERNATION: ACC/DAT
sóða e-ð út 'dirty something(A); make a mess somewhere'
sóða e-u af 'make sloppy work of something(D)'

74. sópa, -aði 'sweep, gather' (HST)
CASE ALTERNATION: ACC/DAT
IMPERSONAL USAGE: **það**
sópa gólfið 'sweep the floor'
sópa ryki af gólfinu 'sweep up the dust from the floor'

sópa e-u saman ‘gather something(D)’
IMPERSONAL:
það sópar að e-m ‘somebody(D) makes a striking impression’

75. splæsa, -ti, -t ‘splice; treat’ (HST)
CASE ALTERNATION: ACC/DAT
USED FOR NATIVE INFORMANT TEST
splæsa kaðal ‘splice a rope(A)’
splæsa e-u á e-n ‘treat somebody(A) to something(D)’

76. spóla, -aði ‘wind, reel, spool’ (HST)
CASE ALTERNATION: ACC/DAT
No examples given in HST.

77. sprauta, -aði ‘inject, spray, squirt’ (HST)
CASE ALTERNATION: ACC/DAT
USED FOR NATIVE INFORMANT TEST
ACC: ‘inject, spray’
sprauta bíl ‘spraypaint a car(A)’
DAT:
No example given.

78. spyrja, spurði, spurður (spurt) ‘ask, question, inquire, hear (as a result of questioning’ (E)
CASE ALTERNATION: ACC/GEN
spyrja e-n um e-ð = **spyrja e-n e-s** ‘ask somebody about something(A/G)’
Per HST:
ACC:
‘ask, question, examine’
spyrja e-n ‘ask, question someone(A)’
spyrja e-n um e-ð ‘ask somebody(A) about something(A)’
spyrja e-n spjörunum úr ‘question somebody(A) thoroughly’
spyrja e-n út úr ‘examine somebody(A)’
spyrja til vegar ‘ask the way’
ég spyr ekki að! ‘you don’t need to tell me!’
GEN:
‘inquire’
spyrja e-s ‘inquire about something(G)’
spyrja frétta ‘ask what’s new’

79. spyta, spytti, spytt(ur) ‘spit, squirt, spurt(refl)’ (E/HST)
DATIVE OBJECT/ALTERNATION?
spyta e-u ‘spit, disgorge something(D)’
spyta bjór ‘nail up and stretch a skin(A/D)’

80. stafa, -aði, -að(ur) ‘spell’ (E)
CASE ALTERNATION: DAT/ACC
láta e-n stafa ‘have somebody(A) spell’
sólin stafar geislum á vatnið ‘the sun(N) projects its rays(D) on the water’

81. standa, stend, stóð, stóðum, staðinn, (-ið) ‘stand, be standing, stay, remain, be; stick, last, endure, etc.’ (E)

IMPERSONAL USAGE: DATIVE OBJECT
CASE ALTERNATION: ACC/DAT
Mostly regular case marking, but:
Impersonal:
það stendur á hádegi 'it is exactly at noon'
meðan á því stendur 'while it lasts'
From HST:
mér stendur ótti af honum 'I am afraid of him'
mér stendur á sama 'I do not care; it's all the same to me'
honum stendur 'he has an erection'
það stendur á þér 'you are making us wait; you are holding us up'
thað **stendur vel/illa á fyrir mér** 'this suits me well/badly'
Other phrases:
standa e-n að verki 'catch somebody(A) redhanded'
standa e-m fyrir þrifum 'be a millstone around somebody's(D) neck'
e-ð stendur til 'something(A) is brewing'

82. stappa, -aði 'mash, stamp' (HST)
CASE ALTERNATION: ACC/DAT
IMPERSONAL: **það**
USED FOR NATIVE INFORMANT TEST
ACC:
'mash'
stappa kartöflur 'mash potatoes(A)'
DAT:
'stamp'
stappa niður fótunum 'stamp one's feet(D)'
stappa í e-n stálinu 'put heart(D) into somebody(A)'
Impersonal:
það stappar nærri ósvífni 'it verges on impudence'

