## Case Merger in Indo-European

 and the Independent Datives in Old Irish.
## Statement on plagiarism and fraud

I declare that I have not committed plagiarism or fraud in making this thesis.

Johanna Rovers, 15-08-2016.

## Index.

Introduction ..... 4
Theoretical Framework ..... 7
Methodology ..... 9
Part I: Theoretical and Historical Background.
In what different ways can cases merge? ..... 14
Why do certain cases merge in Indo-European? ..... 19
How and why did cases merge in the Celtic languages? ..... 23
Part II: Data Analysis.
Which case do the Old Irish independent datives reflect? ..... 32
Which case do the independent datives reflect in the glosses? ..... 32
Which case do the independent datives reflect in prose (legal texts)? ..... 38
Which case do the independent datives reflect in poetry? ..... 39
Is there a difference in the use of the datives among the different types of text? ..... 43
Is one of the four cases the underlying case for (most) independent datives? ..... 48
Conclusions ..... 49
Bibliography ..... 50
Appendix ..... 54

## Introduction.

Old Irish has a case system consisting of five cases: nominative, vocative, accusative, genitive and dative. However, when looking at Proto-Indo-European, the language from which the Celtic languages and thus the Irish language evolved, there is a case system consisting of eight cases: nominative, vocative, accusative, genitive, ablative, dative, instrumental and locative. ${ }^{1}$

Somewhere along the way the Celtic languages have lost three cases - the ablative, instrumental and locative. These cases did not just disappear; they collapsed into the dative case. ${ }^{2}$ Case merger, as this phenomenon is called, is not uncommon; it not only occurs frequently in the Indo-European languages, but also in all of the other language families in the world. ${ }^{3}$

Some examples of case merger in the Indo-European language family are: in Greek and Slavic the genitive and ablative merged, in Romanian and Albanian the nominative and accusative have merged, in Greek the dative and the locative, in Latin the ablative, instrumental and locative, and in Germanic, as in Old Irish, the dative, ablative, instrumental and locative have merged. ${ }^{4}$

Since the ablative, instrumental and locative did not disappear, but instead merged with the dative, the functions of these three cases should still be visible in the use of the dative. However, the use of the dative case in Old Irish is mostly restricted to being governed by prepositions; it almost never occurs without one.

When the dative occurs with a preposition, it is difficult to tell whether the sense that is conveyed is a remnant of an underlying case, or if just the sense of the preposition that is being used is conveyed. The meaning of prepositions covers up earlier usage of cases, that is, many prepositions require the dative, for instance ó meaning 'from', where earlier a noun in the ablative would have been used.

Fortunately, there are instances of datives that occur without a preposition, so-called independent datives, where it is possible that there are remnants of the ablative, instrumental or locative sense.

These independent datives do not occur regularly in "ordinary" prose, apart from a couple of petrified constructions, but 'some remarkably free uses of the dative are found in poetic and legal language ${ }^{5}$. This means that they do occur more frequently in legal texts and in poetry, but even in those types of texts there is not an abundance of them.

Even though there is not a large number of independent datives, these will be sought out in this thesis and they will be analysed to see whether they reflect an underlying dative, ablative, instrumental or locative. If the results are that one case is the reflected in most of the independent datives this would aid both students and scholars translating Old Irish, since it is now often very difficult to interpret independent datives because there is a great variety of translating options.

This research will be done on the basis of a number of research questions, and this thesis will consist of two parts: theoretical and historical background, and data analysis

## Part I: Theoretical and Historical Background.

- In what different ways can cases merge?
- Why do certain cases merge in Indo-European?
- How and why did cases merge in the Celtic languages?

Part II: Data Analysis.

- Which case do the Old Irish independent datives reflect?
- Which case do the independent datives reflect in the glosses?

[^0]- Which case do the independent datives reflect in narratives (legal texts)?
- Which case do the independent datives reflect in poetry?
- Is there a difference in the use of the datives among the different types of text?
- Is one of the four cases the underlying case for (most) independent datives?


## Part I.

In Part I the theory behind case merger will be explored by means of a literature review. This will focus mostly on the Indo-European evidence, because this will provide more insights on the Celtic situation since the Celtic languages are part of the Indo-European language family.

In the first section the mechanics of case merger will be discussed: how cases merge and what different ways there are of doing this. In the second section the reasons why certain cases easily merge in Indo-European and others do not will be explored; this will also give insight into why the ablative, instrumental and locative merged with the dative, and not with another case.

The third section will discuss how the four cases merged in the Celtic languages. This will be done not only on the basis of the Old Irish evidence, but also on the basis of Continental Celtic languages: Lepontic, Gaulish and Celtiberian. The information that was discussed when answering the first two questions will be applied to the Celtic evidence, hopefully showing how the three cases merged with the dative.

Since the Continental Celtic languages are written down much earlier than the earliest Old Irish some of the cases are preserved. That is, the written evidence, usually inscriptions in stone, lead, bronze, pottery or coins, stems from the time before or during the merger of the dative, ablative, instrumental and locative.

These languages may have preserved all the different cases inherited from Indo-European, and it may even be possible to see the merger in progress. This will hopefully give a good insight in what exactly happened to the case system.

## Part II.

In Part II the Old Irish independent datives will be discussed. This will be done on the basis of a number of texts out of which the independent datives will be collected, analysed and categorized as dative, ablative, instrumental or locative in sense.

For this, not only prose legal texts and poetry will be used, but also the three large collections of Old Irish glosses. Glosses are the oldest source of Old Irish ${ }^{6}$, and they are also contemporary to the manuscript they are found in, so there can be no errors of a later, Middle Irish, scribe copying. Furthermore, there is a possibility, since they are much older than most of the written Old Irish, that they contain more independent datives than is usual, assuming that the use of independent datives is archaic.

All of these texts stem from the Old Irish period; that is, they are dated to 900 AD (the end of the Old Irish period) or earlier. This is important because in the Middle Irish period there are some phonological changes, making every unstressed vowel a schwa, which makes it difficult to discern case endings. This means that it is very difficult to state whether something is actually a dative, and even if it is possible to say so, it cannot be certain that the scribe actually knew it was a dative, or if he just wrote something down.

Therefore only Old Irish texts will be discussed, and these are given here, sorted by which type of text it is:

1. For the glosses, the oldest source of Old Irish material, and thus most likely to represent the oldest use of independent datives, these texts will be used:

- The Milan Glosses ${ }^{7}$

[^1]- The St. Gall Glosses ${ }^{8}$
- The Würzburg Glosses ${ }^{9}$

2. For the narrative texts only legal texts will be used; apart from legal texts, we do not find many independent datives in "ordinary" prose, even though it would still be interesting to see how the independent datives would behave outside of a set context.

- Críth Gablach ${ }^{10}$
- Bechbretha ${ }^{11}$
- Uraicecht na Ríar ${ }^{12}$
- Dí Astud Chor (only the sections that are written in prose) ${ }^{13}$

3. For the poetry a large number of individual poems from several collections will be used, in addition to one longer poem and legal poetry. In poetry independent datives are often used as a stylistic element, most specifically the dative plural because it is a very marked form. Still it should be interesting to see how these should be interpreted.

- The Leinster Poems ${ }^{14}$
- Poetry from Early Irish Lyrics by Gerard Murphy ${ }^{15}$
- Tiughraind Bhécáin ${ }^{16}$
- Dí Astud Chor (only the sections that are written in verse) ${ }^{17}$

Recapitulating, this thesis will firstly look into case merger in Indo-European, that is, how and why cases merge, and then apply this information to the Celtic languages and see how the dative, ablative, instrumental and locative merged. Secondly, and more importantly, it will research the independent datives in Old Irish, see how they are interpreted, and if they reflect an underlying dative, ablative, instrumental or locative.

The aim of this thesis is to provide insight in the merger of the dative, ablative, instrumental and locative in the Celtic languages. Furthermore it hopes to provide handles on how to interpret independent datives, that is, if these datives mostly reflect one underlying case, or if the datives in a certain type of text mostly reflect one case.

[^2]
## Theoretical Framework.

For this thesis some terms need to be defined: firstly what an independent dative consists of in Old Irish. However, even more important are the definitions of the four different cases that are being researched: dative, ablative, instrumental and locative.

That is, it is impossible to claim that a certain independent dative reflects another underlying case if we have not determined what these cases represent exactly. Therefore this theoretical framework has been included to give definitions of the Old Irish independent datives and the different cases

## Definition of an Old Irish independent dative.

Independent datives in Old Irish are nouns in the dative case that are not dependent on a preposition, but not all of the different uses of a dative without a preposition are useful for this research. In his Old Irish Grammar Rudolf Thurneysen gives a list of instances in which a dative can occur without a preposition:

1. After comparatives.
2. In apposition to personal pronouns.
3. The dative of the substantivized neuter adjective serving as an adverb. ${ }^{18}$ He then continues, under point 3 , to discuss some 'some remarkably free uses of the dative ${ }^{19}$. This free use of the dative is exactly what we are looking at in this thesis. The independent dative in Old Irish can thus be defined as a dative that does not follow a preposition or comparative, that is not in apposition to a personal pronoun and that is not a neuter adjective used adverbially. ${ }^{20}$

## Definition of the dative case.

In PIE the dative expresses the indirect object, possession and the beneficiary. The function of indirect object is not one that needs explaining, but the other two might need some elaboration. The dative can express possession in sentences such as: 'there is tea to me', i.e. 'I have (am in the possession of) tea'. When it expresses the beneficiary it almost always refers to an animate noun, and it reflects the person for whom something is done, such as: 'I make tea for my mother'. ${ }^{21}$

According to Silvia Luraghi and Ashild Naess the dative case is mostly characterized by animacy, that is, the word in the dative case is usually a human or other sentient being. Semantic roles that can be expressed by the dative are: recipient, beneficiary/maleficiary, experiencer, purpose and goal. Recipient is a semantic role that is easily understood, it denotes the person who is receiving the object: 'I give tea to you'. For beneficiary see above, maleficiary is technically the same except for the fact that it is not positive. Experiencer is when a person is partially involved, but there is not necessarily a benefit to it. An example of this can be found in German: 'Mir ist schlecht' meaning 'I feel sick'. ${ }^{22}$

Purpose and goal are two semantic roles not used with animate nouns, but with inanimate nouns. Purpose denotes a reason: 'she makes tea for drinking', that is, with that particular purpose. Goal is as a semantic role not very difficult to grasp, as it is a local function: 'we are walking to the teashop ${ }^{\prime 23}$ All of these different semantic roles of the dative will be taken into account when analysing the Old Irish data.

[^3]
## Definition of the ablative case.

In PIE the ablative expresses the source. This is mostly expressed by using the prepositions 'from' and 'since', which is more temporal in nature. An example is: 'This tea comes from India'. Source can indicate the original place or owner of an object of person, but it can also denote the person or object from whom a physical sensation emerges. This variant of source is used with certain kinds of verbs, for instance 'watching' and 'hearing'. ${ }^{24}$

## Definition of the instrumental case.

In PIE the instrumental can express means or agent. Means denotes the object that is being used as an instrument, i.e. 'he carried water with (by means of) a bucket' ${ }^{25}$ The instrumental also expresses the comitative, a semantic role denoting accompaniment. Luraghi believes that the instrumental use has evolved from the comitative, the case that denotes the object/person one is doing something with, i.e. 'he drank tea together with his friend' ${ }^{26}$

The instrumental can also express the agent in passive sentences, for instance: 'the tea was bought by my mother'. As with the dative case all these semantic roles will be categorised under the heading instrumental, but when there are notable differences in the use of the instrumental in the different texts, these will most certainly be noted.

## Definition of the locative case.

As the name already implies, locatives denote a location. In PIE these express the place where. This can be not only a physical location, but can also indicate a place in time. This is usually expressed with the prepositions 'in' or 'at', i.e. 'I drink tea in my room at 5 pm '. An important thing to realize with this case is the fact that there is not motion implied, it is a place or time in which the object is not moving. ${ }^{27}$

## Summary.

The Old Irish independent dative is defined as noun in the dative case that is not governed by a preposition, after a comparative, in apposition to a personal pronoun or serving as an adverb.

The dative case conveys a large number of semantic roles: it can not only express the indirect object and possession, it also expresses the the beneficiary/maleficiary, recipient, purpose, goal and experiencer.

The ablative can only denote source, and the instrumental can convey means, agent or the comitative. Lastly the locative expresses location, be it temporal or physical.

[^4]
## Methodology.

It is important to describe which methods are being used when researching, to not only make things clear for the reader of this thesis, but also to make things easier for the researcher himself. In this chapter all the methods that will be used are described, some more extensive than others. They appear in the order in which they will be used.

## Literary review.

In order to answer the questions of Part I of this thesis the current literature on cases and case merger will be reviewed. For answering the first two questions, in what different ways cases merge and why certain cases merge, starting points are the book On the Meaning of Prepositions and Cases by Silvia Luraghi ${ }^{28}$ and two chapters from The Oxford Handbook of Case, "Case Polysemy", written by Andrej Malchukov and Heiko Narrog ${ }^{29}$, and "Case in Decline", written by Jóhanna Barðdal and Leonid Kulikov ${ }^{30}$.

In order to answer the last question, how the four cases merged in the Old Irish, the information learned from answering the previous questions will be applied to the Continental Celtic evidence. This will be mostly taken from Francisco Villar's article "The Celtiberian Language" ${ }^{31}$ for the Celtiberian evidence, for Gaulish the Dictionnaire de la Langue Gauloise by Xavier Delamarre ${ }^{32}$, and for Lepontic Lexicon Leponticum. ${ }^{33}$

## Corpus.

In order to find the true meaning of the independent datives in Old Irish a corpus consisting of three types of texts will be used. The texts in it are mostly selected on the basis of their antiquity, since in the later language some of the endings become obscured because of phonological changes. Of course, if we cannot be certain whether the word is in the dative case we cannot conclude anything. Another reason for choosing these particular texts is their availability in editions with translations.

The three different types of texts are glosses, prose and poetry. The reason for looking at all the three different types is because there could be differences in their use of datives. Furthermore independent datives in texts that are not legal texts or poetry are often disregarded because they are very rare, even though they could potentially be very interesting.

For the glosses three texts will be used: the Milan Glosses ${ }^{34}$, the St. Gall Glosses ${ }^{35}$ and the Würzburg Glosses ${ }^{36}$. These three collections of glosses have been chosen because they are the three earliest significant collections of glosses. Glosses are in fact our oldest source of Old Irish material, and thus most likely to represent the oldest use of independent datives. A benefit of glosses is that they are contemporary to the manuscripts, so we cannot only safely state that they are old, but they have also not been affected by the younger language as happens with many other texts. Since the glosses are the least likely to be affected by the younger language they comprise the biggest part of the corpus.

The Milan Glosses can be found in the Codex Ambrosianus C301 inf. It is the largest collection of Old Irish glosses in a single manuscript, and it consists of over 8000 marginal and interlinear notes on a commentary of the Psalms written in Latin, as well as translations of the Latin into Old Irish. The 2011 edition by Aaron Griffith will be used here.

[^5]The St. Gall Glosses are notes to the Latin grammar of Priscian, and they can be found in five different manuscripts, the major part being found in Codex 904 of the Stiftsbibliothek in St. Gall, where the collection of glosses gets its name from. The other four manuscripts in which the glosses can be found are: the Karlsruhe Codex Augiensis (Reichenau) CXXXII, Paris BN ms lat. 10290, Milan Bibl. Ambr. Codex Ambrosianus A 138 sup. and Leiden Universiteitsbibliotheek, BPL 67. The five manuscripts combined give us a collection of almost 3800 glosses. Here the 2014 edition by Bernhard Bauer will be used.

Just as the other two collections of glosses, the Würzburg Glosses are named after the city where the manuscript, Codex Paulinus Wirziburgensis, is being kept. This collection consists of notes on the Pauline Epistles in the New Testament. For this the edition by Séamus Kavanagh (2001) will be used.

In narrative texts there are not very many independent datives to be found, with the notable exception of legal texts. Therefore only the legal texts will be discussed, for which Críth Gablach ${ }^{37}$, Bechbretha ${ }^{38}$, Uraicecht na Ríar ${ }^{39}$ and Dí Astud Chor ${ }^{40}$ will be used. These four texts have been chosen because they all belong to a different "law school", thus providing the most diversity among the legal texts.

There are so few independent datives to be found in other prose texts that it would not yield any results, unless one were to look at a very large number of texts. The luxury we have with the glosses, that they are contemporaneous to the manuscript they are found in, is not one we have with the prose texts. The texts have been dated to the Old Irish period; however, they are mostly found in manuscripts that are younger. The texts have been copied numerous times, and in the process mistakes were made. The older language has been influenced by the language of the later scribes, that is, they modernised or made mistakes where they did not recognize forms. This can sometimes be difficult for our research.

Críth Gablach, 'Branched Purchase', is a law tract on status and it has been dated to the early $8^{\text {th }}$ century. It can be found in three different versions in Dublin, Trinity College MS 1337 (formerly H.3.18). None of the versions have the complete texts, but from the first two versions, written around 1540 and 1510, the complete text can be constructed. The third version, written in the mid$16^{\text {th }}$ century, is a copy of the 1540 -version. The edition used here is by D. A. Binchy.

Críth Gablach does not belong to either the "Senchas Már school" or the "Nemed school". The "Senchas Már ('Great Tradition') school" is the largest collection of legal texts we have, comprising all sorts of legal texts. The "Nemed school" deals with "poetico-legal" texts, that is, texts that are mostly about the duties and rights of poets. ${ }^{41}$

A text that does belong to the "Senchas Már school" is Bechbretha, 'Bee-judgements'. It is a law tract that, as the name implies, deals with bees and bee-keeping. Quotations from the tract can be found in as many as eleven other texts, but there is but one manuscript in which the complete Bechbretha can be found: Dublin, Trinity College MS 1316 (formerly H.2.15a). The text has been dated to around the middle of the $7^{\text {th }}$ century AD. For this the edition by Thomas Charles-Edwards and Fergus Kelly from the Early Irish Law Series will be used.

Belonging to the "Nemed school" is Uraicecht na Ríar, a tract on the various poetic grades. It has been dated to the second half of the $8^{\text {th }}$ century AD, but can only be found in four manuscripts from the $15^{\text {th }}$ century and later. Three of these manuscripts are from Trinity College Dublin: MS E.3.3, MS H.1.15 and MS H.2.15a. The fourth one is British Museum MS Egerton 153. Again from the Early Irish Law Series, the edition used is by Liam Breatnach.

[^6]Dí Astud Chor, 'on the binding of contracts', is as the name implies, a legal text dealing with contracts. It is partly written in prose, and partly in verse. Both parts will be used, but the part in verse will of course be discussed under poetry.

The text as it is now has been dated to the $8^{\text {th }}$ century AD, and it can be found in four different manuscripts: MS H 3.18, MS 23 Q 6, Egerton 88, and MS H 3.17. Most of these manuscripts are compilations of legal and other material, and they contain both a large portion of the text and fragments of it.

In poetry many more independent datives can be found, often used as a stylistic element. Most specifically the dative plural is used stylistically because it is a very marked form. Still it should be interesting to see how these should be interpreted. For this The Leinster Poems ${ }^{42}$ and poetry from Early Irish Lyrics by Gerard Murphy ${ }^{43}$ will be used, as well as Tiughraind Bhécáin ${ }^{44}$ and the part of Dí Astud Chor that is written in verse. These texts have been chosen because they represent different kinds of poetry, there is genealogical, monastic, secular and legal poetry.

The Leinster poems are part of a collection of genealogies, edited by M. A. O'Brien. This edition is also the one that will be used in this thesis. The poetry can be found in MS Rawlinson B502, the Book of Leinster, the Book of Lecan, the Book of Ballymote and Laud 610. James Carney has dated some of these poems to 450 AD or even earlier; even though this is most probably not the case they are true Old Irish. Because O'Brien does not give translations in his edition, the translations made by James Carney ${ }^{45}$ and Kuno Meyer ${ }^{46}$ will be used.

The book Early Irish Lyrics is an edition of monastic and secular poetry from the $8^{\text {th }}$ to the $12^{\text {th }}$ century AD. In this thesis only the poems dated to the $8^{\text {th }}$ or $9^{\text {th }}$ century AD will be used, as these truly belong to the Old Irish period. As this is a collection of poetry from various manuscripts these will not be mentioned here, but, as with the other poems and the prose texts, most manuscripts are much younger than the poetry in them.