83. steypa, steypti, steypt(ur) 'throw, hurl; pour out; cast, found, make of concrete (streets)' (E/HST)
CASE ALTERNATION: ACC/DAT
steypa yfir sig kápu 'throw a cape(D) over oneself'
From HST:
ACC:
'cast, found; make concrete castings, pour concrete'
steypa hús 'build a concrete house(A)'
DAT:
'overturn, topple'
steypa stjórn 'topple a government(D)'
steypa e-u um koll 'topple something(D) over'
steypa e-m af stóli 'dethrone somebody(D)'
steypa e-m í glötun 'plunge somebody(D) into ruin'

84. stinga, sting, stakk, stungum, stunginn (-ið) 'prick, stab, sting, pierce, put, thrust, stick' (E/HST)
CASE ALTERNATION: ACC/DAT
IMPERSONAL USAGE
USED FOR NATIVE INFORMANT TEST
stinga bréfum í póstkassa 'put letters(D) into the mailbox'

stinga e-u undir e-ð ‘run (thrust) something(D) under something(A)’
Question: check case in first example.
From HST:
ACC:
‘prick, stab, hurt, wound’
stinga sig ‘prick oneself(A)’
stinga gat á e-ð ‘prick a hole(A) in something(A)’
þetta stingur mig í hjartað ‘this cuts me to the quick’
DAT:
‘prick, stab, slip’
stinga hnífum í tréð ‘stick the knife(D) into the tree’
stinga e-u í vasann ‘slip something(D) into one’s pocket’
stinga bókinni í hilluna ‘put the book(D) onto the shelf(A)’
stinga sér ‘dive, plunge (oneself(D))’
IMPERSONAL:
það stakk mig ‘it struck me(A)’
Phrases:
stinga e-n af ‘give somebody(A) the slip’
stinga e-m inn ‘put somebody in prison’
stinga e-u undan ‘retain something(D) for oneself’
stinga e-u upp í sig ‘pop something(D) into one’s mouth’
stinga saman nefjum ‘whisper together’

85. stofna, -aði ‘found, establish, set up, place, put’ (HST)
CASE ALTERNATION: ACC/DAT
ACC:
‘found, establish, set up’
stofna fyrirtæki ‘set up a business(A)’
DAT:
‘place, put’
stofna e-u í voða ‘place something(D) in jeopardy’
stofna e-m í vanda ‘put somebody(D) in a difficult question’

86. taka, tek, tók, tókum, tekinn (-ið) ‘take, seize, grasp, catch, hold, buy, overtake, surprise, take (time), receive, accept, succeed, begin’ (E/HST)
CASE ALTERNATION: ACC/DAT; DOUBLE ACCUSATIVE
IMPERSONAL USAGE: ACCUSATIVE SUBJECT
REFLEXIVE IMPERSONAL: DATIVE SUBJECT
With accusative:
taka (leigu) bíl á götunni ‘hail a taxi(A) in the street’
taka mynd ‘take a picture(A); snap a picture’
taka e-n í skóla ‘admit somebody to school’
taka tíma ‘take lessons; take courses’
taka próf ‘take an examination’
taktu þennan hatt ‘buy this hat’
taka ost ‘make cheese’
ef dagur tæki þau (pl. acc.) ‘if day should surprise them’
höfnin tekur 100 skip ‘the harbor holds 100 ships(A)’
Double accusative:
það tók mig langan tíma ‘it took me(A) a long time(A)’
With dative:
t**aka e-m** ‘receive, welcome somebody(D)’
taka e-m vell/illa ‘receive somebody(D) well/in an unfriendly fashion’

taka e-u ‘put up with, accept something(D); resign oneself to something’
taka fram förum ‘make progress’
Impersonal:
mig tekur í fótinn ‘my foot hurts me’
veðrið tók að batna ‘The weather began to improve’ (lit. ‘the weather took to improve’)
From HST:
ACC: ‘take, seize, capture, get, obtain, understand, accept, hold’
taka e-ð með höndunum ‘take hold of somebody(A)’
taka borg ‘seize a city(A), take a city’
taka sér far með bát/let ‘get a passage with a boat/train’
ég tók það svo ‘that was how I understood it’
taka borgun fyrir e-ð ‘accept payment(A) for something’
taka mark á e-u ‘accept something as valid’
taka trú ‘accept a religion(A)’
húsið tekur 500 manns ‘the house holds 500 people’
DAT: accept, react, return’
taka boði ‘accept an offer(D)’
taka kveðju e-s ‘return somebody’s greeting(D)’
taka e-u vel/illa ‘react favorably/unfavorably to soemthing’
Impersonal:
það tekur því ekki ‘it is not worth the trouble’
Reflexive:
mér tókst að gera þetta ‘I succeeded in doing this’
Phrases:
taka e-ð á sig ‘take on responsibility for something’
taka e-ð að sér ‘undertake to do something’
taka e-n að sér ‘take somebody(A) into one’s care’
taka e-ð af e-u ‘remove something(A) from something(D)’
taka e-ð fram yfir annað ‘prefer something(A) to something else’
taka e-m fram ‘be superior to somebody(D); be better than somebody’
taka e-ð fyrir e-ð ‘accept payment(A) for something’
taka e-ð fyrir ‘deal with something(A)’
taka e-n fyrir ‘harass somebody(A); harry somebody’
taka e-n af lífi ‘execute somebody(A)’
taka e-ð aftur ‘take something(A) back’
taka orð sín aftur ‘take back one’s word(A)’
taka e-ð frá e-m ‘take something(A) away from somebody(D)’
taka sér e-ð fyrir hendur ‘find oneself something to do’
taka e-ð saman ‘gather something(A) together’

87. tálma, -aði ‘hinder’ (HST)
DATIVE OBJECT
CASE ALTERNATION: DAT/ACC
Case alternation (Dat/Acc) per HST; no examples given.

88. treysta, -i, treyst ‘strengthen, rely on, depend on, trust’ (HST)
CASE ALTERNATION: ACC/DAT
ACC: ‘strengthen’
DAT: ‘depend on, rely on, trust’
treysta e-u ‘depend on something(D)’
treysta e-m ‘trust somebody(D)’

89. troða, treð, tróð, tróðum, troðinn (-ið) ‘tread (on), trample (on)’ (E/HST)
CASE ALTERNATION: ACC/DAT
USED FOR NATIVE INFORMANT TEST

troða (á)
with dative: ‘stuff, cram’
troða sér inn í ‘cram oneself into’
From HST:
ACC: ‘trample, stamp on, tread, walk, stuff’
troða e-n undir ‘trample somebody(A) underfoot’
troða e-ð út ‘stuff something(A)’
DAT: ‘stuff, fill, pack, press, squeeze’
troða e-u í e-ð ‘stuff something(D) into something(A)’
troða e-u inn í e-ð ‘squeeze something(D) into something(A)’
troða e-m um tær ‘harass somebody(D); bother somebody’
troða e-u upp á e-n ‘force something(D) on somebody’

90. tefla, -di, -t ‘play (chess), risk’ (HST)
CASE ALTERNATION: ACC/DAT
ACC: ‘play’

tefla eina skák ‘play a game(A) of chess’
DAT: ‘risk’
tefla e-u í tvísynu ‘put something(D) in danger’

91. tjasla, -aði ‘patch up, mend hastily’ (HST)
CASE ALTERNATION: ACC/DAT

Case alternation per HST; no examples given. Verb not found in E.

92. úða, -aði ‘spray, atomize’ (HST)
CASE ALTERNATION: DAT/ACC
IMPERSONAL USAGE: **það**

úða e-u á e-ð ‘spray something(A) with something(D)’
úða e-ð ‘spray something(A)’
úða e-u í sig ‘gobble something(D) up’
Impersonal:
það úðr ‘it is drizzling’

93. vefja, vafði, vafinn (-ið) ‘wrap up’
CASE ALTERNATION: ACC/DAT
REFLEXIVE IMPERSONAL: DATIVE SUBJECT

vefja e-ð (innan) í e-u ‘wrap something(A) up in something(D)’
HST:
vefja e-ð inn ‘wrap something(A) up’
vefja e-ð upp ‘wind something up’
vefja e-u/e-ð saman ‘roll something up’
vefja e-u um e-ð ‘wind/wrap something(D) around something(A)’
vefja sig utan um e-ð ‘coil around something(A)’
Reflexive:
e-m vefst tunga um tönn ‘somebody(D) is at a loss for an answer/response; somebody is tongue-tied’
það vafðist fyrir mér ‘I(D) had problems with it’

e-r er skuldum vafinn ‘somebody is deep in debt’