Tiughraind Bhécáin is a poem in praise of Columb Cille, edited by Fergus Kelly. It has been dated to the $7^{\text {th }}$ century AD. It can be found in only one manuscript, Laud Misc. 615, which has been dated to the middle of the $16^{\text {th }}$ century AD. This manuscript contains many poems concerning Columb Cille, but only a few of these, such as Tiughraind Bhécáin, have been dated to the Old Irish period. The subject and date of Dí Astud Chor have been discussed above, so it will not be repeated here.

## Collecting the data.

From the various texts in the corpus the independent datives have to be collected, and this will be done in two stages. In the first stage all the datives in the texts will be looked at, and those that are not dependent on a preposition or a comparative will be sorted out.

Then this rough data will be looked through again and the true independent datives will be collected, according to the rules specified in the theoretical framework. This will exclude for instance the datives that are used as an adverb or the datives that are in apposition to a personal pronoun.

For some of the texts in the corpus this will be easier than for others. That is, for the Milan and St. Gall glosses there are digital databases which are searchable by grammatical category, and the Würzburg Glosses have a digital edition consisting of several searchable PDF's. For the other texts the physical editions will have to be searched through, although some times the editors will give a list of all the independent datives in the text.

[^7]
## Analysing and categorising the data.

When the collection of independent datives is complete and all of them are collected from the various texts; it is time to analyse them. The use of the independent datives will be compared to the definitions semantic roles of the dative, ablative, instrumental and locative case and the most fitting semantic role will be chosen. That is, if, for instance the use of the dative reflects means it will be marked an instrumental.

There is always the possibility that the independent dative is ambiguous or that multiple semantic roles are an option. In these cases the context will be taken into account, as well as the classification of other independent datives in that specific text.

The independent datives in the various types of texts will then be categorized according to underlying case. After all of the different datives have been categorised hopefully we will be able to draw some conclusions on the reflection of the dative, ablative, instrumental and locative in the independent datives in Old Irish, and give answers to the research questions of Part II.

Part I:
Theoretical and Historical Background

## In what different ways can cases merge?

Case merger, or case syncretism, is a phenomenon widely found in the various languages of the world. In order to provide a background for the merger of the dative, ablative, instrumental and locative in Old Irish the various aspects of case merger will be discussed here.

Even though merger is found in most of the world's languages, only the Indo-European languages will be considered here; this is most relevant for this thesis because the Celtic language family is a branch of Indo-European.

Another issue that needs to be taken into account is the fact that case syncretism need not mean two or more cases fully merging, but it can also mean that within the paradigm there is some homonymy between the endings. A clear example of this can be found in Sanskrit, where only the astem singular has different endings for all cases, whereas in the other stems and in the plural some endings are identical. For instance the ablative singular ending of the a-stem is - $\bar{a} t$, and the genitive singular ending is -ásya, whereas in the i-stem both endings are -es, in the ā-stem - $\bar{a} y \bar{a} s$, in the ntstem -ás and in the r-stem -úr. ${ }^{47}$

In this paper, whenever the term syncretism is used, it will denote case merger. If an example is given that is not complete merger, it will be noted that we are not dealing with case merger, but with the broader sense of case syncretism.

Barðdal and Kulikov recognize two different types of case merger: those due to phonological changes and those due to a functional syncretism. ${ }^{48}$ Sometimes only of the two types occurs, but they also go hand in hand often. The second type, functional syncretism, can be split up in two subtypes: semantic and syntactic syncretism. Each of these categories will be discussed below.

## Phonological changes.

The most straightforward mechanism leading to case merger is phonological change. In the course of time, case markers can erode due to phonological changes, causing cases to collapse. That is, the case markers of two, or more, different cases that were previously easily differentiated become the same through phonological changes. ${ }^{49}$

A good example of this is Latin evolving into the Romance languages. Latin was a fully inflected language, with no less than seven cases. This became a two - or three-case system in the Romance language around the $5^{\text {th }}$ century AD. To illustrate this, here is an example from Spanish, taken from Barðdal \& Kulikov (2009):

- Through the loss of final -m, the acc sg and abl sg merge: montem (acc sg) and monte both become monte.
- Together with the loss of final -m, the merger of short and long a occurs, merging nom $\mathrm{sg}, \mathrm{acc} \mathrm{sg}$ and abl sg: mensa (nom sg), mensam (acc sg) and mensā (abl sg) all become mensa.
- Merger of word final $-u(m)$ and $-\bar{o} ;$ acc sg and abl sg merge: dominum (acc sg) and dominō (abl sg ) both become domino. ${ }^{50}$
This type of syncretism can also be observed in Middle Irish: all unstressed vowels become ə in Middle Irish, which erases differences between many case endings. There is however still some disctinction between vowels because of palatalization, therefore unstressed -i and -e fall together, and $-a,-u$ and $-o$ fall together as well, for instance nimi < Old Irish nime, and rígda< Old Irish rigdae. Given this massive loss of case distinctions between Old and Middle Irish, I have chosen to only deal with the independent datives in Old Irish, and not those in the later language, because it is difficult to distinguish what actually is in the dative case.

[^8]These phonological changes, or phonetic erosion if you will, can lead to the complete disappearance of the case system, or the collapse of the case system into two cases: a nominative cases and an oblique case. These two types of simplifications of case systems have occurred in the Indo-European languages. In fact, the history of French illustrates them both. ${ }^{51}$

As stated above, the two types of case merger often go hand in hand. Phonological changes will occur of their own account, but the merger they create can be undone. That is, if a phonological change occurs that merges two or more cases with one another, it must not make the paradigm too difficult to learn or understand.

If the paradigm becomes too difficult, or if the merger is 'unnatural', that is, if two cases merge that would normally never merge, new endings can be constructed to differentiate between the forms and thus restoring the paradigm to its earlier number of cases.

An example of this can be found in Middle Irish. Because final -(a)e, -(a)i and -(i)u fell together, all the cases of the io- and ia-stems became the same, with the notable exception of the dative plural. For instance, the nominative singular in Old Irish was céile and the accusative plural was céiliu. However, in Middle Irish both became céile.

Since this erased almost all distinction between the cases, the paradigm became too difficult. Therefore, some distinction was restored by using unsyncopated plural endings from the dental stems, from words as file. For this word the nominative singular was file and the accusative plural fileda. From this the distinction céile - céileda was formed, again bringing a distinction between the nominative singular and the accusative plural. ${ }^{52}$

## Functional Syncretism.

The second type of case merger has nothing to do with phonology, but deals with the semantic or syntactic similarity of different cases. As Luraghi (1987) puts it:
"Functional elements such as cases are seldom used completely unambiguously, for one function only. More often, they can be used with a certain degree of freedom, which enables speakers to choose among different formal means in order to convey the same meaning."53
This means that there can be overlap between two or more different cases, a "partial synonymy", which makes it possible for the cases to merge, that is, provided that the synonymy between them is high enough and that their merger does not induce too much ambiguity. ${ }^{54}$

There are two different types of functional syncretism: semantic and syntactic. The first assumes a similarity in meaning, even if the syntactic functions do not overlap. The second is exactly the other way around, that is, it needs an overlap in syntactic functions, and not in meaning. ${ }^{55}$ In both types of syncretism this means that some cases are more prone to merging with certain cases than others.

It is important to note here that not only phonological changes and functional syncretism, but also semantic and syntactic syncretism, often go hand in hand. It is very unlikely for a case to extend to another case through semantics when the cases have completely different syntactic functions, and vice versa it is unlikely for two syntactically similar cases to merge when they are incompatible on a semantic level.

## Semantic syncretism.

As the name already implies, this subtype of functional syncretism has to do with semantics. There exists a vast literature on which semantic roles can merge with one another, and which direction this

[^9]would take. ${ }^{56}$ An important theory has been put forward by William Croft in his 1991 book Syntactic Categories and Grammatical Relations. ${ }^{57}$

Here he notes that spread, as he calls it, from one semantic role to another can only happen with another element in the same domain, and this element must be semantically "near" to the one that it is spreading to. He also remarks that there is a boundary, namely the direct object.

He states the object is always the endpoint, and the antecedent roles follow the subject but precede the object, and the subsequent roles follow the object: "[...] that is, follow the subject in the causal chain; hence, SBJ < OBJ. The (subsequent) obliques follow the object in the causal chain; hence, OBJ < OBL." ${ }^{58}$ This is the reason why the direct object is the boundary for spread, he demonstrates this using a table:


1 Taken from Croft 1991: p. 185.
Spread usually does not cross this boundary, so only elements that come before the direct object in the causal chain can merge with one another, and those that come after it. He divides the semantic roles into two groups: antecedent, coming before the object, and subsequent, following it. ${ }^{59}$ This division is simply based on the semantic roles that can merge with one another, and they are named antecedent only because precede the object in the causal chain, and subsequent only because they follow it.

Silvia Luraghi has extracted the semantic roles from the discussion in the book, and gives us a list with all the antecedent and subsequent semantic roles:

| ANTECEDENT ROLES | SUBSEQUENT ROLES |
| :--- | :--- |
| Cause | Result |
| Agent | Benefactive |
| Comitative | Recipient |
| Means | Purpose |
| Manner | Locative |
| Instrument | Direction |
| Source | Goal $^{60}$ |

She then continues the discussion by stating that semantic roles frequently merge "illegally". For example, antecedent and subsequent semantic roles should not merge, yet they often do. We can see this with the merger of instrument and locative, which is attested frequently in Semitic and Australian languages. ${ }^{61}$

[^10]Furthermore we often see syncretism of cause and purpose, and cause and benefactive, which should not occur according to Croft. And, some syncretisms that should be attested, such as agent and comitative, are actually very infrequent. ${ }^{62}$

Luraghi suggests a four-way distinction, adding concomitant and non-directional roles:

| ANTECEDENT ROLES | CONCOMITANT ROLES <br> (causal concomitant) | NON-DIRECTIONAL ROLES <br> (local concomitant) | SUBSEQUENT ROLES |
| :--- | :--- | :--- | :--- |
| Cause | Instrument | Locative | Direction |
| Agent | Comitative | Perlative | Benefactive |
| Source | Manner |  | Recipient $^{63}$ |

This would allow for many of the "illegal" syncretisms that are attested. She also discusses the fact that syncretism between two seemingly unrelated semantic roles can occur through the mediation of a third semantic role.

As an example she gives the syncretism of cause with four other semantic roles: allative, recipient, purpose and benefactive. This syncretism can be found in Konda, a language spoken in India. Recipient and benefactive are two semantic roles that are very similar, and are often expressed via the same marker.

Allatives often spread to recipient and benefactive. The allative marks a motion towards something, and the recipient and benefactive are receiving something. This means that both recipient and benefactive have a "motion" towards them. This makes the semantic roles similar enough to spread to one another.

Purpose also often spreads to benefactive, even though, at first glance these two semantic roles do not seem very similar. However, when the benefactive is used, something is done with the express purpose of benefitting someone, making the two semantic roles "near" enough to merge.

That these four semantic roles merge is not very exceptional; it is in fact pretty common. Finding semantic similarities between these four and cause is, however, much more difficult. But, it is not uncommon for cause and purpose to merge, and thus it is possible for cause to merge with all four of the semantic roles, using purpose as an intermediary. ${ }^{64}$

This merging of semantic roles by way of an intermediary is very common, and also happens often in Indo-European; this will be discussed in the section on why certain cases merge with one another. In that section will also be discussed which cases are prone to merge with certain cases on the basis of semantic roles, and why this is the case.

## Syntactic syncretism.

The second subtype of functional syncretism that can be recognized has to do with the syntactic functions of the cases. It works on the same basis as semantic syncretism, similarities between constructions, but in this case on a syntactic level. This can occur separately from phonetic change as well.

Often a distinction is made between different cases, calling some 'grammatical' and others 'concrete'. 'Grammatical' cases have a predominantly syntactic function, whereas 'concrete' cases predominantly express semantic roles.

Most cases have both syntactic and semantic functions, except for the nominative and vocative cases, but they can still be classified as either 'grammatical' or 'concrete'. The nominative and vocative case are purely syntactic cases, making them 'grammatical'. To this group the accusative case and the genitive case can be added.

[^11]The 'concrete' cases, mostly expressing semantic roles, are comprised of the ablative, locative and instrumental. The position of the dative case can sometimes be uncertain, but most of the time it will be grouped under 'concrete' cases. ${ }^{65}$

Cases that merge according to their syntactic use mostly merge within their group, so 'grammatical' cases merge with other 'grammatical' cases, and 'concrete' cases merge with other 'concrete' cases. This can result in a two-case system, as we saw in the part on phonological changes, leaving only a nominative as the 'grammatical' case, and an oblique as the 'concrete' case.

But, this can also mean that, for instance, the ablative, locative and instrumental merge, as happened in Latin, leaving the 'grammatical' cases intact. In this case the dative could be viewed as a more 'grammatical' case, which is possible since its position is still uncertain at times.

The basic principles of syntactic syncretism are the same as those of semantic syncretism, and since those have been discussed in detail in the previous section, there is no need to repeat them here.

## Summary.

Cases can merge through phonological changes, which erases the differences between the endings, or through functional syncretism. Functional syncretism works on the basis of similarities between cases, on a semantic or syntactic level.

The two types of functional syncretism frequently coincide, and it is often difficult to tell whether cases merged on the basis of similarity between semantic roles or on the basis of similarity between syntactic functions, or both. But, of course, they are not mutually exclusive and can occur at the same time, and we can assume that most of the case merger is motivated by more than one of the reasons for merger.

[^12]
## Why do certain cases merge in Indo-European?

Proto-Indo-European had eight cases: nominative, vocative, accusative, genitive, ablative, dative, instrumental and locative. ${ }^{66}$ Most of the Indo-European languages have merged some of these cases at a certain point, and we can see that often the same cases have merged.

For example: the nominative and accusative have merged in Romanian and Albanian, genitive and ablative in Slavic and Greek, and the dative and locative also in Greek. The ablative, instrumental and locative have merged in Latin, and the dative, ablative, instrumental and locative haver merged in Celtic in Germanic. ${ }^{67}$

It is not difficult to see that some cases are more prone to merging with certain cases than others, as was already mentioned in the previous chapter. Here these different combinations of cases will be discussed, together with the reason these cases are prone to merging with one another.

## Nominative and accusative.

Both these cases are considered core cases, i.e. cases that express either subject or object.
Syncretism of these core cases is a widespread phenomenon in the languages all around the world, that is, in research of forty different languages with case syncretism 30 languages display this kind of merger. ${ }^{68}$

In the Indo-European language family this happens for instance in Romanian and Albanian, two of the languages in the Balkans. It is notable that in PIE the neuter nominative and accusative are never differentiated from one another.

Of the six cases in Latin, Romanian preserves only a nominative-accusative, vocative and genitive-dative. In Albanian the case system consists of nominative-accusative, vocative, genitivedative and ablative.

Ringe speaks of the nominative-accusative syncretism in Greek and Germanic. It is important to keep in mind, however, that here he does not discuss case merger, but the broader sense of syncretism, homonymy between some forms in the paradigm. ${ }^{69}$

He gives two possible explanations for this syncretism, one applying only to the Germanic evidence, and one applying to both the Germanic and the Greek evidence. To explain the Germanic evidence analogical levelling would be enough. That is, because the neuter nominative and accusative already had the same ending, and after some masculine and feminine noun classes no longer differentiated between the two forms because of phonological changes, it was easy to extend this to the words in the other noun classes. ${ }^{70}$

Unfortunately, this explanation does not work for the Greek evidence. However, Ringe has a theory that would work for both Germanic and Greek, namely a superordinate case, which he calls the 'direct' case. His theory is the same as the above-mentioned syntactic syncretism, that is, they are syntactically similar enough to allow for their merging. The only difference is in this thesis the term 'grammatical' is used instead of 'direct'. ${ }^{71}$

## Genitive.

In Indo-European the genitive is likely to merge with either the dative or the ablative. Its merging with the dative is due to two semantic roles of the datives, the recipient and the beneficiary. The recipient and beneficiary both receive something, making them a person who possesses something. And, as is well known, possession is marked by the genitive. This means that there is an overlap in

[^13]semantics. This kind of syncretism can be found in Romanian and Albanian, but also in Bulgarian and Colloquial French, where "possesors are marked like recipient/beneficiary datives". ${ }^{72}$

The syncretism with the ablative can develop out of the partitive meaning of the genitive. The ablative indicates source, but this can be extended to indicate origin. The partitive genitive indicates a part of a whole. Luraghi (2003) connects these two semantic roles:
"Part-whole relations are often metaphorically mapped on the domain of possession: the whole is conceived as the possessor of its parts, following the metaphor PARTS ARE POSSESSIONS. [...] Syncretism of the ablative and genitive through the partitive can be explained based on the metaphor WHOLES ARE ORIGINS. ${ }^{73}$
The syncretism between genitive and ablative occurs in Greek, but also in some of the Slavic languages.

An interesting fact about ablative-genitive syncretism is that it occurs almost exclusively in Indo-European languages, and when it does occur outside Indo-European it is not very common. In other languages it is much more common for both the ablative and the genitive to merge with other cases. ${ }^{74}$

## Ablative.

Not only does the ablative merge with genitives in Indo-European, it can also merge with the instrumental. Luraghi (1987) says the following about the ablative-instrumental syncretism:
"Both cases cover the relation of a conditioning factor with regard to the action or process expressed by the predicate. Such factor may be conceived either as a cause, as is the case with the ablative, or as a means, as is the case with the instrumental."75
That is, in some sentences it is clear whether an ablative is used as opposed to an instrumental and vice versa, but in other cases it is less straightforward, as can be demonstrated by these sentences taken from Case by Barry J. Blake (2001):
"battered by/from the gale wounded by/from shrapnel smoothed by/from rubbing warped by/from the heat" ${ }^{76}$
As can be seen, it is very difficult to decide whether an instrumental or an ablative should be used, and thus they can begin to be used interchangeably. This happened for instance in Hittite. ${ }^{77}$

This type of merger can be found in Latin, combined with the locative. Of course, we also find this type of merger in the Celtic languages, in combination with the dative and locative. The same combination of four cases can also be found in Germanic languages.

## Dative.

The dative in Indo-European often merges with the locative, but this merger differs from the other syncretisms. That is, the dative and locative are often in complementary distribution, the dative being used with animate nouns and the locative being used with inanimate ones, so the question is whether they were different cases at all.

Also, the reconstructed Indo-European endings are very similar to one another: for athematic nouns in the singular the dative ends in *-ei and the locative in ${ }^{*}-i .{ }^{78}$ For the thematic nouns the dative singular has an ending *-ōi, and the locative singular has the ending *-oi. The plural endings

[^14]are more dissimilar; the dative endings having an element *-bh- / *-m- and the locative an element *-su-. ${ }^{79}$

One of the theories regarding the complementary distribution of the dative and the locative, is the one introduced by Fairbanks (1977), who argued on the basis of the use and the similarity between the dative and locative that Proto-Indo-European only had the dative case. According to him the locative developed later out of a certain form of the dative. ${ }^{80}$

In 1964 Jerzy Kurylowicz also voiced his opinion on the matter, in his book The Inflectional Categories of Indo-European..$^{81}$ According to him the development occured the other way around, and the dative case originated from out of the locative. For this case he has three arguments: firstly the Indo-European endings look like they are ablaut variants of one another.

Secondly he notes the fact that the dative and locative alternate in the Indo-European languages and sometimes a locative ending is found with an animate noun representing an indirect object. An inanimate noun in the locative case can never represent an indirect object. His third and last argument is that in the later Indo-European languages there are cases where a dative arises from a locative, such as in French á, which can represent a locative/allative or a dative.

This last argument shows us that the process is a natural one. Anthony Rodriguez Aristar (1996) presents more evidence, from languages outside of the Indo-European language family, that supports this view of the dative arising from the locative. ${ }^{82}$

However, these theories cannot be proven, since the split of the dative and locative cases must have happened early enough for all the Indo-European languages to inherit both of them, and therefore we have no direct evidence that can prove or disprove one of the theories. But, regardless of whether one of these theories is correct, the fact that datives and locatives often merge with one another is still a well-known fact, as it occurred for instance in Hittite and in Greek.

## Instrumental.

The instrumental can merge with the locative, and therefore often also merges with the datives, since the dative and locative are connected to one another, as shown above.

The locative can be extended to mark companionship, which happened for example with the English word with, which originally had a spatial meaning but later extended to mark the comitative, which used to be expressed by the word mid. Since the instrumental and the comitative are connected in Indo-European, the instrumental might even have evolved out of the comitative, this can be a pathway for merging the instrumental and locative. ${ }^{83}$

The semantic extension is easy to make, that is, originally the locative marker indicated proximity to another object or person. And if someone is in very close proximity to another person, it usually is because the two persons are accompanying each other, and vice versa. Thus, the locative can be extended to mark the comitative.