94. velgja, velgdi, velgdur (velgt) ‘warm up, warm’ (E/HST)
CASE ALTERNATION: ACC/DAT
IMPERSONAL USAGE: ACCUSATIVE SUBJECT
velgja matinn ‘warm up the food(A?)’
velgja sér ‘warm oneself(D)’
Impersonal:
e-n velgir við e-u ‘somebody(A) is nauseated by something(D)’
mig velgir við e-u ‘I am nauseated at something’

95. verja, varði, varinn (-ið) ‘defend, guard against’ (E/HST)
CASE ALTERNATION: ACC/DAT
verja e-n e-u ‘guard somebody(A) against something(D)’
ACC: ‘defend, protect, save’
verja sig ‘defend oneself(A)’
verja mál ‘defend a case(A) in court’
verja e-ð fyrir e-u ‘protect something(A) against/from something(D)’
DAT: ‘use, spend’
verja tíma sínum til e-s ‘spend one’s time(D) one something(G)’
verja peningum sínum til e-s ‘spend one’s money(D) on something(G)’

96. vinda, vind, vatt, undum, undinn (-ið) ‘wind, wring, twist, turn’
CASE ALTERNATION?
Per HST, takes accusative object, not dative, so can serve as a counterexample.
vinda e-ð upp á e-ð ‘wind something(A) around something(A)’
But:
vinda sér að e-m ‘turn (oneself(D)) quickly around to somebody(D)’
vinda sér e-ð ‘go (oneself(D)) somewhere(A) fast’

97. vinna, vann, unnu, unnið ‘work, perform, do a job, win’ (HST)
CASE VARIATION? DAT/ACC
vinna verk ‘do a job(A)’
vinna e-m gagn ‘do somebody(D) good(A); do somebody a favor’

98. voga, -að ‘dare, risk’ (HST)
DATIVE OBJECT: INSTRUMENTAL
CASE ALTERNATION: ACC/DAT
ACC: ‘dare’
voga e-ð ‘dare to do something(A)’
voga sér að gera e-ð ‘dare to do something’
DAT: ‘risk’
voga e-u ‘put something(D) at risk’

99. vökva, -að ‘water (flowers) (E/HST)
CASE ALTERNATION: ACC/DAT
USED FOR NATIVE INFORMANT TEST
Case alternation noted by HST, but no examples given. E. gives only:
vökva blóm ‘water flowers(A)’

100. ylja, -að ‘warm up, heat up’ (HST)
CASE ALTERNATION: ACC/DAT

ylja sér ‘warm oneself(D)’
Examples of the variation were not given by HST.

101. þeyta, -ti, -t ‘whip, blow, fling, dash, rush’ (HST)
CASE ALTERNATION: ACC/DAT
COUNTER EXAMPLE?
ACC: ‘whip, blow’
þeyta rjóma ‘whip cream(A)’
þeyta lúður ‘blow a horn(A)’
DAT: ‘fling, blow’
vindurinn þeyti laufunum burt ‘the wind(N) blew the leaves(D) away’
REFL: ‘dash, rush’

102. þora, -ði, -að ‘have courage, dare’ (HST)
CASE ALTERNATION: DAT/ACC
þora e-ð ‘have the courage to do something(A)’
ég þori það/því ekki ‘I(N) won’t risk it; I don’t dare do it’
það er ekki þorandi ‘it is too risky’

103. þrengja, -di, -t ‘narrow, constrict, delimit’ (HST)
CASE ALTERNATION: ACC/DAT
IMPERSONAL USAGE: **það**
Impersonal:
það þrengir að e-m ‘somebody(D) is getting into a bad spot’
Phrases:
þrengja e-u saman ‘press something(D) together’
þrengja e-u upp á e-n ‘force something(D) on somebody’

104. þurfa, þarf, þurfum, þurfti, þurft (pret. pres. verb) ‘need, have, be necessary’ (E/HST)
CASE ALTERNATION: ACC/GEN
IMPERSONAL USAGE: ACCUSATIVE/GENITIVE SUBJECT
þurfa e-ð, þurfa e-s (með) ‘need something(A/G)’
hún þarf þess með ‘she(N) (certainly) needs it(G)
þú þarft þess ekki ‘you(N) do not have to do it(G)’
Impersonal:
það(þess) þarf ekki ‘that(A/G) is not necessary’
það þarf að ger þetta ‘this needs to be done’

105. þurrka, -aði ‘dry (off), wipe’ (HST)
CASE ALTERNATION: ACC/DAT
þurrka sér ‘wipe oneself(D) dry’
þurrka sig ‘dry oneself’
þurrka sér í framan ‘wipe one’s(D) face’