However, it is also possible for the locative to be extended to mark the instrumental directly. This can again be shown by an example from English. The word by, originally marking a location, became extended to mark the instrumental. ${ }^{84}$

This extension came to be through the use of the 'container metaphor', that is, some entities can be viewed as 'containers' and these can be seen as instruments or as locations. For example, in Russian means of transportation ('to go by bike/by bus' etc.) is expressed through the use of a locative preposition meaning 'in', whereas normally the instrumental case is marked by the instrumental. This can then be extended further to words that are not 'containers'. ${ }^{85}$

[^15]The reason for instrumental to merge with the locative can thus be through the comitative or through the instrumental itself. They are, however, not mutually exclusive and it is very likely that both processes working at the same time caused the merger between instrumental and locative.

In combination with other cases, the instrumental merging with the locative can be found in Latin, Germanic and the Celtic languages.

## Merger through an intermediary.

As discussed in the previous section, cases sometimes merge with cases that do not have very similar semantic roles, and should therefore not be merging, according to theoretical predictions. However, other cases can function as an intermediary, providing the situations we have now. Some examples from Indo-European will be discussed here.

In Latin we find the merger of the ablative, instrumental and locative. As noted earlier in this chapter, ablative and instrumental are prone to merging because they can both express "the relation of a conditioning factor with regard to the action or process expressed by the predicate." ${ }^{86}$ Also prone to merging - albeit "illegal" according to Croft - are instrumental and locative. The ablative and locative however, are not semantically similar enough to merge on their own. But, using the instrumental as an intermediary the ablative and locative were able to merge with one another.

Another good example of merger through an intermediary is the merger of the dative, ablative, instrumental and locative in Germanic and Celtic. As can be learned from Latin, the ablative, instrumental and locative have merged, with instrumental being the intermediary. Here, however, there is a fourth case added to the existing group of three cases: the dative.

Since, the dative and locative are very close to one another, sometimes even in complementary distribution, there is often syncretism between these two cases. This means that for these four cases to merge together, there are two intermediaries needed: the instrumental, to merge the ablative and the locative, and the locative to merge the dative, instrumental and locative, creating this group of four cases.

However, both the Latin example and the example from Germanic and Celtic could also simply be a form of syntactic syncretism, instead of semantic, collapsing the 'concrete' cases into one case, and leaving the 'grammatical' cases intact. Since the position of the dative is sometimes uncertain, it could mean that in Latin the dative was considered a more 'grammatical' case, whereas in Celtic and Germanic it was considered a more 'concrete' case.

And there is of course also a third possibility, that both the semantic roles and the syntactic functions played a role in the syncretism of these cases. It seems the most logical option to me that both played a role in this merger, since they often coincide and having both the semantic roles and the syntactic functions being similar made it much easier for these cases to merge.

A third example comes from Greek, where the dative, locative and instrumental have merged. Here again the locative serves as the intermediary between the dative and the instrumental.

## Summary.

It can be very easily observed that some cases are more prone to merging with other cases on the basis of semantic or syntactic roles. For instance the nominative and accusative often merge, the genitive is prone to merging with the dative or ablative and the ablative is often seen merging with the instrumental, whereas both the instrumental and the dative are prone to merging with the locative.

However, often cases that would not normally merge do merge with the help of an intermediary, making combinations of three or four cases. This gives us the merger of the dative, locative and instrumental in Greek, the ablative, instrumental and locative in Latin and the merger of the dative, ablative, instrumental and locative in Celtic and Germanic.

[^16]
## How and why did cases merge in the Celtic languages?

In Old Irish there are no traces left of the ablative, instrumental and locative, only the dative case remains. In Middle Welsh there is actually nothing left of the original case system; in Old Welsh there are some remnants left of this system, but not enough to be able to say something about it.

Fortunately, there are still inscriptions from earlier Celtic languages, found on the continent: Lepontic, Gaulish and Celtiberian. Because these languages are attested much earlier than the other Celtic languages, they do preserve the older cases, before or even during their merger with the dative.

According to Eska (1993) the merger between the four cases begins only at the end of the Proto-Celtic period, or even later: "Within the flexional morphology of the noun, losses, replacements, and syncretisms attested in Insular Celtic are now seen to have been, at most, only just beginning, if that, in Proto-Celtic." ${ }^{87}$

There is some discussion that Lepontic is actually a dialectal variation of Gaulish ${ }^{88}$, but here they will be treated as separate languages. That is, for this research it does not matter whether they are separate languages or simply different dialects, as long as they preserve the older case forms.

The three Continental Celtic languages will be discussed separately, and the theories that have been explored in the previous sections will be applied to the linguistic evidence. They will be discussed in the order given above.

## Lepontic.

The oldest written evidence of the Celtic languages is found in Lepontic. The earliest Lepontic inscription has been dated to the second quarter of the $6^{\text {th }}$ century $B C$, however, most of the inscriptions have been dated to the second and first centuries BC. ${ }^{89}$

Most of these inscriptions are funerary inscriptions, carved on grave stones. They usually consist mostly of names, not only the name of the person that has been buried there, but sometimes also the name of the person who has erected the grave stone. There are inscriptions on pottery as well, often also found in a funerary context, but sometimes expressing the ownership of the vessel. ${ }^{90}$

In Lepontic only four cases are attested: the nominative, accusative, genitive and the dative. Of these only the dative has been found in both the singular and the plural, the other cases are only found in the singular.

Different forms, of the different stems, are attested:

| Dative singular: | Dative plural: |
| :--- | :--- |
| - o-stems: -ui | - o-stems: -opos |
| - $\quad$ a-stems: -ai |  |
| - | i-stems: -ei ? |
| - | n-stems: -onei, -oni |

It is unfortunate that none of the other cases have survived, but this does not mean they had already disappeared. The longest Lepontic inscription that was found contains only seven words, and since most were funerary inscriptions, they were very formulaic in nature.

An example of this is: slaniai : uerkalai : pala 'funeral stone (?) for Slania, daughter of Wergos'. On the other side of the stone another inscription is found: tisiui : piuotialui : pala 'funeral stone (?) for Tisios, son of Biwontios'. Another inscription, the longest, consisting of seven words,

[^17]reads: pelkui : pruiam : teu : karite : išos : karite (or kalite) : palam 'for Belgos Dewu made a pruia; he (the same) made the funeral stone'.

It is clear from these inscriptions that they are indeed formulaic in nature, and this explains why the ablative, instrumental and locative do not occur in any of these inscriptions, but this does not mean that these cases did not exist in the language at all. Unfortunately, there are no remnants of this whatsoever, so it does not help in explaining the case merger in the Celtic languages

## Gaulish.

Even though Gaulish is not the oldest attested Continental Celtic language, the attestations do span the longest number of years and the most Continental Celtic inscriptions are in this language. Gaulish inscriptions have been found dated to as early as the late $3^{\text {rd }}$ century $B C$, but also as late as the $5^{\text {th }}$ century AD.

The earliest inscriptions were written in the Greek or the Etruscan alphabets, whereas from the beginning of the first century AD most inscriptions were written in the Latin alphabet. As in Lepontic, many short, formulaic funerary inscriptions were found. However, other types of texts were found as well, among them even a few longer texts.

Many of the inscriptions were votive in nature, that is, they were inscribed as being gifts to the gods. Pottery inscriptions are abundant as well, some indicating the owner or maker, and numerous inscriptions were found in the pottery centre at La Graufesenque, and those yield, among other things, the ordinal numerals from one to ten. ${ }^{92}$

Also very interesting are the so-called defixiones, or curse tablets. These were inscriptions on thin lead tablets, often folded or rolled up after they were written, asking the gods to place a curse upon a certain person named in the inscription. This was then usually left at the temple of the god who was to perform the curse.

Other interesting inscriptions can be found on spindle whorls, such as Autun L-112 nata uimpi - curmi da 'belle fille, donne de la bière'93 and Autun L-117 marcosior - maternia 'que je sois chevauchée (moi) Maternia' or 'je veux chevaucher avec Materna' or 'je veux être chevauché par Materna ${ }^{94}$.

In these inscriptions six cases are attested: the nominative, accusative, genitive, dative, instrumental and locative. The endings of the dative, instrumental and locative are:

Dative singular:

- o-stems: -ui >-u
- ā-stems: -ai >-e >-i
- u-stems: -ou
- i-stems:-e
- occl.-stems: -i

Instrumental singular:

- o-stems: -u
- ā-stems: -ia
?Locative singular
- o-stems: -e ${ }^{95}$


## Dative plural:

- o-stems: -obo ?
- ā-stems: -abo
- r-stems: -rebo


## Instrumental plural:

- o-stems: -us
- other stems: -bi, -be

In the spindle whorl inscription marcosior - maternia an instrumental can be found, 'with Materna', if maternia is taken as an instrumental, however, it could also simply be a nominative. ${ }^{96}$

[^18]A relatively long text is Châteaubleau L-93, inscribed in tile. In this text some examples of locatives, datives and instrumentals can be found:

## 1. nemnaliíumi beni. ueíonna incorobouido

'Je célèbre une femme qui est fiancée avec dot de bétail (ou: qui est ménée [au marriage] à Coro Bouido'
2. neíanmanbe gniíou apeni temeuelle íexsetesi
'don't je ne connais pas les noms, et une femme qui est en âge (ou: qui est consentante), vous devez dire'
3. sueregeniatu o quprinnopetamebissi íeteta.
'vous la famille (ou: qu'elle dise son nom de famille), je demande qu'elle soit une épouse' 4. miíi íegumi. suante ueíommi petamassi papissone 'pour moi, je dis par désir je me fiançais, nous te prions, ô Papissonos;'
5. suirexetesi íegiiinna anmanbe íeguisini
'il la désidera bien, (elle) étant appelée par ses noms; j’appele,'
6. siaxsiou. beiiassunebiti moi [mot] upiíummiateri
'je chercherai beíiassu (le seul facile ? ou que tu prospères); il est brisé par moi ou vers le seul je vois un motu, mon père'
7. xsi índore core. nuana íegumisini • beíassusete
'dans cet endroit fermé; maintenant attend; je l'appelle; beliassu sete'
8. sue cluio u sedagisamo cele uiro íonoue
'Je vous entends. Epouse Sedagisamo(s), un compagnon honnête et juste.'
9. ííobiíe beiiassusete rega íexstumisendi
'beíiassu sete. Elle ira. Appelle-moi "époux".'
10. me • setingi papissonebeíiassusetemetingise
'Entre moi et elle, Papissonos, beíiassu sete, entre moi,'
11. tingibeíiassuseteregarise íexstumisendi
'entre elle, beíiassu sete, ils iront (ou: ô reine), appelle-moi "épouse".'97
A locative singular can be seen in line 7, in dore core, 'à porte fermée' or 'sur une petite place' ${ }^{98}$, which is a noun in the o-stem, however, if dore means 'door' it is most probably a u-stem. Also a noun in the o-stem is teme uelle in line 2 , it is however not certain that this is a locative, but there is a good possibility that it is.

A dative plural can be found in the first line: corobo. ${ }^{99}$ Lastly, there are two occurrences of an instrumental plural in this text, in line 2 and line 5 . Both consist of the word anmanbe 'by the names' ${ }^{100}$

The interpretation of this text, however, is problematic. Of the forms cited here only anmanbe is almost certainly an instrumental. The other forms could be interpreted differently, and therefore could possibly not be locatives and datives.

A large number of datives can be found in Lezoux L-66, a fragment of a ceramic plate that has preserved about a fourth of the original text, which could be a letter:

1. ne regu na[...]
'je n'amène pas (la faim?)'
2. gandobe inte nouiio[...]
'au moyen des recipients, de façon nouvelle...'
[^19]```
3. extincon papi coriiosed[ii] exa o[...]
'la pleine suffisance de chaque Coriosédien de ...'
4. mesamobi molatus certiognu sueticon[...]
'par les juges (experts), loués à juste titre, bonne suffisance...'
5. pape boudi macarni papon mar[...]
'pour chaque avantage nourrissant, chaque (grand ?)...'
6. nane deuorbuetid loncate[...]
'par faim qui servient, vous avalez...'
7. nu gnate ne dama gussou \(n[. .\).
'à present, fils, ne souffre pas, de la peine...'
8. uero ne curri ne papu cos[...]
'supérieur, ne place pas, ne ... par chaque ...'
9. pape ambito papi boudi ne tetu[...]
'pour chaque citoyen, pour chaque avantage, ne ...'
10. batoron ueia suebreto [...]
'des guerriers la force, bon apport (de nourriture) ...'
11. citbio ledgamo berto[...]
'... vif, affaibli (?), apport ...' \({ }^{101}\)
```

In line 4 an o-stem dative singular can be found: certiognu 'à l'homme juste ${ }^{\prime 102}$, and another in line 8: $p a p u$ 'chaque ${ }^{\prime 103}$. This is a late form, the earlier ending would be -ui. This means that this could also be an instrumental, since that also has the ending $-u$. Here it can be observed that these endings become obscured in the o-stem through phonological changes.

Multiple a-stem dative singulars can be seen in line 5 and line 9: pape and papi. ${ }^{104}$ Both have later endings, although this text seems to be in a transition phase, since the ending -e developed to $-i$. In line 7 there is also an u-stem dative singular: gussou 'valeur, force'. ${ }^{105}$

Not only datives can be found in this text, but also two instrumentals: gandobe 'rare' ${ }^{106}$ in line 2 and mesamobi 'par les juges' ${ }^{107}$ in line 4. Both are in the plural and do not belong to the ostem. However, again the interpretation of this text is problematic, especially because it is not complete. This makes it difficult to be sure whether the forms cited here are actually datives and instrumentals.

Short dedicatory inscriptions often contain datives as well, such as buscilla sosio legasit in alixie magalu 'Buscilla placed this in Alisia for Magalos', where magalu is the dative singular of the ostem Magalos. ${ }^{108}$ This is another example of the o-stem ending -ui becoming -u because of phonological changes, rendering it the same as the ending of the instrumental singular.

Another example is MARTIALIS DANNOTALI IEVRV VCVUETE SOSJN CELICNON 'Martialis (son) of of Dannotalos dedicated this edifice to Ucuetis', with ucuete being the dative singular of the i-stem Ucuetis. ${ }^{109}$

## Celtiberian.

The Celtiberian language has been argued to have been the first language to split off from ProtoCeltic. This is mostly based on the fact that Celtiberian has not shared in some innovations with the

[^20]other Celtic languages, and that Celtiberian has some innovations not shared by the other languages. This is, however, not conclusive evidence for an early split off. ${ }^{110}$

Some of these innovations are the genitive singular of the o-stem in -o instead of the ending $i$ that is found in the other Celtic languages, the nominative plural of the o-stem in -os instead of the ending -oy, and the genitive plural of the ā-stem in -aum. Celtiberian also has a verbal ending -Tus which is found nowhere else in Celtic, and the pronouns ośCues, osaś and osiaś that only occur in Celtiberian. ${ }^{111}$

Most of the Celtiberian texts can be dated to the first century $B C$, but there are some that are older and some that are younger. The corpus is not very large, and most of the texts are short. Among them are inscriptions on coins, graffiti on ceramics, funerary inscriptions, some religious texts and tesserae hospitales. ${ }^{112}$

Tesserae hospitalis are small inscriptions indicating who the owner is and where he is from, these ensured hospitality when the Celtiberian people were travelling, an ancient passport, so to say. These inscriptions often contained an ablative, denoting which town the person was from, such as in the Froehner tessera: lubos : alizo/kum : aualo : ke / kontebiaz / belaiskaz 'Lubos of the Alisoci, son of Avalos, from Contrebia Belaisca'. ${ }^{113}$

There are, however, also four longer texts, all found in Contrebia Belaisca, where now the small town of Botorrita is located. All of the four Botorrita texts are inscribed in bronze tablets. Botorrita I is a legal text, Botorrita II is a Latin text on a law-suit regarding water use, Botorrita III is with 500 words the longest Continental Celtic text; however, apart from one sentence it contains only names. Botorrita IV is very fragmentary, but it is probably also a legal text.

In Celtiberian the dative, locative, instrumental and ablative can all be found, but are only preserved in the singular, the dative, however, does also occur in the plural:

Dative singular: Dative plural:

- o-stems: -ui -o-stems: -ubos
- ā-stems: -ai
- i-stems: -ei
- u-stems: -uei
- n-stems: -unei
- nt-stems: -nte
- occl.-stems: -ei

Instrumental singular:

- o-stems: -u
- n-stems: -unu

Locative singular:

- o-stems: -ei

Ablative singular:

- o-stems: -uz
- ā-stems: -az
- i-stems: -iz
- u-stems: -uez
- n-stems: -unez

[^21]```
- occl.-stems: -ez }\mp@subsup{}{}{114
```

Botorrita I consists of two parts, the bronze tablet has been broken in half. The first part, side a, contains the actual legal decrees, whereas the second part, side $b$, contains only names. In the text the dative and locative are attested, and there are some petrified ablative endings in adverbs:

1. tiricantam : percunetacam : tocoitoścue : śarnicio (:) cue : śua : compalcez : nelitom
2. necue [:] to [: u]ertaunei : litom : necue : taunei : litom : necue : maśnai : tisaunei : litom : śos : aucu
3. areśtalo : tamai : uta : oścuez : śtena : uersoniti : śilabur : śleitom : conścilitom : capiseti
4. cantom : śanciliśtara : otanaum : tocoitei : eni : uta : oścues : pouśtomue : coruinomue
5. macaśi[a]mue : ailamue : ampitiśeti : camanom : uśapitus : osaś : śueś : śailo : cuśta : pisetus : iom
6. aśecati [: a]mpitincounei : śtena : eś : uertai : entara : tiriś : matuś : tinpitus : neito : tirncantam
7. eni : oiśatus : iomui : liśtaś : titaś : sisonti : śomui : iom : arsnaś : pionti : iom : cuśtaicoś
8. arsnaś : cuati : iaś : osiaś : uertatośue : temeiue : ropiśeti : śaum : tecametinaś : tatus : somei
9. enitousei : iśte : ancioś : iśte : eśancioś : use : areteina : śarniciei : acainacupoś
10. nepintor : tocoitei : ioś : ur [:] antiomue : auseti : aratimue : tecametam : tatus : iom : tocoitoścue
11. śarniciocue : aiuisaś : compalcoreś : aleiteś : iśte : ireś : rusimus : apulu : upocum ${ }^{115}$
'The superiority of Tokoits and Sarnikios has ruled the territory Berkunetaka.
It is prohibited to allow exploitation, to sell it or to put it under construction.
The preceding is confirmed by the order of the responsible magistrate.
And whoever infringes on these orders and receives money (---), (let him pay) an amount ten times higher as a fine.
Whoever builds around a stable, or a grain storage, or a tile wall, or a wall of chalk or of chalked rock, let him build a path, which guards a distance of six feet, for use of the border/farm.
If one intends to build a paddock, let him build these things during three weeks/months, starting from the date of permission.
Let him not enter, under no circumstance, the territory.
And he, to whom fixed rents are payed, assuming that he possesses lands, and that a tenant cultivates these lands, he, according to the expansion of terrain which he reserves, as concessionaire or as owner, let him pay a tenth of the rent of these.
In this situation stays the one (who accepts the determined obligation) as well as he who doesn't. All the preceding has been carried out in the place of Sarnikios for the Akainakians.
And whoever sells at Tokoits the surplus, or part thereof, let him pay a tenth (as a tax).
If the magistrate has committed any infringement against the rules of Tokoits and Sarnikios, woever it be, let him be punished (or, if the ... have decided the rules of Tokoits and Sarnikios, let that remain as written??) ${ }^{116}$

There is still much discussion on the interpretation of the text, which can be seen in the translation above, by David Stifter, and the translation of the examples below, by Joseph Eska. I have supplied both translations here so this is visible, and also because Eska does not give a complete translation of the text.

Two o-stem locative singulars in -ei can be found in the text: śarniciei in Sarnikios' in line 9 and tocoitei 'in Tokoits' in line 10. ${ }^{117}$ Also in line 9 is a dative plural in -ubos: acainacupos' 'to the people of Akaina', this is also an o-stem. ${ }^{118}$

[^22]The texts contains three occurrences of the dative singular in the ā-stem: maśnai 'by violence' in line $2^{119}$, uertai 'from the destruction' in line $6{ }^{120}$ and probably also tamai in line $3{ }^{121}$ The case of maśnai is interesting, since it would have been better, judging by its translation, if it had been in the instrumental case. Eska suggests that the instrumental case had merged with the dative case in the ā-stems of Celtiberian, as in Insular Celtic. ${ }^{122}$

An s-stem dative singular in -ei can be found in line 9: eni-tousei 'veneration, offering'. ${ }^{123}$ The last three datives belong to the r/n-stems, these also have the ending -ei: taunei 'to destroy ${ }^{\prime 124}$ and tisaunei 'to destroy ${ }^{\prime 125}$, both in line 2 , and line 6 has [a]mpiticounei 'to rebuild'. ${ }^{126}$

There are two adverb that are probably formed using the ā-stem ablative singular ending *$\bar{a} d$, śua < *swād 'so, thus' in line $1^{127}$ and entara < *en-trā-d 'within' in line 6. ${ }^{128}$

## The merger of the four cases in the Celtic languages.

It is clear from the Gaulish evidence that the dative and instrumental plural endings were very similar, in Indo-European they were in fact the same, together with the ending of the ablative plural. These Proto-Indo-European plural endings were *-bh-for athematic nouns and ${ }^{*}-o(i) b h$ - for thematic nouns. ${ }^{129}$ Also in Gaulish the o-stem dative singular became -u from -ui, through phonological changes, rendering it the same as the instrumental ending.

It is possible that, after the o-stem dative singular ending became $-u$ and the dative plural ending adopted the instrumental plural ending -bi, the paradigm underwent analogical levelling, rendering all the dative and instrumental endings the same, in all the different stems in the singular.

According to Eska (1993) both Irish and Welsh are more closely related to Gaulish than to Lepontic or Celtiberian; he states that after Celtiberian split off from Proto-Celtic Lepontic followed, leaving Gaulish and the Insular Celtic languages, making this assumption more valid:
"There are a fair number of innovations which demonstrate that Transalpine Celtic, ${ }^{130}$ Goidelic and Brittonic are to be grouped under a single node on the Celtic family tree. Among these are the merger of ā-stem nominal flexional endings with those of the ī-stems, [...] and the syncretism of inherited dat. pl. -bo by instr. pl. -bi, as in Transalpine Celt. gobedbi 'to the smiths' (RIG L-13) beside Olr. túathaib < *tōtābi." ${ }^{131}$

This seems to be a likely scenario, even more when one considers that the ā-stem dative and instrumental merge in Celtiberian. This does not, however, give any clues on how the ablative and locative merged with the dative and the instrumental.

Schrijver (2007) suggests that the *-i in the reconstruction of the Old Irish datives does not derive from a locative ending, but rather an ablative ending:

[^23]"the Olr. 'short' dative singular of consonant stems of the type oíntu is normally reconstructed as *oinotūt < *oinotūti, with an IE locative or dative ending *-i which was lost as a result of early $i$-apocope. Now, however, we have the possibility of deriving this short dative from an ablative in *-ed: oíntu < *oinotūt < *oinotūtı < *-tūt-ed." ${ }^{132}$

That is, according to Schrijver there is no conclusive evidence for a locative ending *-i in the Continental Celtic languages. Celtiberian has a locative in -ei, and it is possible that this also is the underlying form in the Gaulish forms in -i. Furthermore, Celtiberian has an ablative ending -es < *-ed, which can also account for the datives in -i in Gaulish.

Even if one were to argue for a locative ending -i in Celtiberian, however, it is not sure whether this form survived as a living case form, but this could also account for the Gaulish dative in $i$ as well. Celtiberian, however, needs only two cases, the dative singular in -ei and the ablative singular in -es, and Gaulish only needs one.

Using Occam's Razor, this explanation should be preferred, since it only needs two forms to explain the attested forms, instead of three. Therefore the short dative in Old Irish probably derives from the ablative in Continental Celtic. ${ }^{133}$

If the argument discussed above are correct, then both the instrumental and ablative merged with the dative, but how it exactly happened and the reason for the merger are still unclear. As has been made clear in the previous section, the ablative does not normally merge with the dative, but it does merge readily with the instrumental on the basis of their semantic similarity.

This means that the ablative probably merged with the dative, after said dative had merged with the instrumental, or the ablative first merged with the instrumental and after that the two merged with the dative. It is however, also not very likely for the instrumental to merge with the dative without an intermediary.

This is where the locative comes into play. The locative often merges with the instrumental, as stated in the previous section, because the locative can sometimes express both the comitative and the instrumental. And the locative is very connected to the dative case.

As has been discussed in the previous section, the reconstructed Proto-Indo-European endings for the dative and locative are very similar, and the two cases are in complementary distribution with one another. It has also been argued that the locative arose from the dative, or vice versa, and they merge in many Indo-European languages.

Furthermore, both Gaulish and Celtiberian have an attested separate locative ending only for the o-stem, of which the locative in Gaulish is not certain. It could be the case that in all the other stems simply the dative case was used when denoting the locative, and only the o-stem ending remained separate. However, this eventually also merged with the dative.

After the locative had merged with the dative both the instrumental and ablative could easily merge with the dative, using the locative sense as an intermediary. Of course, it is not certain whether this is in fact the way the four cases merged in the Celtic languages, but, it seems to be the most logical one, presenting little problem.

[^24]
## Part II:

Data Analysis

## Which case do the Old Irish independent datives reflect?

In this part of this thesis the Old Irish evidence will be reviewed. Here examples of the independent datives from the different types of text will be discussed, beginning with the glosses, after that the narrative texts and finally the various poems. All of the independent datives can be found in the appendix; only a small number will be discussed here.

The independent datives have been categorized according to their underlying case. That is, the translation and context in which the words can be found has been analysed, and they have been labelled a pure dative, ablative, instrumental or locative. However, it has sometimes proven impossible to categorize datives because it was not possible to decide which semantic role was conveyed and the context did not provide any clues.

Therefore these cases are mentioned here, and they are listed in the appendix, but they will not be taken into account when making conclusions. It would otherwise be nearly impossible to conclude anything at all.

## Which case do the independent datives reflect in the glosses?

The aforementioned problem, that it was unfortunately not possible to categorize each and every independent dative, is the largest when looking at the glosses. Since the glosses often consist of only a few words or less, often just being a single word, they provide us with little to no context from which we can deduce what the underlying case is of an independent dative.

When dealing with a one-word gloss it can be very difficult to determine which semantic role is conveyed. Sometimes it helps to look at the Latin it is glossing. That is, not just looking at which case the Latin word is in, since Latin itself has merged cases. The ablative can denote not only the ablative sense, but also locative and instrumental. But, in some cases, it is clear which semantic role is conveyed in the Latin, and it is most likely that the Old Irish gloss has the same semantic role.

Another problem with the glosses is that often a translation of a Latin word is given, and this translation consist of only one word. Many times the preposition will be left out, leaving a seemingly independent dative; however, it is only a translation of the Latin substantive. Although it can be argued that these examples are not independent datives, they are included here because they are independent datives according to the definition given in the theoretical framework.

The independent datives have been collected from three different texts: the Milan Glosses on the Psalms, the St. Gall Glosses on Priscian and the Würzburg Glosses on the Pauline Epistles. These are the three largest collections of glosses, given here, and treated below, in descending order of size.

## The Milan Glosses.

Out of the 8443 Old Irish glosses on this text of the Psalms, 257 contain one or more independent datives. That is $3,0 \%$ of the total number of glosses. Some of these glosses contain more than one independent dative, that is, some glosses are longer sentences with two independent datives separate from each other, and others give two or three options when glossing a single Latin word.

Each of the four cases is reflected in these glosses, and they will be discussed in the order that they have been given in the theoretical framework, that is: dative, ablative, instrumental and locative.

The numbering that is given is according to the conventions in the Milan Glosses Project. ${ }^{134}$

## Dative.

Of the 257 glosses containing an independent dative, 117 , so almost half of them ( $45,5 \%$ to be exact), reflect an underlying dative. Of these 94 are predicatively used, conveying purpose or goal. These are set combinations, as we learn from Thurneysen:

[^25]"In prose this use is confined to certain combinations like fris-cu(i)rethar céill 'colit' (vb.n. freccor céill) [...], dat. of cíall 'sense'; ar-beir biuth or bith 'enjoys, uses' (vb.n. airbert, erbert biuth), with the dat. of bith 'world'; oidid menmain 'gives heed, attends (to)', with dat. of menma(a)e 'mind'; ar-mu(i)nethar féid 'honours' (vb.n. airmitiu féid), with dat. of fíad 'respect'." ${ }^{135}$
In the Milan Glosses almost all of these different combinations can be found:

021d03 friscoirter ceill
137c01 [...] 7 tír frecur ceill lassin lín naile
033c14 anarrubarttatar biuth
046b28 [...] .i. cia innerbirt mibiuth [...]
051d20 asnairmitnigthi feid
$121 a 06$.i. innermitin feid ón indí dǽ
'that they should be worshipped'
'and agriculture with the other set' 'when they have used'
'i.e. to what use?'
'that he is to be revered'
'i.e. that is, the reverence for God'

The combination oidid menmain is seemingly absent, but these have been analyzed as taking an accusative, and not a dative. ${ }^{136}$ The rest are all represented here, with conjugated verb and verbal noun. Airbeir biuth occurs the most, in 54 glosses, followed by ar-mu(i)nether féid in 29 glosses and fris-cu(i)rethar céill in 11 glosses. Gloss 022a04 is shared between an instance of airmitiu féid and an instance of freccor céill, making the total number of predicatively used independent datives 95.

The independent datives in the remaining 23 glosses have been categorized as datives because either theyreflect a semantic role connected to the dative, or the Latin word it glosses reflects a dative. Take for instance gloss 024a07b .i. soiraib 'to the free', glossing liberís, : this word can denote two semantic roles, it could be either goal or recipient.

In 090b14 we find an independent dative that denotes purpose or goal: .i. buide lesom [leg. do ?] taidbse neich immeforlaing dudia 'i.e. he is thankful for the showing of all that he has effected to God', glossing inpleri optans quæ ostensa lætatur. In the edition it is stated that the preposition do should be added, it is however not present in the original text, making it an independent dative. The fact that the preposition is missing here could mean that it was a deliberate decision on the scribe's part to leave it out; it could, however, also just be a simple scribal error. If it simply is a scribal error, it would not really be worth including in this thesis. However, leaving out all of the one word translation glosses, is it even possible to know whether the other examples of independent datives in this text are in fact deliberate and not a scribal error?

Why does the editor add do here, but not in other cases? Are the other more likely to be deliberate decisions? Or do we simply not know whether an independent dative was deliberate or a scribal error? Here all of the independent datives will be judged equally, even though they could be scribal errors, because there is a good possibility that all of them are scribal errors.

In the 053a04 messidib 'for judicial (ones)', which glosses quae arbitris, the
beneficiary/maleficiary is conveyed. The fact that the dative can represent possession can be seen in gloss 073a13: .i. beniaminecdu .i. de tribu beniamin fuit 'i.e. of Benjamin, i.e. he was of the tribe of Benjamin', glossing Beniaminitica.

As stated above, some of the glosses have been categorized according to the word they are glossing. That is, the Latin word it glosses conveys a semantic role that is expressed by the dative case. A good example is gloss 020a15 cortarsnaidib [leg. cotarsnaidib] 'adversaries', which glosses ad ipsos contradictores 'to those who object'. The Latin clearly reflects either recipient or goal. However, a note has been given in the Milan Glosses Database, stating that normally as ipsos contradictores would by glosses by do(naib) cotarsnaidib, but the scribe left out the preposition.

Another example can be found in 139a02 nuib 'new', glossing ad recenta. However, again a note is given: "As noted in Thes Pal, nuib is as if for do nuib to translated ad recenta." A third example can be found in 118a14 .i. foirbthiu ón 'i.e. that is, perfect' glossing ad obtatum. The

[^26]preposition ad 'to' clearly conveys the semantic role goal, which is one of the semantic roles that is expressed by the dative case.

## Ablative.

There are 38 glosses with an independent dative that has been categorized as an ablative, which is $14,8 \%$. Again some of these have been categorized according to the semantic role they convey, and others according to the Latin word they are glossing.

A very obvious ablative can be seen in 017c07 .i. huare is athir [leg. hoathir] arroét macc cumachtae [...] i.e. because it is from the Father that the Son has received power [...]'. Another can be found in ulidi .i. conruthói [add. hua] huilidetaid apreceptae dothaibsin sainemlae dæ 'general, i.e. he has turned from the generality of his teaching to show forth the excellence of God' in 051c22, glossing ad uniuersalem.

Here again there are some that have been categorized according to the translation of the Latin word they are glossing, such as: 121 b11 aiib 'theirs', which glosses de suis 'from theirs' and 138b03 sainredaig 'peculiar, glossing Latin a peculiari 'from [something] peculiar'. Another example can be found in 039a02 foirbthi 'perfect' glossing de salute 'from health'.

## Instrumental.

There are only 15 glosses in which the independent datives have been classified as instrumental, making up $5,7 \%$ of the total of glosses in which one or more independent datives can be found. Some are very straightforward, such as 048c08 esfoiti .i. indéni assafoiter guth • roort dia assaru síc 'emitted, i.e. with the swiftness with which voice is emitted, God slew the Assyrians thus', glossing emisæ.

Others need more explanation. Take for instance the different variations of in chruth so, meaning 'in that way, thus'. I have categorized these as instrumentals because the adverb 'thus' is formed using an instrumental in Sanskrit, Avestan, Greek and Hittite. ${ }^{137}$ Examples of this can be found in 041c04, 044b16, 098d01 and 127d04.

Others, such as the often occurring word aithirriuch 'again' have been marked intstrumental for their meaning. That is, aithirriuch is the dative singular of the verbal noun aitherrach meaning 'act of repeating, repetition'. To get to the translation 'again', aithirriuch has been taken to literally mean: 'with repetition', thus having an instrumental meaning. Examples can be found in: 046b01, 048d27, 060a09, 107c08, 115b09 and 134c06.

## Locative.

In the Milan Glosses there are 17 locatives, making up $6,5 \%$ of the total number of glosses with an independent dative. Most of these are locatives not of place, but of time. All of the occurrences of in tain for instance, are categorized as locatives. In tain is usually translated with 'when', but is also often translated more literally with 'at that time'. In the second translation the locative is easy to see. Examples of this can be found in 066d04, 073c02 and 076a06.

It is sometimes difficult to say something about in tain, because it could also be translated as 'during the time', making it an accusative of duration. The form would look the same if it were an accusative, the only difference would be the mutation that cannot be seen when written, only be heard when spoken. Here the forms are given that were marked as a dative by the editor, so there is a possibility that in the other texts many more or much less instances of in tain occur, because the editors of the other texts decide it is an accusative and not a dative.

Also classified as a locative is nachthain, in 039a23, 047c09 and 122b03, meaning 'at any time'. Others are aidchi '(on) one night' in 055c01 and lathidi 'daily' or 'on every day' in 133b15. In 138b08 oín fecht can be found meaning 'once' or more literally 'at one time'.

[^27]There is also indassa 'now' in 061 b02 and 108d11. This originated from foss, meaning 'in a state of rest, stationary, here, on this side'. This would be a locative, meaning something like: 'in this state, in this place'.

## Undetermined independent datives.

Unfortunately, as stated earlier in this section, there is a number of independent datives that cannot be categorized. There are 70 independent datives in the Milan Glosses, making up 27,2\% of the total number of independent datives.

Examples of this are: 055b07 madachaib 'futile' glossing frustratis, 084b03 imdu 'abundant' glossing opulento and 110d10 fotheisthib 'poured down' glossing suffusis. It is clear that it was impossible to assign a fitting semantic role, and the Latin is inconclusive. These could be determined if one were to take a detailed look at the Latin text and decide which semantic role is represented.

Sometimes these undetermined independent datives occur in longer glosses, such as: 017 b10 .i. a foraitmit [leg. foraithmit] do dia 'i.e. that God should remember Him', glossing qui dignus tanto honore sit habetus. However, in longer glosses it is usually easier to see the true case of the independent datives as they are in a full sentence, instead of only being a one-word gloss.

More undetermined independent datives can be found in single word glosses, such as: 038a04 nelán 'little cloud', 048d13 tobaidib 'cut down', 096a05 étib 'gained' and 093b02 .i. in meitse 'i.e. this extent'.

## The St. Gall Glosses.

The Latin text of Priscian's grammar contains 3777 Old Irish glosses, of which 77 contain one or more independent datives. That is $2,1 \%$ of the total number of glosses. Even more so than with the Milan Glosses it has been an issue here that not all of the independent datives could be categorized, that is, almost half could not be categorized at all.

The numbering is according to the conventions in The Online Database of the Old Irish Priscian Glosses. ${ }^{138}$

## Dative.

There are 12 independent datives in the glosses on Priscian that reflect an underlying dative, one of which shares a gloss with another independent dative. Of these, seven are predicatively used, conveying purpose or goal, such as: 035a11 .i. recht frecoir chéill cruith/nechtae 'i.e. the law of cultivating wheat', 078a01 ararubart/ bith 'that he has used' and 192b02 ara•mbera nech biuth 'that anyone should use'.

035 a11 has the only instance of the combination fris-cu(i)rethar céill, and the rest are examples of airbeir biuth. The combination ar-mu(i)nether féid does not occur in the St. Gall Glosses.

The other 6 show an underlying dative, acoording to the semantic role they convey, such as: 028 b16 .i. trenaib 'i.e. (to) substantives', glossing appelatiuis, which reflects a beneficiary or possession, even though it is not an animate noun.

## Ablative.

There are only 4 datives reflecting an ablative in the St. Gall glosses, and none of those have been classified according to their translation. Half of them have been tentatively classified an ablative because they gloss a Latin ablative: 039a03 ranngabáltaith † ranngabáldu 'participator or participial' glossing the Latin ablative participe 'partaking', and 064a02 lairt '(king) Lar' glossing [/ar]te '(king) Lar' which is in the ablative case.

The other two gloss a Latin word that is also in the ablative, governed by the preposition $a(b)$. Not only do they gloss ablative, they themselves convey source and are thus categorized as ablatives: 039a13 .i. nephdilledchaib 'i.e. indeclinables' glossing a dictionibus carentibus 'from free sayings', and

[^28]106b16 .i. duaibsib [...] 'i.e. unlucky [...]' glossing a fastis et nefa(s)tis 'from favourable and unfavourable'.

## Instrumental.

In these glosses 15 independent datives reflect an instrumental. Here again one is found in a gloss with another instance of an independent dative. Eleven of these consist of in chruth so 'in that way, thus', or variations of it. Take for instance $058 \mathrm{b05}$ ni•bbad bind nach cruth ailiu 'otherwise it would not be euphonious' where it is not 'in that way' but 'in another way, otherwise'. Other examples can be found in 007b03, 040a15, 063a14, 108b04, etc.

Another examples of an instrumental is feib in 144b03. i. feib fond•uáir som la auctoru issamlid da•árbuid./ reliqua 'i.e. as he has found it in authors so he has showed it', glossing nequit, and in 210b04 .i. feib con•rerortatar is indí as quis 'i.e. as they have erred in quis', glossing eodem. These two instances of feib have been categorized as instrumentals because they literally mean 'in the way that'.

The last two can all be translated best with 'by means of': 028a12 .i. robu óenlitrib 'i.e. either [lit. it can be] by single letters', glossing (uel) singulis (literis), 033a19a ar-bertar as noéntarmoirciunn .i. aitrebthacha ${ }_{7}$ agnomina 'they are expressed by the same termination, i.e. possessives and agnomina', glossing (ex) eadem (forma).

## Locative.

Five times the independent datives in this collection of glosses represent a locative. All of these are temporal. There are two instances of in tain (sin) 'when, at that time', in 066b14 and 130b03. For a detailed discussion on this form see under the Milan Glosses. Also appearing twice is indosa 'now' in 014b02 and 159b05. The last locative in the St. Gall glosses can be found in 222b01a .i. alailitain 'i.e. at some time'.

## Undetermined independent datives.

As stated above, there are many undetermined independent datives in these glosses. There are 43 of them which is $53,1 \%$ of the total number of independent datives. Examples of this can be found in 001a03 in méitso 'so much', glossing tanto, in 106b18 lebraib 'books', glossing fastibus, and in 203a13 immognamib 'constructions', glossing structuris.

Other examples are 001a01 .i. libardaib 'bookish', 046a14 in meincán 'fairly often', 180b01 eisib $\dagger$ loiscdib 'consumed or burnt' and 215 b03 .i. remsuidigud/aoinur cen/ brethir 'i.e. a preposition alone without a verb'.