106. þvo, þvær, þvoði, þvegið ‘wash’ (HST)
CASE ALTERNATION: ACC/DAT
þvo sér ‘wash oneself(D)’
þvo þvott ‘do the laundry’

107. þvæla, -di, -t ‘talk nonsense, drivel, babble; crumple’ (HST)

CASE ALTERNATION: ACC/DAT

ACC: ‘talk nonsense, drivel, babble, confuse’

þvæla mál ‘confuse an issue(A)’

DAT: ‘crumple’

þvæla e-u saman ‘crumple something(D)’

Appendix B

Utterances Excluded from Analysis of Test Results

B.1. Overview of Excluded Utterances

Twenty-one utterances from reference (58) above were tested but were excluded from the results of the main test. They appeared to take dative case marking on objects due to thematic relations not under consideration in this thesis (e.g., locative, benefactive, etc.). These thematic relations have well-known dative case marking patterns that are not relevant to the central questions of this thesis.

To check against possible distortion of the results resulting from the exclusion, a chi square test was done before and after the exclusion of these verbs. The chi square tests confirm a statistical probability of 95% or better that there is a correlation between dative case and motion – whether or not the utterances below are excluded. Therefore, there is a high level of certainty that the test results are not skewed by exclusion of the utterances below, and that the correlations between semantics and case marking are valid statistically.

B.2 Statistics Before Exclusion of Any Utterances

The following table shows the pattern of case marking associated with native speaker judgments on whether the direct object moved or not. This table includes all utterances, including those that were excluded from the final results.

(100) Case Marking – MBNOA Patterns, All Utterances

	Accusative		Dative		
	No.	% of Total	No.	% of Total	Totals
Object Moves	5	7.58%	61	92.42%	66
No Movement	48	78.69%	13	21.31%	61
Uncertain	5	26.32%	14	73.68%	19
Totals	58	39.73%	88	60.27%	146

The “uncertain” category (shown as “?” in some tables) was excluded from the chi square test. That yielded the following pattern.

(101) Summary of All Utterances Except for Excluded Uncertainties

	Accusative	Dative	Totals
Object Moves	5	61	66
No Movement	48	13	61
Totals	53	74	127

B.3 Correlation Between Dative Case and MBNOA

The next chi square test checks whether any correlation of accusative or dative case marking is possibly due to chance. Of the 66 "yes" (MBNOA) answers, 61 instances occur with dative case, and 5 instances occur with accusative case. The null hypothesis is that the distribution of case marking in verbs that necessarily entail movement of the object is due to chance. The alternate hypothesis is that there is a correlation between MBNOA and case. In the overall group, 42% of the utterances involve accusative case, and 58% involve dative case. Therefore, in an even distribution, 42% of the non-MBNOA utterances would appear with accusative, and 58% would occur in dative. That would predict 28 occurrences with accusative, and 38 with dative. The observed frequency is that 5 occur with accusative, and 61 occur with dative. Here is the statistical analysis.

(102) Is MBNOA Associated with Dative Case?

	fe	fo	fo-fe	fo-fe squared	(fo-fe)squared/fe	
D	38	61	+23	529	529/38=	13.921
A	28	05	-23	529	529/28 =	18.893

Chi squared is the sum of last column = 32.814

At the 0.05 level, the critical value for the level of significance is 3.841. The computed chi square is 32.814, which is far above the level of significance. The null hypothesis is

rejected that MBNOA is associated in a random distribution with either accusative or dative case. It is clear that there is a significant association between dative case and MBNOA. There is less than a 5% probability that this correlation is due to chance.

B.4 Correlation Between Patient Objects and Accusative Case

The next chi square test checks for a correlation between verbs with non-MBNOA objects and case marking. Of the 61 instances with "no" answers to whether movement of object is entailed by the meaning of the verb, 48 occur with accusative case, and 13 occur with dative case. The null hypothesis is that the distribution is due to chance. The alternate hypothesis is that there is a pattern of correlation not accountable for by chance. Of the entire corpus, after uncertainties were excluded, 42% of the utterances involved accusative case, and 58% involved dative case. Therefore, it would be expected that an even distribution would have 42% of the non-MBNOA utterances associated with accusative case, and 58% with dative case. That would yield an expected 26 instances with accusative, and 35 with dative case. The observed frequency is 48 with accusative and 13 with dative. Here is the statistical outcome.