Many of these undetermined datives are found in longer glosses, such as: 025b15 .i. [(fil)] sillaib ṅdiuit [(fodl)]-sidi ir/ rainn frisa ../ insce ../ beid ar is .. vel is/ [remśuidi] .. / vel is in../.. 'i.e. <"a" which is> separate simple syllable <which is a part of> a part <of speech> ... For it is <a syllable> or it is a preposition or ... (?)'. This is simply impossible to classify as it is so incomplete.

## The Würzburg Glosses.

There are 3503 glosses on the Pauline Epistles, almost as many as on the text of Priscian, but only 47 of those glosses contain an independent dative, which is $1,4 \%$. Again there are some that could not be categorized, but luckily many fewer than was the case with the St. Gall glosses.

## Dative.

There are 22 independent datives that reflect a dative, which is $29,7 \%$ of the total number of independent datives. Of these, 18 are predicatively used datives that convey purpose or goal, such as: 07 d 14 [...] .i. airmitiu féid inchinn dothabirt donaib ballaib '[...] i.e. in giving the members the respect due to the head'.

Others are 11b05 .i. issí tra temptatio homana asrubart túas freccor céil ídol et accobor á túare 'i.e. this, then, is the tempatio humana which he had mentioned above, cultus of idols and desire of their food' and 11b25 .i. arnách airbirid biuth [...] 'i.e. that ye should not partake of it [...]'.

Of the 18 predicatively used datives four are a variant of the combination ar-mu(i)nether féid, two are a variant of fris-cu(i)rethar céill and the remaining twelve are a variation of the combination airbeir biuth.

This still leaves four other independent datives that have been categorized as datives. There are two that convey recipient: 05b06 .i. indaltóir foranidparar (do) ídlaib 'i.e. the altar whereon offering is made to idols', although this might not be the best example as the manuscript is illegible, and there is a possibility that do was written after all.

There is another example of recipient: 21 c 14 .i. preceptorib 'i.e. to teachers', glossing profetis. Another conveys beneficiary: 21d25 i. napadairib far nóinur 'i.e. let it not be for you yourselves alone'.

The last one, 09b15 esbetu 'uselessness', has been categorized because it glosses the Latin word nequitiae 'worthlessness', which could be in the dative case, however, it could also be in the nominative or genitive case. It seems most likely that it would be in the dative case here.

## Ablative.

In the Würzburg Glosses there are no independent datives that reflect an underlying ablative.

## Instrumental.

In this collection of glosses there are two independent datives that reflect an underlying instrumental, the first can be found in $07 \mathrm{c08}$ [...] et hésom triuss 'and he himself as the third'. In his edition, Kavanagh specifically states that this is an instrumental. ${ }^{139}$

The second is 15b04 .i. úadfialichthi [...] 'unveiled [...]' which glosses reuelata facie 'with uncovered faces'

## Locative.

There are 33 independent datives that reflect a locative. Three of these are locatives of time. Both in 04 a 08 and 04 d 03 in decht so, or a variation of it, can be found. This is mostly translated with 'now', but can be translated more literally as 'at this time'. The third temporal locative can be found in 04 c 11 .i. cinn rehe, it literally means 'at the end of a space', but this actually means 'at the end of a space of time, after a time'.

The fourth locative is purely locational: 17 d 15 aincis 'a hamper'. This has been categorized because it glosses Latin in sportam 'in a basket', which clearly has a locative meaning. Therefore, it would be better to translate aincis with 'in a hamper'.

The next example in an interesting one: 25a22 i. aeicentatu 'necessity', which glosses in omni necessitate, which reflects location in a state. Another locative can be found in 33a10 tacráth 'provocation' which glosses in exacerbatione 'in exasperation'. ${ }^{140}$

The remaining 27 locatives are variations of in tain. Examples are: 02c06 i.inintain rombói in praeputio 'i.e. is it when he has been in praeputio?', 03c14 .i. robtar hesid aidmi oipretho pectho intainsin 'i.e. they have been instruments of committing sin then' and 28d09.i. intain dorratad grád fort ' $\mathrm{i} . \mathrm{e}$. when orders have been conferred upon thee'.

## Undetermined independent datives.

Again there is a number of independent datives that could not be categorized. There are 17 in total, such as: 19d01 .i. foichlorib 'guardians', glossing curatoribus 'keepers', 19d01 i. secridapthib 'viceabbots', glossing actoribus 'drivers' and 28b10 .i. cissib 'braided', glossing tortís 'twisted', 28c16 .i. is seichti [...] 'in hypocrisy [...]' and 32a07 .i. ........ hiressach 'i.e. .... faithful'.

[^29]
## Which case do the independent datives reflect in narratives (legal texts)?

The independent datives have been collected from four different legal texts: Críth Gablach, a text on status, Bechbretha, on bees and bee-keeping, Uraicecht na Ríar, a text on the grades of poets and Dí Astud Chor, on contracts.

Dí Astud Chor is partly written in prose, but also partly in verse. The prose part, and the independent datives found in it will be discussed here, the part that is in verse will be discussed in the section on poetry. The texts will be discussed in the order given here

Whereas there were too many independent datives in the glosses to discuss them all, and therefore a selection was given, in these texts there are much less so they will all be discussed. This includes all of the undetermined independent datives.

## Críth Gablach.

In this law-text 32 independent datives can be found. That is more than in the other three texts combined. There is unfortunately a number of independent datives that could not be categorized, as was the case with the glosses. This problem does not exist in the other legal texts.

## Dative.

Out of the 32 independent datives 13 reflect a dative, which is $40,6 \%$. Nine of these convey purpose: in line 230 dag-cerchaill 'for a good cushion' can be found, and two lines after this, in line 232, dagassaib 'for good shoes', and in line 236 séot 'for a sét'. The other six can all be found in the same sentence in line 340-341: Lepaid daltu, comaltu, fiur, mnaí, macc, ingin. 'A bed for a fosterson, a foster-brother, a man, a woman, a boy, a girl.

There are three independent datives that convey either purpose or goal: cintaib 'in regard to liabilities' in line 339 and cáin 'in regard to written law' and cairddiu 'in regard to treaty-law', both in line 340 . The last dative has the semantic role goal and can be found in line 251 reicc 'to selling'.

## Ablative.

There is only one independent dative that reflects an ablative óen-béimm 'at a single blow' in line 557. This is better translated as 'from a single blow', for example: 'he died at/from a single blow'.

This is, however, a prime example of how the ablative and instrumental can be very much alike, and this could just as well be an instrumental.

## Instrumental.

In Críth Gablach eight independent datives that reflect an instrumental can be found. In line 246 the dative mucaib '(payable) in pigs' can be found. This does not seem an instrumental, at first glance, but when it is translated as 'payable with pigs' it becomes much more clear.

An instance of aithirriuch 'again, with repetition' can be found in line 311. In line 526 three independent datives can be found: goí ná écin ná forniurt 'by falsehood or by force or by superior strength'. This is better translated with 'by means of'.

In line 594 there is coímtecht 'in accompaniment', which is an example of the comitative. Other examples of the comitative are dib feraib 'with two men' in line 598 and dib ferib, also meaning 'with two men' in line 603. Since the comitative is expressed by the instrumental these examples are categorized as such.

## Locative.

There are three locatives in Críth Gablach. Two of them are temporal: one can be found in line 186: cach aimsir 'every time', and another is raithiu 'in the quarter' in line 237, which is clearly a locative. There is one that denotes location and not time: in line 418 there is nach airm 'wherever', which can be literally translated as 'in any place'.

## Undetermined independent datives.

Seven independent datives in Críth Gablach remain undetermined. Line 166 and 204 both have an instance of triur 'he is three'. In line 249 and 259 also has the same word occurring twice: bóairechaib '(takes precedence) of the bóaire'. Line 373 has cur 7 chairddiu 'in contract and in treaty-law'. The last can be found in line 444: cumachtu simply translated as 'the power'.

## Bechbretha.

In this law-tract on bees and bee-keeping only two independent datives can be found, and both reflect a locative. In line 2 there is cach leth 'on every side', and in line 27 a temporal locative can be found: ind amsir 'at the time'.

## Uraicecht na Ríar.

As in Bechbretha, only two independent datives can be found in Uraicecht na Ríar. The first can be found in line 8 and has been categorized as an instrumental: do-renar secht cumalaib 'who is paid compensation with seven cumal's'.

The other has been more difficult to categorize, but has been classified as an ablative. It can be found in line 26: at-balar coibligiu chíabair 'one perishes through dark (illicit) cohabitation'. The context suggests that 'dark cohabitation' leads to ones perishing, leading to its categorization as conveying source, that is, the source of the perishing, and thus it is classified as an ablative. This is confirmed by the fact that it is translated with the preposition 'through'.

## Dí Astud Chor.

In the prose part of this legal text on contracts 12 independent datives can be found. Of these, none are categorized as ablative or locative. This leaves us with only datives and instrumentals. As stated above, all of the independent datives were categorized, so there are also no undetermined independent datives in the prose part of Dí Astud Chor.

## Dative.

Nine out of the 12 independent datives have been categorized as datives. This is $75 \%$ of the total number, which is quite a lot. All of these are examples of either purpose or goal: in §23 comnadmaim can be found, meaning 'in regard to mutual exchange of promises', and in $\S 37$ nim 'in regard to heaven'.

In §19 there are two: bithráthaib 'in regard to permanent paying suretyships' and bithdilsib 'in regard to permanent immunities from legal challenge'. The remaining five independent datives can be found in §57: roach 'in regard to contractual witness', ráthaigius 'in regard to paying suretyship', fir 'in regard to proof', forus 'in regard to pronouncement (of judgement)' and fíadnaisiu 'in regard to eyewitness evidence'.

## Instrumental.

The remaining $25 \%$ of independent datives is comprised of instrumentals. In $\S 1$ there is inscib ánaib 'by honourable statements', perhaps better translated as 'by means of honourable statements'. In $\S 37$ a clear example of an instrumental can be found: foltaib firaib 'with true considerations'.
$\S 57$ has an example of the instrumental expressing the agent in passive sentences, which is the first example of this: gáethaib 'by capable persons'.

## Which case do the independent datives reflect in poetry?

In poetry independent datives are often used, probably as a stylistic element. Here the independent datives from the Leinster Poems, a series of genealogical poems, and from Early Irish Lyrics, a collection of Old Irish poetry - this includes monastic and secular poetry - translated by Gerard Murphy, will be used, together with the datives from Tiughraind Bhécáin, a poem praising Columb Cille, and the part of the legal text Dí Astud Chor that is written in verse.

As with the prose legal texts, all the independent datives will be discussed, as there are not too many, again there are some that could not be classified, and these will all be mentioned as well.

## The Leinster Poems.

This is a collection of genealogical poems, dealing with the Leinster people. Across the various poems 21 independent datives can be found. The poems will be named by their full name the first time they are mentioned; after that an abbreviation will be used.

## Dative.

There are no independent datives in the Leinster Poems that reflect an underlying dative.

## Ablative.

There are more ablatives as there are datives, but still there are only two. One can be found in $\S 5$ of Móen óen: deeib 'of gods'. The other is seirib 'Heeres' in §7 of Núadu Necht ní dámair anflaith (henceforth abbreviated on NN).

## Instrumental.

$42,9 \%$, that is nine independent datives, have been categorized as instrumental. Five of these can be found in NN: in §13 faíbraib derggaib 'mit roten Schneiden', §14 drongaib máraib 'mit grossen Heereshaufen', §16 móraib frassaib 'mit gewaltigen Schauern', §16 dóenaib ruadaib 'mit blutigroten Männern' and §27 láignib lethnaib, buidnib 'mit breiten Lanzen, mit Kriegsscharen'.

Another can be found in Find Taulcha, in §1: bárcaib 'mit schiffen', and another in Cathair coem also in §1: comfebaib 'mit gleichen tugenden'. The last two are located in §1 of Lámair lergga: láthaib 'mit Helden', and in §1 of Línais Nia: slógaib 'mit Kriegsscharen'. Both of these are good examples of comitatives.

## Locative.

There is only one independent dative in the Leinster Poems that reflects a locative: crólechtaib 'auf blutlagern', found in §3 of Mára galgata.

## Undetermined independent datives.

There are as many undetermined independent datives as there are ones that reflect the instrumental: nine. Some of these, three to be exact, are undetermined because the context is too obscure to allow an interpretation; poetry in gereral is notoriously difficult to interpret.

One of these can be found in §25 of NN: mílib [...] mísaib. The other two are both located in Énna Labraid luad cáich, one in §14 srethaib, and the second in §29 bith.

The other undetermined independent datives do have a translation, but this was not enough to be able to categorize them, unfortunately. Two can again be found in NN: one in §27 cathaib cruadaib 'in harten Schlachten', and the other in $\S 51$ tréoin 'ein Held'. Two others can be located in Nidu dír dermait, one in §6 bith 'die stolze Welt' and the other in $\S 22$ nithaib 'die Edlen'. The last one can be found in Na trí Fothaid in §2: triur 'eine Dreiheit'.

## Early Irish Lyrics.

As mentioned above, this is a collection of both monastic and secular poetry. Not all of the poems in the book have been analyzed, since some are later than the Old Irish period. The various poems combined hold 11 independent datives.

As with the Leinster Poems the first time a poem is mentioned the full name is used, afterwards an abbreviation will be used. And again there are some independent datives that could not be categorized.

## Dative.

There is one independent dative that reflects goal, and is thus categorized as a dative. It can be found in $\S 22$ of The Lament of the Old Woman of Beare: bith 'to be'.

## Ablative.

In the poems in Early Irish Lyrics there are no independent datives that reflect an underlying ablative.

## Instrumental.

Four independent datives, that is $36,4 \%$, reflect the instrumental. The first of these can be found in $\S 29$ of King and Hermit: forglas néol, which can be translated literally as 'with very grey cloud'. Two can be found in A Hermit Song (from now on HS): one in §3 súilib tlaithib todéraib 'with eyes feeble and tearful' and the second in §13: m'óenur 'with me alone'.

The last independent dative reflecting an instrumental is located in God Be With Me, in §8: cech cruth 'in every way'. This has been categorized an instrumental for reason that it is a variation of in chruth so 'in that manner, thus'.

## Locative.

There are two locatives in the poetry of Early Irish Lyrics, and both can be found in Messe ocus Pangur Bán (from now on MPB). Both are also temporal locatives. The first is located in §4: húaraib 'at times', and the second in §7 nach ré 'at any time'.

## Undetermined independent datives.

Four datives remain undetermined, the first one can be found in $\S 3$ of MPB: clius 'feat'. There is one located in The Lord of Creation, in the first and only paragraph: cusnaib aicdib amraib 'maker of wondrous works'.

Another can be found in HS, in §1: m'óenurán 'all alone', and the last is located in §2 of MayDay: cerb caill chraíb 'branchy wood is lacerated'. It is clear that these forms do not reflect any one of the four cases.

## Tiughraind Bhécáin.

In this poem in praise of Columb Cille a total of 13 independent datives can be found. Interesting about this is the fact that all of these are dative plural. It seems as though they were used mostly as a stylistic element, since the dative plural ending is very marked; it does not occur elsewhere in the paradigm.

Dative.
Of these 13 independent datives, four reflect a dative. The first can be found in the first paragraph', conveying the benefactive: cétaib landa 'churches for hundreds'. In $\S 8$ the next is located: mílib 'over thousands'.

Another can be found in §17: caoíne bertaib 'fairest of deeds'. The last one is located in §21: ríaraib imbaiss 'according to the demands of poetic knowledge', conveying purpose or goal.

## Ablative.

As in the poems from Early Irish Lyrics, there are no independent datives reflecting an ablative in Tiughraind Bhécáin.

## Instrumental.

There are eight independent datives reflecting an underlying instrumental in Tiughraind Bhécáin, which is more than half, $53,8 \%$ to be exact. The first one can be found in §3: findaib coraib 'with fair deeds'. The second is located in the paragraph after that, $\S 4$ : fichtib curach 'with scores of boats'.

The third one is almost a repetition of the first, except with a different wording, found in $\S 7$ : lethnaib coraib 'with fair deeds'. Number four is located in §17: feisib tercaib 'with few sleeps'. Then
three can be found in §24: lámaib fáenaib 'with outstretched hands', findaib gartaib 'with fair acts of generosity' and gnímaib mathib 'with good deeds'.

The last one is located in §23: cressaib 'in religious garb', this reflects accompaniment. Accompaniment makes it a comitative, and comitative is a part of the instrumental.

## Locative.

In the independent datives there is only one locative to be found, in §24: aidchib laithib 'by nights [and] by days'. This is again a temporal locative. It would have been more clearly marked as a locative if it were translated with 'at', but this is not possible since it is in the plural, and 'at night and at days' would simply not make any sense, even though it has the same meaning.

## Dí Astud Chor.

As stated earlier, this legal text dealing with contracts is partly written in prose and partly in verse. The prose text has already been dealt with, which leaves the part in verse, which will be discussed here. In the part written in verse there are 11 independent datives.

## Dative.

Out of the 11 independent datives three reflect a dative, which is $27,3 \%$. They can all be found in the same paragraph, namely §5: sóer-choraib 'regarding independent contracts', duinorcuin 'regarding man-slaying' and nach cul 'regarding any wrong'. All three convey either purpose or goal.

## Ablative.

There are no ablatives to be found in Dí Astud Chor, neither in the prose part nor in the part that is in verse.

## Instrumental.

Almost half of the independent datives, that is, $45,5 \%$, reflect an underlying instrumental. In total there are five. The first can be found in §9: coméicin 'by compulsion'. It is easier to see it is an instrumental when it is translated as 'by means of compulsion' or 'with compulsion'.

The second is located in §28: láim 'by hand'. The last three can be found in a single paragraph, namely § 36: gnímaib córaib 'by correct acts', ráthaib trénaib 'by strong paying sureties' and inscib ánaib 'by honourable statements'. For all of these it would be easier to see that they are instrumental when they are translated with 'by means of' or 'with', just as the first one.

## Locative.

There is only one locative, and it is located in §36: fíadnaib 'before witnesses'. This clearly conveys the location of this person, standing in front of the witnesses.

Undetermined independent datives.
There are also two independent datives that could not be categorized. The first can be found in §2: cur chomnadmae 'in a contract involving (lit. 'of') the mutual exchange of promises'. The second and last one is located in $\S 25$ : cach cundrad 'in every bargain'.

## Is there a difference in the use of the datives among the different types of text?

When looking at the previous section, the answer to this question becomes quite clear. It is not difficult to see that the answer is yes, there is a difference in translation of the datives between the different types of texts. But what exactly are the differences, and how do the texts differ among themselves?

This will be discussed here. First the division of the translation of the independent datives within the different texts will be discussed, following the order of the previous section. After this, generalisations will be made to cover the translation of datives in the different types of text.

## Glosses.

In the Milan Glosses 257 independent datives can be found, and the most of these can be translated as a dative, $45,5 \%$ to be precise. This is followed by the ablative with $14,8 \%$ and the locative with $6,6 \%$. The case underlying the least datives is the instrumental with $5,8 \%$. Then there still is a large part that could not be determined, $27,2 \%$.

The St. Gall glosses on Priscian contain 79 independent datives, in 76 glosses. 12 of these are true datives, making up $15,2 \%$ of the total. There are however three more datives that are classified as an instrumental, making this the most used case in the glosses on Priscian, making up 19\%. Third place is taken up by locative, with $6,3 \%$ and fourth place goes to the ablative with $5,1 \%$. Most of the independent datives in the St. Gall glosses, however, could not be categorized. This category makes up over half of the total, $54,4 \%$ to be exact.

The Würzburg Glosses only contain 74 independent datives. Most of these have been classified as a locative, making up almost half, $44,6 \%$ to be precise, of the total number. The second largest group is those that have been classified as a dative, making up $29,7 \%$. There are two instrumentals, which is $2,7 \%$, and there are no instances of an ablative. Making up quite a large portion of the total is the number of undetermined independent datives. There are 17 of them, making up 23\%.

With all three collections of glosses combined there are 410 independent datives. The largest number of those, $36,8 \%$, is categorized as a dative. The second largest group is the locative, making up $13,4 \%$ of the total. $10,2 \%$ is made up by occurrences of the ablative. Fourth place goes to the instrumental, with 31 instances making up 7,8\%.

|  | Dative | Ablative | Instrumental | Locative | Undetermined | Total |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Milan | 117 | 38 | 15 | 17 | 70 | 257 |
| St. Gall | 12 | 4 | 15 | 5 | 43 | 79 |
| WB | 22 | 0 | 2 | 33 | 17 | 74 |
| Glosses | 151 | 42 | 32 | 55 | 130 | 410 |

As for the undetermined independent datives: $31,7 \%$ could not be determined. It is, however, difficult to take all three of the collections together, since they are divergent from one another, and do not show a unified picture.

That is, where both Milan and Würzburg have a large number that is classified as a dative, St. Gall stays at $15,2 \%$. Furthermore, in St. Gall most of the independent datives are categorized as an instrumental, taking up 19\%, whereas in Milan the percentage of instrumentals is only 5,8 and in Würzburg it is 2,7 .

It could be that the problem lies in the high percentage of undetermined independent datives in the St. Gall glosses, which is 54,4\%, but there are many in Milan and Würzburg as well (respectively $27,2 \%$ and $23 \%$ ), albeit not as many.

Another difference can be found in the number of locatives in Würzburg. In Milan and St. Gall the percentage is relatively small, 6,6 and 6,3 respectively. However, in Würzburg this percentage is much higher, $44,6 \%$, which is almost half of the total. Most of these locatives consist of a variation of
in tain. The number of ablatives in St. Gall and Würzburg is small, having 5,1\% and 0\% respectively. In Milan, however, this number is higher, making up 14,8\%.


Some of the discrepancies could be explained through petrified constructions. That is, the high number of locatives in Würzburg would be around the same amount of locatives in Milan and St. Gall if the instances of in tain, which is a petrified contruction, would be left out.

If in tain would be left out of Würzburg, other petrified constructions should be left out as
 well. This means that all of the predicatively used independent datives also have to be disregarded. This would level the percentages of datives, and the percentages of instrumentals would also be more similar.

However, using this method gives the ablatives in Milan an unreasonably high percentage, which should not be the case. The percentage of undetermined independent datives goes up as well, which is the exact opposite of what was intended.

Leaving out the petrified construction in tain would make the percentage of locatives in all three collections of glosses more similar, but this would also mean that the predicatively used independent datives should be disregarded as wel, which levels out the percentages of datives, but blows the ablatives and undetermined independent datives out of proportion, as well as the percentage of locatives in Würzburg.

## Legal texts.

The 32 independent datives in Críth Gablach are mostly translated as datives, that is, in $40,6 \%$ of the cases. A quarter of the datives reflect and underlying instrumental, and $9,4 \%$ is taken up by the locative. With only one occurrence the ablative makes up only $3,1 \%$, making it the least used case. The remaining $21,9 \%$ has unfortunately remained undetermined.

In both Bechbretha and Uraicecht na Ríar there are only two instances of an independent dative. In the law-text on bees and bee-keeping both are locative, the locative thus making up the full $100 \%$. In the legal tract on poetic grades one of the datives is categorized as an ablative, making up $50 \%$, and the other as an instrumental, taking up the other half.

The prose text of Dí Astud Chor contains 12 independent datives. Nine of these, which is $75 \%$, have been categorized as a true dative. The remaining $25 \%$ consists of instrumentals. Fortunately, there are not many undetermined datives in the prose texts, only in Críth Gablach, however, there are not that many independent datives in the prose texts to begin with.

In the four legal texts there is a combined total of 48 independent datives. Almost half of this number, $45,8 \%$, is taken up by datives. A quarter is categorized as instrumental. Taking up the third place with $10,4 \%$ is the locative and last is the ablative with only $4,2 \%$. The remaining $14,6 \%$ is made up by undetermined independent datives.

|  | Dative | Ablative | Instrumentalis | Locative | Undetermined | Total |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| CG | 13 | 1 | 8 | 3 | 7 | 32 |
| BB | 0 | 0 | 0 | 2 | 0 | 2 |
| UnR | 0 | 1 | 1 | 0 | 0 | 2 |
| DAC | 9 | 0 | 3 | 0 | 0 | 12 |
| Prose | 22 | 2 | 12 | 5 | 7 | 48 |

As with the glosses it is difficult to take the four texts together to get a result. That is, two of the texts, Bechbretha and Uraicecht na Ríar, contain only two independent datives, which is a small number, compared to other texts, and because of this the results might seem distorted. Furthermore, when looking at the cases that are reflected in these two texts, they are wholly different from what can be found in the remaining two texts.

Fortunately, there are not very many undetermined independent datives in these texts, although it is a disadvantage that they are all in the same text, namely Críth Gablach. That is, it could be that the results from Dí Astud Chor are an anomaly, and the results from Críth Gablach are more similar to the results from Bechbretha and Uraicecht na Ríar, but that it is not visible because of the undetermined datives.

Assuming that the results from Críth Gablach and Dí Astud Chor are the standard, and the other two texts display the anomaly, it is clear that the legal texts favour the dative case. Interestingly, in both texts the number of instrumentals is exactly 25 percent, which shows that after the dative the instrumental is most likely to be used.

There are no locatives or ablatives in Dí Astud Chor, and since the number of independent datives in Bechbretha and Uraicecht na Ríar are not very representative, it is not possible to say anything about this. It is however interesting to see that there are locatives in Bechbretha, and an ablative in Uraicecht na Ríar. It seems to be that in the case of locatives and ablatives Dí Astud Chor is indeed the anomaly.


## Poetry.

There are 21 occurrences of an independent dative in the Leinster Poems. $42,9 \%$, that is almost half, is made up by the instrumental. There are two ablatives, making up $9,5 \%$, and only one locative, making up $4,8 \%$. There are no datives whatsoever, but there are some undetermined independent datives, that is, just as many as there are instrumental, making up the remaining $42,9 \%$, which is quite a lot.

The various poems in Early Irish Lyrics contain 11 independent datives. Four of these have been categorized as instrumentals, making up $36,4 \%$. Two are classified as locatives, making up $18,3 \%$, and again there is only one that has been categorized as a dative, taking up $9,1 \%$. Interestingly there is no instance of an ablative here. This leaves $36,4 \%$ that are unclassified, again as much as the instrumentals take up.

Tiughraind Bhécáin, the poem in praise of Columb Cille, holds 13 independent datives in total. Of these 13 over half, eight to be precise, have been categorized as an instrumental, making up $61,5 \%$. In this poem the datives take second place, with $30,8 \%$. There is also one locative, making up $7,7 \%$. As was the case with the poetry from Early Irish Lyrics, there are no ablatives to be found here. There are no undetermined independent datives in this poem.

The last text to be discussed is the part of Dí Astud Chor that was written in verse. This text contains 11 independent datives, five of which have been categorized as instrumentals, which is $45,5 \%$ of the total. There are three datives, taking up $27,3 \%$, and a single locative, making up $9,1 \%$. As in the Early Irish Lyrics and Tiughraind Bhécáin there are no independent datives classified as a ablative, but there are 2 that remain undetermined, which is $18,2 \%$ of the total.

In all poems taken together, there are 56 independent datives. Twentysix of these reflect an underlying instrumental, which is $46,4 \%$, and $14,3 \%$ represents a dative. The locative has a slightly larger number of occurences than the ablative, making up $8,9 \%$. The ablative takes up the rear with $3,6 \%$. The remaining $28,6 \%$ is made up by undetermined independent datives.

|  | Dative | Ablative | Instrumentalis | Locative | Undetermined | Total |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| LP | 0 | 2 | 9 | 1 | 9 | 21 |
| EIL | 1 | 0 | 4 | 2 | 4 | 11 |
| TB | 4 | 0 | 8 | 1 | 0 | 13 |
| DAC | 3 | 0 | 5 | 1 | 2 | 11 |
| Poetry | 8 | 2 | 26 | 5 | 15 | 56 |

It is clear that in all the poems, be they genealogical, monastic, secular or legal, most of the independent datives reflect the instrumental. It varies in the different texts between a little under half to over half of the total number of independent datives.

All of them also contain locatives, albeit in most texts only one. Datives occur in three out of the four texts, however their distribution is not regular. In the Leinster Poems there are no datives, and in the poetry from Early Irish Lyrics only 9,1\% is made up by the dative. However, in Tiughrand Bhécáin the percentage of independent datives that are classified as a dative is 30,8\% and in Dí Astud Chor this percentage is very similar at 27,3\%.

Ablatives are the most infrequently found in poetry, only the Leinster Poems preserve two examples that are classified as such, the rest of the texts do not contain any ablatives at all.


## The differences and similarities between the three types of texts.

Now the individual texts have been discussed, the differences and similarities between the three types of texts, glosses, prose and poetry, have become clear. In the legal texts almost half of the independent datives can be categorized as datives, and, when looking at the glosses it is possible to
 state that the dative is the underlying case for most independent datives, even though the evidence is not as convincing as with the legal texts. It might even be possible to state that, if we put glosses under prose texts, that all prose texts favour an underlying dative when dealing with independent datives.

In poetry, however,
the dative plays a much smaller role, and most, again almost fifty percent, of the independent datives represent an underlying instrumental. This makes for a nice opposition between prose and poetry, and can be helpful when translating independent datives.

There are, however, still some differences when looking at how the independent datives are treated in the glosses and in legal texts. That is, in both types of text the majority is dealt with the same, but there are differences in how the rest is treated.

In the legal text the second largest group of independent datives reflect an underlying instrumental, making up $25 \%$ of the total. In the glosses the instrumental is much less present, making up only $7,8 \%$. However, as stated above, there are some discrepancies between the three collections of glosses, when looking at St. Gall alone the number of instrumentals would be much higher, and similarly, when only looking at Milan and Würzburg, the number would be much lower.

A similarity that can be found in all the texts is that the percentage of ablatives and locatives (with the notable exception of Würzburg, which has a very high percentage of locatives) is relatively low in all of them. It seems that, when using independent datives, mostly the dative or instrumental is reflected, and not the ablative or locative.

The glosses have the highest percentage of ablatives, namely $10.2 \%$. Compared to the other texts $-4,2 \%$ in the legal texts and $3,6 \%$ in poetry - this number is pretty high. There is also the possibility that there are more, since the glosses have a lot of undetermined independent datives.

This means that there is a possibility that the number of ablatives in the glosses is much higher than can be seen at this moment. However, there is a number of undetermined independent datives in almost all of the texts, so it is possible that the actual distribution of cases is very different than it is now.

However, as long as the method of distribution remains constant across the text types, it should be okay. That is, as long as one stays consistent, the results might be slightly skewed, but there is reason to suspect it to be systematic.

Moving on to the locative, it is interesting to see that all three types of texts have similar percentages of independent datives that represent a locative. For the glosses this is $13,4 \%$, for the legal texts $10,4 \%$ and for the poetry it is $8,9 \%$.

|  | Dative | Ablative | Instrumental | Locative | Undetermined | Total |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Glosses | 151 | 42 | 32 | 55 | 130 | 410 |
| Prose | 22 | 2 | 12 | 5 | 7 | 48 |
| Poetry | 8 | 2 | 26 | 5 | 15 | 56 |
| Total | 181 | 46 | 70 | 65 | 152 | 514 |

## Is one of the four cases the underlying case for (most) independent datives?

As can be easily seen in the previous section, it is clear that most independent datives reflect either a dative or an instrumental. The dative is the most used case in the glosses and legal texts, and the instrumental in the poetry. The instrumental is also the second most used in the legal texts.

The locative and ablative are much less used in all of the text. Even in the texts where they are used more often, they rarely exceed $10 \%$ of the total number of independent datives in any one text, making an exception of the two legal texts where there are only two instances of an independent dative whatsoever.

It is logical that the dative case is one of the cases that is used the most, since it is, in fact, the dative case that remains after the dative, ablative, instrumental and locative merge. But, because the dative case was used with many prepositions, it is possible that the Old Irish speakers did not know of the other underlying cases at all, but simply used an independent dative where they would normally use a dative governed by a preposition.

However, if this was the case, it is very interesting to see that next to the dative often being reflected, the instrumental is reflected very often as well, especially in poetry. But, since it occurs most frequently in poetry, it could just be a stylistic choice, or a matter of otherwise having to many syllables in a sentence.

It could also be the case that the locative and ablative are much less represented because they convey fewer semantic roles. Both the ablative and the locative express only one semantic role, source and location respectively, although the locative can express location in place and in time.

The dative and instrumental both express many more semantic roles; the dative can express the indirect object, possession, beneficiary or maleficiary, recipient, experiencer, purpose and goal. The instrumental can express means or agent, but also the comitative. One might expect that all of these semantic roles would be more or less evenly distributed among the texts, and that that is the reason for the ablative and locative to be much less represented than the dative or instrumental.

This is, however, not the case. That is, most of the datives found in these texts express either purpose or goal, and most of the instrumentals express means. In the glosses most of the datives occur in set combinations, being used predicatively, such as friscoirter ceill 'they should be worshipped'.

It could be that these were not seen as datives anymore, just as certain combinations that were always used. These petrified datives do not only occur reflecting a dative, these are also represented in other cases, such as the locatives in tain 'when' and indossa 'now', and in chruth so 'in that manner, thus'. The only case which is not represented when looking at the petrified datives is the ablative.

Perhaps it would be interesting to look at the independent datives without these petrified datives; this would, however, leave very little to be examined. It would probably even more interesting and enlightening if it was possible to categorize the undetermined independent datives.

Interestingly, there are no instances of these predicatively used combinations expressing purpose or goal outside of the glosses, this means that all of the independent datives in the legal texts and poetry that reflect a dative truly represent a dative. This is also the case for the other petrified datives, reflecting the locative and instrumental; they only occur in the glosses.

The only thing that is sure at this moment is that most of the independent datives reflect a dative in the prose texts, and an instrumental in the texts in verse. In the legal texts the instrumental also takes up a large part of the total number of independent datives.

It is, however, important that it is not forgotten that all of the cases, dative, ablative, instrumental and locative, are represented in the texts. Even though not every single text has an occurrence of every case, it is clear that they are not at all absent. There is not a single case that is missing from any type of text.

## Conclusions.

In this thesis case merger in Indo-European and the independent datives in Old Irish were researched. It consisted of two parts, in part I the theory behind case merger was explored and the how and why of the merger of the dative, ablative, instrumental and locative in the Celtic languages was discussed.

There are two types of case merger: merger through phonological changes, erasing the different endings in the paradigm, and functional syncretism, which works on the basis of semantic or syntactic similarities. Important to remember is that the types of merger are not mutually exclusive, and in many cases a merger occurs due to interaction between the two types.

It was also found that some cases are more likely to merge with certain cases on the basis of an interplay of semantic or syntactic roles. For instance the nominative and accusative often merge, the genitive prefers merging with the dative or ablative and the ablative is often seen merging with the instrumental, whereas both the instrumental and the dative prefer merging with the locative.

However, sometimes cases that would normally not merge did merge, through an intermediary. This made it possible for groups of three or more cases to merge, and it is one of the reasons it was possible for the dative, ablative and instrumental in Celtic to merge.

In the third and last section of part I the situation in the Celtic languages was discussed, on the basis of the Continental Celtic languages. It is clear that both in Gaulish and Celtiberian the dative and instrumental already started to merge, on the basis of phonological changes.

The ablative singular and dative singular also merged, which can be seen from the short datives in Old Irish, these were formed because of early $i$-apocope, and this $i$ was derived from the ablative ending -ed. The ablative and instrumental can easily merge with one another, but not with the dative.

Therefore the locative was needed as an intermediary. Since the dative and locative are connected, it is not very strange that these two cases were to merge. After this happened either the instrumental merged with the dative-locative and took the ablative on later, or the instrumental and ablative had already merged and then merged with the dative-locative.

Still, it is not certain whether this was in fact the case, although it seems to be the most logical scenario. It explains the full case merger without problems, and it is according to the "rules" of case merger as well.

In part II the Old Irish independent datives were analysed and categorized according to their underlying case. In the glosses most of the independent datives reflect a dative, as well as in the prose legal texts. In the legal texts, however, there are many independent datives reflecting an instrumental as well, which is certainly not the case in the glosses.

In Poetry most of the independent datives reflect an instrumental. A similarity between all three types of text is that the ablative and locative are not very well represented, usually they do not take up more than $10 \%$ of the independent datives in a text.

This should aid in the translation of Old Irish texts that contain independent datives, whereas earlier it was difficult to decide how to translate them, but now it is clear that when an independent dative is found in glosses or in a legal text almost half of the time it reflects a dative, and when the independent dative is found in poetry it usually reflects an instrumental.

For future research it would be interesting to firstly categorize all the undetermined independent datives, and see whether this conclusion still holds up, and it would also be interesting to look at even more texts, more instances of independent datives.

Also an interesting subject, but difficult to research because of the lack of occurrences, is the independent datives in the non-legal prose texts. It would be interesting to research whether these also reflect mostly underlying datives, or if they behave differently from the legal texts and the glosses.

## Bibliography.

Adger, David and Daniel Harbour, "Syntax and Syncretisms of the Person Case Constraint" in Syntax vol. 10 (2007) pp. 2-37.

Aikhenvald, Alexandra Y., Classifiers: A Typology of Noun Categorization Devices, Oxford Studies in Typology and Linguistic Theory (Oxford 2000).

Aristar, Anthony Rodriguez, "The Relationship between Dative and Locative: Kuryłowicz’s Argument from a Tyopological Perspective" in Diachronica 13 (1996) pp. 207-324.

Baerman, Matthew, "Case Syncretism" in The Oxford Handbook of Case (Oxford 2009) pp. 219-230.

Baerman, Matthew and Dunstan Brown, "Case Syncretism" in World Atlas of Language Structures (Oxford 2005) pp. 118-121.

Baerman, Matthew, Dunstan Brown and Greville G. Corbett, "Case Syncretism in and out of IndoEuropean" in Papers from the $37^{\text {th }}$ Meeting of the Chicago Linguistic Society (Chicago 2002) pp. 15-28.

Barðdal, Jóhanna and Leonid Kulikov, "Case in Decline" in The Oxford Handbook of Case (Oxford 2009) pp. 470-478.

Bartsch, R., J. van Benthem and P. van Emde Boas (eds.), Semantics and Contextual Expression, Groningen-Amsterdam Studies in Semantics (Dordrecht 1989).

Bauer, Bernhard, The Online Database of the Old Irish Priscian Glosses (2014) http://www.univie.ac.at/indogermanistik/priscian/.

Binchy, D. A., Críth Gablach, Mediaeval and Modern Series 11 (Dublin 1941).

Blake, Barry J., Case, Cambridge Textbooks in Linguistics (Cambridge 2001).

Breatnach, Liam, Uraicecht na Ríar (Dublin 1987).
----, "An Mheán-Ghaeilge" in Stair na Gaeilge (Maynooth 1994) pp. 221-334.
----, "Some Remarks on the Relative in Old Irish" in Ériu, vol. 31 (1980) pp. 1-9.

Butts, Robert E. and Jaakko Hintikka (eds.), Basic Problems in Methodology and Linguistics: Part three of the Proceedings of the Fifth International Congress of Logic, Methodology and Philosophy of Science, London, Ontario, Canada - 1975 (Dordrecht and Boston 1977)

Caha, Pavel, "Classical Armenian Declension" in Nordlyd vol. 36 (2009) pp. 77-112.

Calabrese, Andrea, "On Absolute and Contextual Syncretism. Remarks on the structure of case paradigms and on how to derive them" in Inflectional Identity (Oxford 2008) pp. 1-41.

Carney, James, "The Dating of Archaic Irish Verse" in Early Irish Literature - Media and Communication (Tübingen 1989) pp. 39-55.

Catasso, Nicholas, "Genetive-Dative Syncretism in the Balkan Sprachbund: An Invitation to Discussion" in SKASE Journal of Theoretical Linguistics vol. 8 (2011) pp. 70-93.

Charles-Edwards, Thomas and Fergus Kelly, Bechbretha (Dublin 1983).
Cook, Walter Anthony, Case Grammar Theory (Georgetown 1989).
Corthals, Johan, "The rhymeless Leinster Poems: diplomatic texts" in Celtica 24 (Dublin 2003) pp. 79100.

Croft, William, Syntactic categories and grammatical relations: the cognitive organization of information (Chicago and London 1991).

Crysmann, Berthold, "Syncretism in German: A Unified Approach to Underspecification, Indeterminacy, and Likeness of Case" in Proceedings of the $12^{\text {th }}$ International Conference on Head-Driven Phrase Structure Grammar (Stanford 2005) pp. 91-107.

Delamarre, Xavier, Dictionnaire de la Langue Gauloise : Une approche linguistique du vieus-celtique continental (Paris 2003).
www.dil.ie: The Electronic Dictionary of the Irish Language.
Eska, Joseph F., Towards an interpretation of the Hispano-Celtic inscription of Botorrita, Innsbrucker Beiträge zur Sprachwissenschaft (Innsbruck 1989).
----, "The Emergence of the Celtic Languages" in The Celtic Languages (London 1993) pp. 22-26.
Eska, Joseph F. and D. Ellis Evans, "Continental Celtic" in The Celtic Languages (London and New York 1993) pp. 26-63.