(103) Observed frequency is 47 accusative case marking, 13 dative case marking.

Expected vs. observed frequencies (fe vs. fo)

	fe	fo	fo-fe	fo-fe squared	(fo-fe)squared/fe
A	26	48	+22	484	484/26 = 18.615
D	35	13	-22	484	484/35 = 13.829

Chi squared is sum of last column = 32.444

The computed chi square is 32.444, which is far above the 3.841 level of significance. The null hypothesis is rejected that there is no association in these utterances with objects that do not necessarily move and accusative case marking. The conclusion is that the accusative case is strongly correlated to lack of MBNOA, and that this is likely a part of

the verb semantics for the set of verbs tested. There is less than a 5% probability that this association is due to chance.

B.5 Conclusion re Excluded Utterances

In conclusion, the chi square tests confirm strong correlations between: (1) MBNOA and dative case; and (2) non-MBNOA and accusative case. This is shown to be true even when the tests are run on all the tested data, including the utterances below that were excluded. By this means, it is established that exclusion of these utterances below did not skew the data or the conclusions.

(104) Utterances Excluded Due to Thematic Roles Likely Not Related to the This Thesis

	Verb	**Examples**	**Case**	**Object Necessarily Moves? / Notes**
1.	**halda** 'hold, keep, think, consider, hold; give, deliver, celebrate, proceed'	**halda e-m (e-u)** 'keep/retain/detain somebody(D) (something(D))'	D	? / Locative
2.	**halda** 'hold, keep, think, consider, hold; give, deliver, celebrate, proceed'	**halda e-u föstu** 'hold firmly onto something(D)'	D	? / Locative
3.	**halda** 'hold, keep, think, consider, hold; give, deliver, celebrate, proceed'	**halda stefnu** 'stick to a course'	D	? / Locative
4.	**hæfa** 'hit'	**fötinn h. honum vel** 'the clothes fit him(D) well'	D	No / Locative
5.	**lysa** 'describe; light up, illuminate'	**lysa e-u yfir** 'declare something(D) solemnly' (literally: 'declare something(D) over')	D	No / Locative

6.	**lysa** ‘describe; light up, illuminate’	**e-ð lysir sér í e-u** ‘something reveals itself(D) in something’	D	? / Possible locative
7.	**maka** ‘smear, daub’	**maka sig í sólolíu** ‘put on sun lotion’ (on ‘self(A)’)	A	No / Locative
8.	**maka** ‘smear, daub’	**maka e-n í sólolíu** ‘daub somebody(A) with sun lotion’	A	No / Locative
9.	**ríða** ‘ride’	**ríða húsum** ‘ride astride the ridge of the roof; rid the house(D) of spooks’	D	No / Locative
10.	**ryðja** ‘clear’	**ryðja e-u braut** ‘pave the way for something(D)’ (literally: ‘clear something(D) road’)	D	? / Benefactive
11.	**skjóta** ‘shoot’	**skjóta e-m skelk í bringu** ‘frighten somebody(D)’ (literally: ‘shoot someone(D) fright to chest’)	D	No / Locative
12.	**skjóta** ‘shoot’	**skjóta e-u á frest** ‘postpone something(D)’ (literally: ‘shoot something(D) on a respite’)	D	? / Locative
13.	**skjóta** ‘shoot’	**skjóta e-m ref fyrir rass** ‘outwit somebody(D)’ (literally: ‘to shoot somebody(D) fox before rump’)	D	No / Locative
14.	**slá** ‘beat, strike, smite, kick, etc.’	**slá trommu** ‘beat a drum(D)’	D	No / Locative
15.	**slá** ‘beat, strike, smite, kick, etc.’	**slá e-m e-ð** ‘knock somebody(D) something(A)’ ‘knock something(A) down to somebody(D) (at an auction)’	D	Yes / Locative
16.	**slá** ‘beat, strike, smite, kick, etc.’	**slá e-m við** ‘do better than somebody(D)’	D	No / Locative
17.	**slá** ‘beat, strike, smite, kick, etc.’	**slá slöku við** ‘neglect something(D); be slack about something’ (literally: ‘beat slack(D) at’)	D	No / Locative