Griffith, A. , A Dictionary of the Old Irish Glosses: in the Milan Codex Ambrosianus C 301 inf . (2011) http://www.univie.ac.at/indogermanistik/milan glosses.htm.

Haspelmath, Martin, From Space to Time: Temporal Adverbials in the World's Languages, LINCOM Studies in theoretical linguistics 03 (Müchen 1997).
----, "Comparative concepts and descriptive categories in cross-linguistic studies" in Language 86 (2010) pp. 663-687.

Hewson, John and Vit Bubenik, From Case to Adposition: the development of configurational syntax in Indo-European languages (Amsterdam and Philadelphia 2006).

Jórdan Cólera, Carlos, "Celtiberian" in e-Keltoi. Journal of Interdisciplinary Celtic Studies 6. The Celts in the Iberian Peninsula (2007). https://www4.uwm.edu/celtic/ekeltoi/volumes/vol6/6 17/jordan 6 17.pdf

Kavanagh, Séamus and Dagmar S. Wodtko (ed.), A lexicon of the Old Irish glosses in the Würzburg manuscript of the epistles of St. Paul, Mitteilungen der Prähistorischen Kommission 45 (Vienna 2001).

Kelly, Fergus, "Tiughraind Bhécain" in Ériu vol. 26 (1975) pp. 66-98.
----, A Guide to Early Irish Law (Dublin 1988).

Krifka, Manfred, "Case Syncretism in German Feminines: Typological, Functional and Structural Aspects" in On Inflection (Berlin 2009) pp. 141-172.

Kulikov, Leonid, Andrej L. Malchukov and Peter de Swart, Case, Valency and Transitivity (Amsterdam 2006).

Kuryłowicz, Jerzy, The Inflectional Categories of Indo-European (Heidelberg 1964).
Lander, Yuri, "Varieties of Genitive" in The Oxford Handbook of Case (Oxford 2009) pp. 581-592.

Müller, Gereon, "A Distributed Morphology Approach to Syncretism in Russian Noun Inflection" in Proceedings of FASL 12 (Michigan 2004) pp. 353-373.
----, "Syncretism and Iconicity in Icelandic Noun Declensions: A Distributed Morphology Approach" in Yearbook of Morphology (2004).
----, "On Decomposing Inflection Class Features: Syncretism in Russian Noun Inflection" in Explorations in Nominal Inflection (Berlin 2004) pp. 189-227.

Luraghi, Silvia, "Patterns of Case Syncretism in Indo-European Languages" in Papers from the $7^{\text {th }}$ International Conference on Historical Linguistics (Amsterdam 1987) pp. 355-371.
----, "Syncretism and the classification of semantic roles" in Sprachtypologie und Universalien Forschungen 54 (Berlin 2001) pp. 35-51.
----, On the Meaning of Prepositions and Cases: the expression of semantic roles in ancient Greek (Amsterdam \& Philadelphia 2003).

Malchukov, Andrej and Heiko Narrog, "Case Polysemy" in The Oxford Handbook of Case (Oxford 2009) pp. 518-534.

Meid, Wolfgang, Die erste Botorrita-Inschrift: Interpretation eines keltiberischen Sprachdenkmals, Innsbrucker Beiträge zur Sprachwissenschaft (Innsbruck 1993).
----, Gaulish Inscriptions: "Their interpretation in the light of archaeological evidence and their value as a source of linguistic and sociological information" in Archaeolingua (Budapest 1994).

Meyer, Kuno, Selections from Ancient Irish Poetry (London 1911).
----, Über die älteste Irische Dichtung I: Rhytmische alliterierende Reimstrophen (Berlin 1913).
----, Über die älteste Irische Dichtung II: Rhytmische alliterierende reimlose Strophen (Berlin 1914).
McLeod, Neil, Early Irish Contract Law, Sydney Series in Celtic Studies 1 (Sydney 1992).
Murphy, Gerard, Early Irish Lyrics: eight to twelfth century (Oxford 1977).

Naess, Ashild, "Varieties of Dative" in The Oxford Handbook of Case (Oxford 2009) pp. 572-580.

Narrog, Heiko, "Varieties of Instrumental" in The Oxford Handbook of Case (Oxford 2009) pp. 593-
600.
----, "The grammaticalisation chain of case functions: Extension and reanalysis of case marking vs. universals of grammaticalization" in Perspectives on Semantic Roles (Amsterdam 2014) pp. 69-97.

Noonan, Michael and Elena Mihas, Areal Dimensions in Case Syncretism: Ablatives and Genitives, unpublished (2007) https://www4.uwm.edu/letsci/noonan/Abl-Gen.Gothenburg.pdf.

O'Brien, M. A., Corpus Genealogiarum Hiberniae (Dublin 1962).
Ó hUiginn, Ruairí, "On the Old Irish Figura Etymologica" in Ériu vol. 34 (1983) pp. 123-133.
Rappaport, Gilbert C., "Case Syncretism, Features, and the Morphosyntax of Polish Numeral Phrases" in Generative Linguistics in Poland: Morphosyntactic investigations (Warsaw 2003) pp. 107119.

Ringe, Don, "Nominative-Accusative Syncretism and Syntactic Case" in University of Pennsylvania Working Papers in Linguistics vol. 2 (1995) pp. 45-81.

Schrijver, Peter, "Some common developments of Continental and Insular Celtic" in Gaulois et Celtique Continental (Genève 2007) pp. 355-370.
----, "Lepontic" in Wieser Encyclopaedia. Western European Languages (2008) pp. 123-130.
Stifter, David, Old Celtic Languages, handouts from Celtic Spring (2012)
http://rootsofeurope.ku.dk/kalender/arkiv 2012/celtic spring/.
Stifter, David, Martin Braun and Michela Vignoli, Lexicon Leponticum (2015) http://www.univie.ac.at/lexlep/wiki/Main Page.

Stokes, Whitley and John Strachan, Thesaurus Palaeohibernicus: A Collection of Old-Irish Glosses, Scholia, Prose and Verse, Volume I: Biblical Glosses and Scholia (Dublin 1975).
----, Thesaurus Palaeohibernicus: A Collection of Old-Irish Glosses, Scholia, Prose and Verse, Volume II: Non-Biblical Glosses and Scholia, Old-Irish Prose, Names of Persons and Places, Inscriptions, Verse, Indexes ( Dublin 1975).

Stolz, Thomas, Cornelia Stroh and Aina Urdze, "Varieties of Comitative" in The Oxford Handbook of Case (Oxford 2009) pp. 601-608.

Strachan, John, Old-Irish Paradigms - and Selections from the Old-Irish Glosses (Dublin 1949).
Thurneysen, R., A grammar of Old Irish, revised and enlarged ed., trans. D.A. Binchy en O. Bergin (Dublin 1946).

Villar, Francisco, "The Celtiberian Language" in Zeitschrift für Celtische Philologie $49-50$ (1997) pp. 898-949.

Wunderlich, Dieter, "Is There Any Need for the Concept of Directional Syncretism?" in Explorations in Nominal Inflection (Berlin 2004) pp. 373-395.

Appendix.

## Milan Glosses.

| Place. | Indep. Dat. | Translation. | Underlying Case. |
| :---: | :---: | :---: | :---: |
| 015 b 16 | intursitib | diffused | undet |
| 016 b 17 | hulidiu | general | undet |
| 016c05 | indinaimso | at this time | loc |
| 017b10 | foraitmit | remembering | undet |
| 017c07 | athir | from the father | abl |
| 020a15 | cortarsnaidib | adversaries | dat |
| 021a11 | arrubart biuth | he has employed | dat |
| 021d03 | friscoirter ceill | they should be worshipped | dat |
| 022a04 | ermitiu feid | honour | dat |
|  | frecur céil | worship | dat |
| 022c04 | dedarnaib | strong | abl |
| 022c06 | ermitiu féid | honour | dat |
| $023 a 15$ | ferc | anger | abl |
| 024a05 | bind | pleasing | abl |
| 024a07b | soiraib | to the free | dat |
| 024d31 | ermitiu feid | honour | dat |
| 025b04 | frithchathaigthiu | rebellious | undet |
| 026c09-10 | brathnigthiu | judged | undet |
|  | brithemandu | judicial | undet |
| 027a04 | timmartaib | straitened | undet |
| 027 b 11 | foiridi | imparted | abl |
| 028a05 | armunter féid | it is honored | dat |
| 028 a 21 | ind ermitiu feid | the honour | dat |
| 029b01 | honderbeirt biuth | from the use | dat |
| 030a05 | nephaescaidi | moonless | undet |
| 030c17 | feib | in the way that | instr |
| 030d16 | isna frecur ceill | to the cultivating | dat |
| 031a08 | doilbthib | feigned | dat |
| 031c13 | serbaib | bitter | undet |
| 031d14 | erchaitechaib | harmful | abl |
| 032b03 | ermitnech féid | honored | dat |
| 032b07 | nach thain | at any time | loc |
| 032 b 12 | greschaib | constant | undet |
| 032 b 14 | nuai | new | undet |
| 033 a 4 | roithinech | calm | undet |
| 033c14 | anarrubarttatar biuth | when they have used | dat |
| 034a14 | immaircidib | appropriate | undet |
| 034a22 | rabsacen | Rabshakeh | undet |
| 034b12 | écin | indeed | undet |
| 034c04 | anarrubartatar biuth | when they employed | dat |
| 035b08 | inermitnech feid | the honoring one | dat |
| 035 b 11 | arrubart biuth | he used | dat |
| 035c15 | acomairberte biuth | of their way of life | dat |
| 035 c 17 | acomairbertae biuth | of their way of life | dat |
| 035c23 | ermiten feid | the respect | dat |
|  | armitiu feid | the respect | dat |


| 035c33 | indinnisseo | of this sort | abl |
| :---: | :---: | :---: | :---: |
| 036a04 | ní arbart biuth | he did not use them | dat |
| 036a18a | arasmuinethar feid | he honours it | dat |
| 036b04 | roitiu | set in motion | abl |
| 036b09 | nephfrescestu | non-expected | abl |
| 036b15 | suidiu | which | undet |
| 036b17 | escartaib | struck down | dat |
| 036b18 | cocrichthib | bordering | dat |
| 037b05 | foindledaig | wandering | abl |
|  | daisciur | common | abl |
| 037b08 | derscaigthetaid | preeminence | abl |
| 037b29 | escartaib | beaten | instr |
| 037c20 | innisseo | such | instr |
| 038a04 | nelán | little cloud | undet |
| 038b04 | inchían | for a long time | dat |
| 038c15 | buidir | deaf | abl |
| 038c17 | sechtaigthib | simulated | undet |
| 038d17 | erbertaib biuth | by the uses | dat |
| 039a02 | foirbthi | perfect | abl |
| 039a09 | séim | thin | abl |
| 039a23 | nachthain | at any time | loc |
| 039b01 | tuaisrenndi | left | abl |
| 039d01 | soinmechaib | prosperous | undet |
| 040b10 | nephrescastaib | unexpected | undet |
| 040d04 | luaichtidiu | flashing | abl |
|  | aittoitech | shining | abl |
| 041c04 | cruth | in [the] manner | instr |
| 041c09 | digas | lofty | undet |
| 041d07 | ceimmím | by a step | abl |
| 041d08 | dián | swift | undet |
| 041d16 | fritcurethar cheill | who worships him | dat |
| 042a13 | graesach | perpetual | abl |
| 042b06 | anarrubart biuth | when he used | dat |
| 043a02 | madfrifrecur cheill | if it be to the worship | dat |
| 043d13 | foiridi | imparted | abl |
| 043d14 | arbeir biuth | he enjoys | dat |
| 044b16 | noisinchruthsa | or is it this way | instr |
| 046b01 | aithirriuch | again | instr |
| 046 b 07 | araber biuth | who lives | dat |
| 046b28 | cia innerbirt $\dot{m}$-biuth | to what use? | dat |
| 047b02 | anermiten feid | their honour | dat |
| 047b04 | ermiten feid | honour | dat |
| 047c04 | erbert biuth | the eating | dat |
| 047c09 | nachthain | at any time | loc |
| 047c19 | digas | lofty | loc |
|  | ard | elevated | loc |
| 048a05 | honerberad biuth | which he would use | dat |
| 048b06 | toltanaig | spontaneous | dat |
| 048b10 | oirbemandi | hereditary | abl |
| 048b12 | honerbera biuth | which he will use | dat |
| 048c03 | loigthiu | obtained | undet |
| 048c08 | indéni | with the swiftness | instr |


| 048d10 | teichthechaib | fleeing | dat |
| :---: | :---: | :---: | :---: |
| 048d13 | tobaidib | cut down | undet |
| 048d27 | aithirriuch | again | instr |
| 049a16 | intain | at that time | loc |
| 050c18 | debaid | strife | abl |
| 050d13 | ara berat biuth | who lives | dat |
| 051b07 | denum | to do | dat |
| 051c22 | huilidetaid | from the generality | abl |
| 051d20 | asnairmitnigthi feid | that he is to be revered | dat |
| 051d21 | foriganib | under-chieftains | abl |
| 053a04 | messidib | for judicial (ones) | dat |
| 053a12 | anarrubart biuth | when he employed | dat |
| 053b25 | ascnaidiu | sought | abl |
| 053c09 | armberthar biuth | that it would be used | dat |
| 054d11 | teilcithiu | let go | undet |
| 054d18 | diubarthu | deprived | dat |
| 055b07 | madachaib | futile | undet |
| 055c01 | aidchi | one night | loc |
| 056a10 | huasil | highest | abl |
| 056a19 | inneirbirt biuth | the use | dat |
| 056a20 | inmét | in the amount | undet |
|  | inmeit | in that amount | undet |
| 056a21 | inmeit | the amount | undet |
|  | inmeit | that amount | undet |
| 056d01 | nephrescastu | unanticipated | abl |
|  | nephtoimtiu | unexpected | abl |
| 057d09 | populdaib | belonging to the people | dat |
|  | tuataib | popular | undet |
| 059a10 | airbert biuth | the use | dat |
| 060a03 | arrarubart biuth | that he used | dat |
| 060a08 | digas | elevated | dat |
| 060a09 | n-aithirriuch | again | instr |
| 060b11 | arbeir biuth | this he uses | dat |
| $061 a 11$ | ar ammentar féid | that he may be honoured | dat |
| 061a16 | arammuinfetar feid | will honour | dat |
| 061a19 | airiltib | deserved | undet |
| 061a26 | in daeni | the swiftness | undet |
| 061b02 | indassa | now | loc |
| 061b13 | doilbthib | feigned | undet |
| 061c09 | inderbert biuth | the living | dat |
| 061c10 | in méis | the table | abl |
| 061d11 | arrubart biuth | he used | dat |
| 061d13 | aramberat biuth | that they eat | dat |
| 062a08 | cáchlathidi | daily | loc |
| 062d09 | aicsenach | casual | undet |
| 063 a 03 | ara muinfersa féid | I will honour You | dat |
| 064d07 | mét | the extent | abl |
| 064d13 | nachmór | to any great extent | dat |
| 065b09 | tarsinnib | opposing | undet |
| 065d04 | senchomerbertae biuth of the way of life |  | dat |
| 065d16 | nach mór | to any extent | dat |
| 066c18b | ermitin féid | by the honour | dat |


| 066d04 | intain | at that time | loc |
| :---: | :---: | :---: | :---: |
| 066d10 | aér chomthaircidib | very collected | undet |
| 067c06 | inna ermiten feid | of the honour | dat |
| 067c17 | araberat biuth | who live | dat |
| 068 b 14 | inderbert biuth | the enjoyment | dat |
| 069a05 | étib | gained | undet |
| 069a18 | aramber biuth | he enjoys | dat |
| 069a19 | aramberat biuth | enjoy | dat |
| 069a23 | erbert biuth | the enjoying | dat |
| 072b26 | coarbera biuth | that it may live | dat |
| 072d15 | meit | as far | undet |
| 073a13 | beniaminecdu | of Benjamin | dat |
| 073c02 | intan | when | loc |
| 073c08 | inmedonchaib | internal (parts) | undet |
| 074b08 | tairmchoslaidib | prevaricators | undet |
| 075b12 | soirthi | swiftness | abl |
| 076a06 | intainsin | at that time | loc |
| 078c08 | frisfoichiurr ceill | I will attend to | dat |
| 079b02 | fri frecur ceill | the worship | dat |
| 080b08 | inithlib | secret | undet |
|  | diamraib | hidden | undet |
| 080c11 | fochrataib | shaken | undet |
|  | madachaib | ineffectual | undet |
| 081b06 | immaircidi | appropriate | undet |
| 083b06 | aramberad biuth | that He lived | dat |
| 084b03 | imdu | abundant | undet |
|  | sommu | rich | undet |
| 084c03 | áecin | truly | undet |
| 086d12 | arabera biuth | consumes | dat |
| 088c13 | comadassaib | suitable | undet |
| 090a01 | arrumuinset fid | that they have honoured | dat |
| 090a04 | airmitnig feid | of the honouring one | dat |
| 090a07 | indermitiu feid | this reverence | dat |
| 090b14 | taidbse | for the showing | dat |
| 090c08 | indinni | of this kind | abl |
| 091a06 | fri ermitin feid | honouring | dat |
| 091b01 | ciararubartat biuth | though they have enjoyed | dat |
| 092a07 | ermitin feid | honour | dat |
| 093a22 | chrisluch | lap | dat |
| 093b02 | in meitse | this extent | undet |
| 093b14 | flechdachaib | rainy | undet |
| 094d01 | airbirthi biuth | they will be enjoyed | dat |
| 095a01 | friscoirthe céil | He was worshipped | dat |
| 097d02 | erberdu biuth | (for a) performed thing | dat |
|  | ararubartar biuth | they had made use of | dat |
| 098b04 | homaib | raw | undet |
| 098d01 | alailiu chruth | in another form | instr |
| 099a07 | etairdbidib | destroyers | undet |
| 099b04 | orcuin | the slaying | abl |
| 100b02 | tarsainniu | opposing | undet |
| 100c25 | arrubartatar biuth | they used | dat |
| 101a09 | indermitiu feid | the reverence | dat |


| 101 d 02 | erbertae biuth | of enjoying | dat |
| :---: | :---: | :---: | :---: |
| 102b08 | esfoitiu | (it is) sent out | undet |
| 102d10 | chumachtaib | constructed | undet |
| 105a10 | forbathib | completed | undet |
| 106 b 12 | déid | idle | undet |
| 106d03 | du frecur cheill | that worship | dat |
| 106d12 | digsib | lofty | loc |
| 106d14 | moraib | great | dat |
| 107c08 | aithirriuch | again | instr |
| 108a02 | anararuburt biuth | when I lived | dat |
| 108b12 | ermitiu féid | an honour | dat |
| 108d11 | indassa | now | loc |
| 110c02 | naderbaera biuth | who will not live | dat |
| 110d10 | fotheisthib | poured down | undet |
| 111b24 | graeschaib | lasting | undet |
| 112b05 | mararubart biuth | if you (sg) have enjoyed it | dat |
| 114b14 | inderet sa | for that space of time | dat |
| 115a05 | nertaidib | strengtheners | undet |
| 115b09 | aithirriuch | again | instr |
| 116c03 | forbaidi | finished | dat |
| 116d04 | airtbidib | destroyed | undet |
| 117d05 | naimdidiu | inimical | abl |
| 118a03 | nephleisc | not sluggish | undet |
| 118a14 | foirbthiu | perfect | dat |
| 120d02 | sainriud | in particular | undet |
| 121a06 | innermitin feid | the reverence | dat |
| 121 a 18 | tipirsnechaib | flowing | undet |
| 121 b 03 | coarbertar biuth | that they be used | dat |
| 121 b 11 | aiib | theirs | abl |
| 121c17 | tírdaib | rustic | undet |
| 121 d 02 | altaib | wild | undet |
| 122 b 03 | nachthain | at any time | loc |
| 123a04 | arrubartatar biuth | they lived | dat |
| 123 b 09 | imthimchiull | by surrounding | instr |
| 124b03 | aithrib | to his fathers | dat |
| 124c16 | ardamunethar feid | who worships them | dat |
| 125d05 | ararubartatar biuth | who use | dat |
| 126a09 | rigdaib | royal | dat |
|  | coitchennaib | common | dat |
| 126a10 | sainredchaib | particular | dat |
| 127c11 | meit | the size | abl |
| 127d04 | inchruthsin | ! In that way | instr |
| 127d10-11 | comermitin feid | honour | dat |
| 128c02 | erbirt biuth | use | dat |
| 128d03 | ní inderbartach biuth | it is not skillfully | dat |
| 128 d 07 | ermitiu feid | reverence | dat |
| 129c01 | araberat biuth | that live | dat |
| 129d01 | echu | clear | abl |
| 130c18 | suidiu | herein? | undet |
| 130c20 | bastu | deadly | undet |
| 131a11 | ararubartatar biuth | who lived | dat |
| 131c07 | érassaigthiu | rejected | undet |


| 131d10 | arabertis biuth | who used to live | dat |
| :--- | :--- | :--- | :--- |
| 132a05 | diafrecur ceill | their observance | dat |
| 132b03 | du frecur ceill | of my thinking | dat |
| 133a10 | cech óin | every one | undet |
| 133b15 | lathidi | daily | loc |
| 133d08 | arberaesiu biuth | if you (sg) enjoy | dat |
| 134c06 | aithirriuch | again | instr |
| 134d06 | inlidiu | treacherous | dat |
| 135b07 | línmair | abundant | abl |
| 135d03 | huanerbirmis biuth | in which we used to live | dat |
| 135d04a | bíc | small | abl |
| 136b03 | ararubartat biuth | who had lived | dat |
| 137b04 | sainredach | particular | undet |
| 137c01 | tír frecur ceill | agriculture | dat |
| 137d01 | nermitnigthifeid | to be honoured | dat |
| 138b03 | sainredaig | peculiar | abl |
| 138b08 | oín fecht | once | loc |
| 139a02 | nuib | new | dat |
| 145d05 | huathud | for singular | abl |