18.	**splæsa** ‘splice; treat’	**splæsa e-u á e-n** ‘treat something(D) to somebody(A)’ ‘treat somebody(A) to something(D)’	D	No / Locative
19.	**stappa** ‘mash, stamp’	**stappa í e-n stálinu** ‘put heart(D) into somebody(A)’ (literally: ‘to put in somebody(A) steel(D)’)	D	Yes / Locative
20.	**troða** ‘tread (on), trample (on)’	**troða sér inn í** ‘cram oneself(D) into’	D	Yes / Locative
21.	**troða** ‘tread (on), trample (on)’	**troða e-m um tær**[70] ‘harass somebody(D); bother somebody’ (literally:’tread somebody(D) about the toe’; cf. English ‘step on someone’s toes’)	D	No / Locative

[70] Variant of **tá**’toe’.

Appendix C

Orthographical Features of Icelandic

The following is a rough guide to Icelandic pronunciation.

Spelling Used		Rough Notes Phonetics	Or Comparable English Sound
Á; á	=	[aw]	‘ou’ in ‘house’
Au; au	=	[öi]	no equivalent
Æ; æ	=	[ay]	‘y’ in ‘sky’
Ð; ð	=	[ð]	‘th’ in ‘the’
É; é	=	[ye]	‘ye’ in ‘yes’
F; f	=	[f]	in most environments
		[v]	between vowels or word-final
		[b]	when followed by l, or n
		[m]	in -fnd or -fnt
Í; í	=	[i:]	‘ee’ in ‘feel’
N; n	=	[n]	in most cases
		[d]	first n pronounced like ‘d’ in words like ónn, aunn, einn, eynn; second ‘d’ is merely breathed in these cases
Ó; ó	=	[ow]	‘o’ in ‘home’
Ö; ö	=	[ö]	‘u’ in ‘turn’
Þ; þ	=	thorn	‘th’ in ‘thanks’
Ú; ú	=	[u:]	‘oo’ in ‘moon’

Appendix D

Case Marking in Icelandic

Table I: Pronominal System of Modern Icelandic

	First Person		
	Singular	Dual	Plural
Nominative:	ég	við	vér
Accusative:	mig	okkur	oss
Dative:	mér	okkur	oss
Genitive:	mín	okkar	vor

	Second Person		
	Singular	Dual	Plural
Nominative:	þú	þið	þér
Accusative:	þig	ykkur	yður
Dative:	þér	ykkur	yður
Genitive:	þín	ykkar	yðar

	Third Person (Sg.)		
	Masc.	Neuter	Fem.
Nominative:	hann	það	hún
Accusative:	hann	það	hana
Dative:	honum	því	henni
Genitive:	hans	þess	hennar

	Third Person (Pl.)		
	Masc.	Neuter	Fem.
Nominative:	þeir	þau	þær
Accusative:	þá	þau	þær
Dative:	þeim	þeim	þeim
Genitive:	þeirra	þeirra	þeirra

To assist the reader further in following the examples in Icelandic, it is necessary to understand the morphological case marking on nouns. Icelandic has masculine, feminine, and neuter nouns. There is only one article, the definite article **hinn**, which is inflected as follows (Jónsson, 1927).

Table II. Nominal Case Marking in Modern Icelandic

	Singular		
	Masculine	Feminine	Neuter
Nominative:	hinn	hin	hið
Accusative:	hinn	hina	hið
Dative:	hinum	hinni	hinu
Genitive:	hins	hinnar	hins

	Plural		
	Masculine	Feminine	Neuter
Nominative:	hinir	hinar	hin
Accusative:	hina	hinar	hin
Dative:	hinum	hinum	hinum
Genitive:	hinna	hinna	hinna

Hinn appears independently only when it is used with an adjective that is being employed as a nominal, or when it modifies a noun that is further delimited by an adjective or an ordinal number. In these cases, it stands before the adjective and is declined as above.

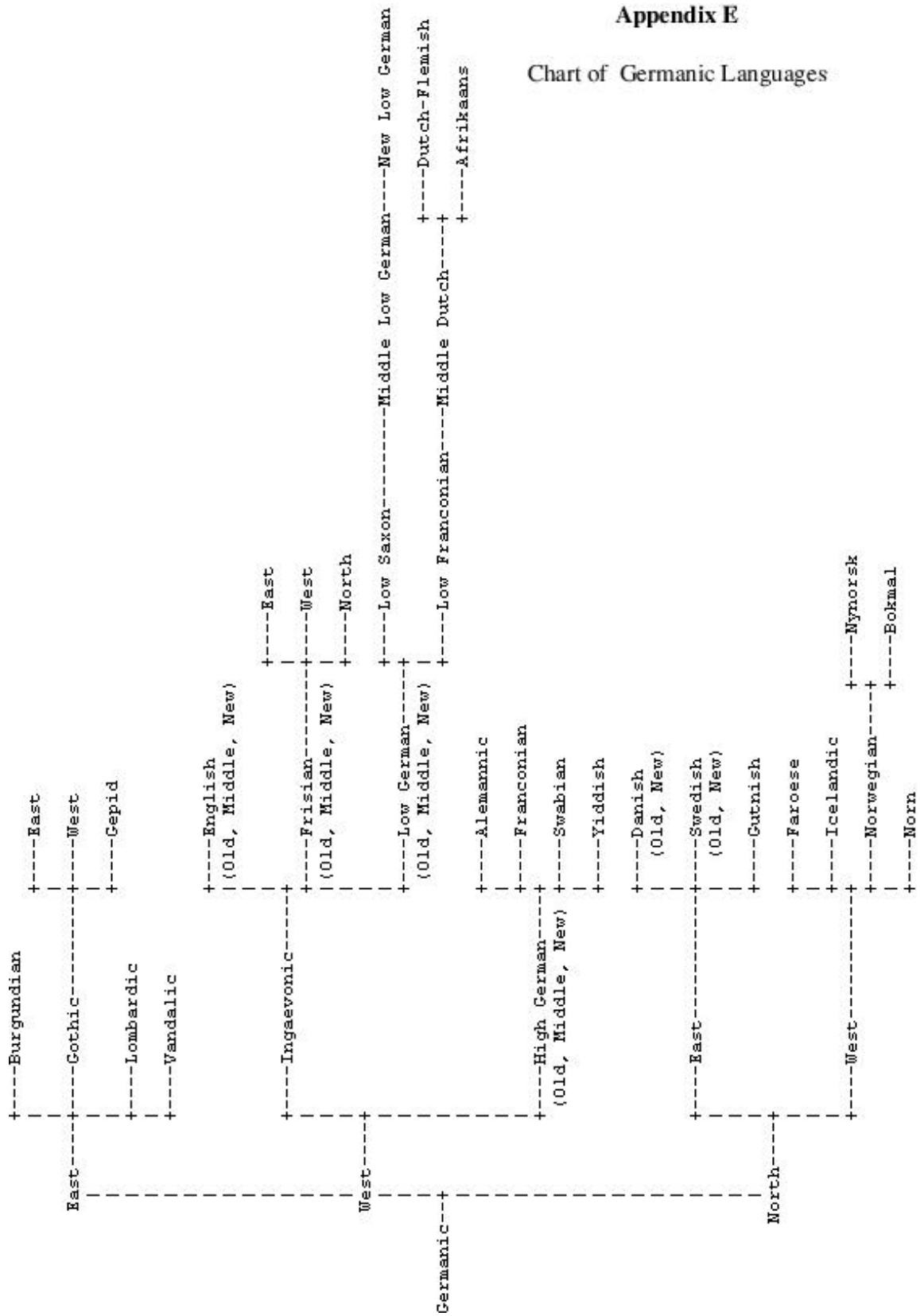
Otherwise, and this will be the norm throughout this paper, **hinn** is suffixed to the noun and the initial **h-** is dropped. (The **-i-** is also dropped in a variety of cases, such as if the word ends in a short or unaccented vowel.[71]) Thus, for example, the singular neuter noun **barn** 'child' is declined as follows: **barniđ** 'the child(N)'; **barniđ** 'the child(A)'; **barninu** 'the child(D)'; and **barnins** 'the child(G)'.[72]

[71] The **-i-** is also dropped after the **-r** of nominative and accusative plural; **-i-** is always dropped after long **-e**; neuter nouns ending in long or accented vowels other than **-e** retain the **-i-** in the nominative and accusative singular and plural. There are other rules, but these main rules cover most examples in this paper.

[72] Parenthetical (N) after the gloss indicates nominative case, (A) means accusative case, (D) refers to dative case, and (G) stands for genitive case.

Appendix E

Chart of Germanic Languages



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