St. Gall Glosses.

| Place. | Indep. Dat. | Translation. | Underlying Case. |
| :--- | :--- | :--- | :--- |
| 001a01 | libardaib | bookish | undet |
| 001a03 | in méitso | so much | undet |
| 003b30 | méit | as far as | undet |
| 004a02 | laitnorib | (we) Latins | undet |
| 005a01 | méit | as far as | undet |
| 006a17 | timmthastaib | compressed | undet |
|  | cumcaib | constricted | undet |
| 007a01 | dimútaib | two mutes | undet |
| 007a09 | in méitse | so much | undet |
| 007b03 | nach cruth ailiu | any other way | instr |
| 008a04 | abuith | its being | undet |
| 008a14 | buith | should be | undet |
| 008b06 | indsainriuth | especially | undet |
| 011b05 | alailiu | for the other | dat |
| 014b02 | indosa | now | loc |
| 020b02 | buith | the occurrence | undet |
| 025b15 | sillaib ndiuit | separate simple syllable | undet |
| 026b05 | ainm | a noun | undet |
| 027a03 | inni | the quality | undet |
| 028a12 | óenlitrib | by single letters | instr |
| 028b16 | trenaib | (to) substantives | dat |
| 033a19a | noéntarmoirciunn | by the same termination | instr |
| 034a03 | grecdu | Greek | undet |
| 035a11 | frecoir chéill | cultivating | dat |
| 039a03 | ranngabáldu | participial | abl |
| 039a13 | nephdilledchaib | indeclinables | abl |
| 040a15 | inchruthsin | then | instr |
| 040b09 | ni-arrbartatar bith | they have never used | dat |
| 040b12 | ara-rubatar bith | when they used | dat |


| 042b06 | in meitse | so much | undet |
| :---: | :---: | :---: | :---: |
| 045b01 | dígbail | to diminish | dat |
| 045b07 | digbail | diminution | undet |
| 045b19 | dechur | a distinction | undet |
| 046a14 | in meincán | fairly often | undet |
| 058b05 | nach cruth ailiu | any other way | instr |
| 059a10 | sainreth | peculiar | undet |
| 059a13 | immgabail | avoidance | undet |
| 063a14 | inchruthsin | in that manner | instr |
| 064a02 | lairt | (king) Lar | abl |
| 065b06 | lestur | vessel | undet |
| 066b14 | in tain | when | loc |
| 076b05 | diblinaib | both | undet |
| 078a01 | ararubart bith | that he was used | dat |
| 093b05 | in chrutsin | in this wise? | instr |
| 106 b 16 | duaibsib | unlucky | abl |
| 106 b 18 | lebraib | books | undet |
| 108b04 | inchruth | thus? | instr |
| 109a04 | inchruth | as? | instr |
| 111a01 | inmedónchaib | intestines | undet |
| 111a05 | inchruthsa | in this fashion | instr |
| 112b02 | foircnedaib | terminating | undet |
| 130 b 03 | intain sin | then | loc |
| 137 b 02 | ind huathad | rarely | undet |
| 140 b 01 | in chrut sin | in that way | instr |
| 144b03 | feib | as | undet |
| 148a01 | ara-mberam biuth | that we may use | dat |
| 148a07 | anarambeir biuth | while he lives | dat |
| 151b06 | écrichdai | indefinite | undet |
| 159b05 | indosa | now | loc |
| $162 \mathrm{b02}$ | diblínaib | to them both | dat |
| 180b01 | eisib | consumed | undet |
|  | loiscdib | burnt | undet |
| 188a23 | indsainriud | especially | undet |
| 192b02 | ara-mbere nech biuth | that anyone should use | dat |
| 196 b 06 | frecndairc | present | undet |
| $200 b 07$ | immacaldaim | conversation | undet |
| 200 b 10 | anmmaim | proper name | dat |
| 202a07 | moínur | I alone | undet |
| 203a13 | immognamib | constructions | undet |
| 207b09 | ind etarceirt | the interpretation | undet |
| 208b05 | thóinur | you alone | undet |
| $210 b 04$ | feib | as | undet |
| 211b04 | inchrutso | in this manner | instr |
| 215b03 | aoinur | alone | undet |
| 218a10 | indiamrán | secretly | instr |
| 221b07 | in chruth | as? | instr |
| 222b01a | alailitain | at some time | loc |
| 222b02 | in inidleán | secretly | instr |
| E012a04 | seul | a sail | undet |
| K002a02 | indsainriud | especially | undet |

## Würzburg Glosses.

| Place. | Indep. Dat. | Translation. | Underlying Case. |
| :---: | :---: | :---: | :---: |
| 02c05 | intain | when | loc |
| 02c06 | intain | when | loc |
| 02c08 | intain | when | loc |
| 03a15 | intain | when | loc |
| 03c14 | intainsin | then | loc |
| 04a08 | indechtso | now | loc |
| 04c11 | cinn rehe | at the end of a space | loc |
| 04c15 | diblínaib | they both | undet |
| 04d03 | indectso | now | loc |
| 05a25 | meisse móinur | me alone | undet |
| 05a28 | tussu thóenur | thou alone | undet |
| 05b06 | ídlaib | to idols | dat |
| 05c05 | intain | when | loc |
| 05c12 | intain | when | loc |
| 05d38 | diblínaib | both of you | undet |
| 07c08 | triuss | as the third | undet |
| 07d14 | airmitiu féid | the respect | dat |
| 09a03 | intain | when | loc |
| 09b15 | esbetu | uselessness | dat |
| 09d05 | diblínaib | they both | undet |
|  | Indlúim máir inchoirpsin | the great mass of that body | undet |
| 10b08 | ni airbertis biuth | they used not | dat |
| 10b21 | intain | when | loc |
|  | intain | when | loc |
| 10c01 | ní arbarat biuth | provided they do not eat | dat |
| 10c03 | doairbirt biuth | them to eat | dat |
| 10c06 | airbeir biuth | he eats | dat |
| 10d14 | airbert biuth | he were to eat | dat |
| 10d18 | doairbirt biuth | to be eaten by them | dat |
| 11b05 | freccor céil ídol | cultus of idols | dat |
| 11b14 | ocairbirt biuth | in partaking | dat |
| 11b15 | ocairbirt biuth | in partaking | dat |
| 11b25 | arnách airbirid biuth | ye should not partake | dat |
| 11c14 | airmitin féith | due respect | dat |
| 12d27 | intain | when | loc |
| 13 a 13 | intain | when | loc |
| 13c03 | á oenur | he alone | undet |
| 14a21 | a óenur | alone | undet |
| 14a25 | intain | when | loc |
| 14c38 | intain | when | loc |
| 15a19 | airmitiu féid | honour | dat |
| 15b04 | úadfialichthi | unveiled | abl |
| 16d12 | indoís anechtir | more grievous | undet |
| 17a13 | intain | when | loc |
| 17c12 | biuc | a little | undet |
| 17d15 | aincis | (in) a hamper | loc |
| 18b14 | intain | when | loc |
| 19d01 | foichlorib | guardians | undet |
| 19d02 | secndapthib | vice-abbots | undet |


| 19d07 | intain | when | loc |
| :---: | :---: | :---: | :---: |
| 20c15 | intain | when | loc |
| 21c14 | preceptorib | to teachers | dat |
| 21d01a | comairbert biuth |  | dat |
| 22d25 | far nóinu | for yourselves alone | dat |
| 24a28 | intain | when | loc |
| 25a22 | aeicentatu | necessity | undet |
| 25b28 | intan | when | loc |
|  | intain | when | loc |
| 25c23 | intain | when | loc |
| 25d19 | intain | when | loc |
| 27c11 | dígail | punishment | undet |
| 28a06 | éitchechaib |  | undet |
| 28 b 10 | cissib | braided | undet |
| 28c11 | arambere biuth | live | dat |
| 28 c 16 | seichti | in hypocrisy | loc |
| 28d09 | intain | when | loc |
| 29a25 | airbir biuth |  | dat |
| 29d06 | frecur céill doe |  | dat |
| 29d09 | intain | when | loc |
| 31a09 | intain | when | loc |
| 31c10 | coarmentar féid | that he may revere | dat |
| 32a07 | hiressach | faithful | undet |
| 32c13 | intain | when | loc |
| 33a07 | firiónaib | righteous | undet |
| 33a10 | tacráth | provocation | abl |
| 33d10 | intan | when | loc |

Críth Gablach.

| Line No. | Indep. Dat. |
| :--- | :--- |
| 166 | triur |
| 186 | cach aimsir |
| 204 | triur |
| 230 | dag-cerchaill |
| 232 | dag-assaib |
| 236 | séot |
| 237 | raithiu |
| 246 | mucaib |
| 249 | bóairechaib |
| 251 | reicc |
| 259 | bóairechaib |
| 311 | aithirriuch |
| 339 | cintaib |
| 340 | cáin |
|  | cairddiu |
| 341 | daltu |
|  | comaltu |
|  | fiur |
|  | mnaí |
|  | macc |
|  | ingin |


| Translation. | Underlying Case. |
| :--- | :--- |
| he is three | undet |
| every time | loc |
| he is three | undet |
| for a good cushion | dat |
| for good shoes | dat |
| for a sét | dat |
| in the quarter | loc |
| (payable) in pigs | instr |
| of the bóairechaib | undet |
| to selling | dat |
| of the bóairechaib | undet |
| again | instr |
| in regard of liabilities | dat |
| in regard of written law | dat |
| in regard of treaty law | dat |
| for a foster-son | dat |
| for a foster-brother | dat |
| for a man | dat |
| for a woman | dat |
| for a boy | dat |
| for a girl | dat |


| 373 | cur <br> chairddiu <br> nach airm |
| :--- | :--- |
| 418 | cumachtu <br> 444 <br> 526 |
|  | goí |
| 557 | écin |
| forniurt |  |
| 594 | óen-béimm |
| 598 | coímtecht |
| 603 | dib feraib |
| dib ferib |  |


| in contract | undet |
| :--- | :--- |
| in treaty law | undet |
| wherever | loc |
| the power | undet |
| by falsehood | instr |
| by force | instr |
| by superior strength | instr |
| at a single blow | abl |
| in accompaniment | instr |
| with two men | instr |
| with two men | instr |

## Bechbretha.

| Line No. | Indep. Dat. |
| :--- | :--- |
| 2 | cach leth |
| 27 | ind amsir |

## Uraicecht na Ríar.

| Line No. | Indep. Dat. |
| :--- | :--- |
| 8 | secht cumalaib |
| 26 | coibligiu chíabair |

Translation.
on every side
at the time

## Translation.

with seven cumals
through dark cohabitation

Underlying Case.
loc
loc

## Underlying Case.

instr
abl

## Dí Astud Chor - Prose.

| Par. | Indep. Dat. | Translation. | Underl. Case. |
| :--- | :--- | :--- | :--- |
| 1 | inscib ánaib | by honourable statements | instr |
| 19 | bithráthaib | in regard to permanent paying suretyships | dat |
|  | bithdílsib | in regard to permanent immunities from legal challenge | dat |
| 23 | comnadmaim | in regard to a mutual exchange of promises | dat |
| 37 | foltaib fíraib | with true considerations | instr |
| 39 | nim | in regard to heaven | dat |
| 52 | gáethaib | by capable persons | instr |
| 57 | roach | in regard to contractual witnesses | dat |
|  | ráthaigius | in regard to paying suretyship | dat |
|  | fír | in regard to proof | dat |
|  | forus | in regard to pronouncement | dat |
|  | fíadnaisiu | in regard to eyewitness evidence | dat |

## Dí Astud Chor - Verse.

Par. Indep. Dat.
2 cur chomnadmae
5 sóer-choraib duicorcuin nach cul
9 coméicin
25 cach cundrad
28 láim
36 gnímaib córaib ráthaib trénaib inscib ánaib fíadnaib
Translation.
in a contract of the mutual exchange of promises
regarding independent contracts
regarding man-slaying
regarding any wrong
by compulsion
in every bargain
by hand
by correct acts
by strong paying sureties
by honourable statements
before witnesses

Underl. Case. undet dat dat dat
instr
undet
undet
instr
instr
instr
abl

## Leinster Poems.

| Place. | Indep. Dat. | Translation. | Underlying Case. |
| :--- | :--- | :--- | :--- |
| MO-05 | deeib | of gods | abl |
| NN-07 | seirib | Heeres | abl |
| NN-13 | faíbraib derggaib | mit roten Schneiden | instr |
| NN-14 | drongaib máraib <br> móraib frassaib | mit grossen Heereshaufen | instr |
| NN-16 | dóenaib ruadaib | mit gewaltigen Schauern | instr |
|  | mit blutigroten Männern | instr |  |
| NN-25 mísaib | Láignib letnaib | mit breiten Lanzen | undet |
| NN-27 | buidnib | mit Kriegsscharen | instr |
|  | cathaib cruadaib | in harten Schlachten | instr |
| NN-51 | tréoin | ein Held | undet |
| EL-14 | srethaib |  | undet |
| EL-29 | bith | die stolze Welt | undet |
| ND-06 | bith | die Edlen | undet |
| ND-22 | níthaib | mit Schiffen | undet |
| FT-01 | bárcaib | mit gleichen Tugenden | instr |
| CC-01 | comfebaib | auf Blutlagern | instr |
| MG-03 | crólechtaib | dat |  |


| LL-01 | láthaib | mit Helden | instr |
| :--- | :--- | :--- | :--- |
| LN-01 | slógaib | mit Kriegsscharen | instr |
| NT-02 | triur | eine Dreiheit | undet |

## Early Irish Lyrics.

| Place. | Indep. Dat. |
| :--- | :--- |
| 01.03 | clius |
| 01.04 | húaraib |
| 01.07 | nach ré |
| 04.01 | cusnaib aicdib amraib |
| 08.29 | forglas néol |
| 09.01 | m'óenurán |
| 09.03 | súilib tlaithib todéraib |
| 09.13 | m'óenur |
| 10.08 | cech cruth |
| 34.22 | bith |
| 52.02 | cerb caill chraíb |


| Translation. | Underl |
| :--- | :--- |
| feat | undet |
| at times | loc |
| at any time | loc |
| maker of wondrous works | undet |
| with very grey cloud | instr |
| all alone | undet |
| with eyes feeble and tearful | instr |
| with me alone | instr |
| in every way | instr |
| to be | dat |
| branchy wood is lacerated | undet |

## Tiughraind Bhécáin.

Paragraph. Indep. Dat.
1
3 findaib coraib
4 fichtib
7 lethnaib coraib
8 mílib
17 bertaib
feisib tercaib
ríaraib
cressaib
aidchib laithib
lámaib fáenaib
findaib gartaib
gnímaib maithib

## Translation.

for hundreds
with fair deeds
with scores
with fair deeds
over thousands
of deeds
with few sleeps
according to the demands
in religious garb
by nights [and] by days
with outstretched hands
with fair acts of generosity
with good deeds

## Underlying Case.

dat
instr
instr
instr
dat
dat
instr
dat
instr
loc
instr
instr instr


[^0]:    ${ }^{1}$ Fortson 2004: p. 102.
    ${ }^{2}$ Thurneysen 1946: pp.
    ${ }^{3}$ Baerman 2009.
    ${ }^{4}$ Barðdal \& Kulikov 2009: p. 470.
    ${ }^{5}$ Thurneysen 1946: p. 161.

[^1]:    ${ }^{6}$ Milan, Würzburg and St. Gall are not the oldest collections of glosses, but the older sources are not very extensive. The three collections that are being discussed here are the earliest significant source of Old Irish. ${ }^{7}$ Griffith 2011.

[^2]:    ${ }^{8}$ Bauer 2014.
    ${ }^{9}$ Kavanagh 2001.
    ${ }^{10}$ Binchy 1941.
    ${ }^{11}$ Charles-Edwards \& Kelly 1983.
    ${ }^{12}$ Breatnach 1987.
    ${ }^{13}$ McLeod 1992.
    ${ }^{14}$ O’Brien 1962.
    ${ }^{15}$ Murphy 1977.
    ${ }^{16}$ Kelly 1975.
    ${ }^{17}$ McLeod 1992.

[^3]:    ${ }^{18}$ Thurneysen 1946: pp. 160-161.
    ${ }^{19}$ Thurneysen 1946: p. 161.
    ${ }^{20}$ Thurneysen 1946: pp. 161-162.
    ${ }^{21}$ Fortson 2004: p. 102.
    ${ }^{22}$ Luraghi 2003: pp. 63-65; Naess 2009: pp. 572-576.
    ${ }^{23}$ Naess 2009: pp. 572-576.

[^4]:    ${ }^{24}$ Fortson 2004: p. 102.
    ${ }^{25}$ Fortson 2004: p. 102.
    ${ }^{26}$ Luraghi 2003: pp. 28-30.
    ${ }^{27}$ Fortson 2004: p. 102.

[^5]:    ${ }^{28}$ Luraghi 2003.
    ${ }^{29}$ Malchukov and Narrog 2009.
    ${ }^{30}$ Barðdal \& Kulikov 2009.
    ${ }^{31}$ Villar 1997.
    ${ }^{32}$ Delamarre 2003.
    ${ }^{33}$ Stifter, Braun \& Vignoli 2015.
    ${ }^{34}$ Griffith 2011.
    ${ }^{35}$ Bauer 2014.
    ${ }^{36}$ Kavanagh 2001.

[^6]:    ${ }^{37}$ Binchy 1941.
    ${ }^{38}$ Charles-Edwards \& Kelly 1983.
    ${ }^{39}$ Breatnach 1987.
    ${ }^{40}$ McLeod 1992.
    ${ }^{41}$ Kelly

[^7]:    ${ }^{42}$ O’Brien 1962.
    ${ }^{43}$ Murphy 1977.
    ${ }^{44}$ Kelly 1975.
    ${ }^{45}$ Carney 1989.
    ${ }^{46}$ Meyer 1913 \& 1914.

[^8]:    ${ }^{47}$ Fortson 2004: p. 193.
    ${ }^{48}$ Barðdal \& Kulikov 2009: pp.
    ${ }^{49}$ Barðdal \& Kulikov 2009: p. 471.
    ${ }^{50}$ Barðdal \& Kulikov 2009: p. 472.

[^9]:    ${ }^{51}$ Barðdal \& Kulikov 2009: pp. 475-476.
    ${ }^{52}$ Breatnach 1994: p. 246.
    ${ }^{53}$ Luraghi 1987: p. 356.
    ${ }^{54}$ Luraghi 1987: p. 356; Barðdal \& Kulikov 2009: p. 470.
    ${ }^{55}$ Luraghi 1987: p. 357; Barðdal \& Kulikov 2009: p. 470.

[^10]:    ${ }^{56}$ For further reading see the bibliography in Baerman 2009.
    ${ }^{57}$ Croft 1991.
    ${ }^{58}$ Croft 1991: p. 186.
    ${ }^{59}$ Croft 1991: pp. 184-185.
    ${ }^{60}$ Luraghi 2001: p. 37.
    ${ }^{61}$ Luraghi 2001: pp. 37-38.

[^11]:    ${ }^{62}$ Luraghi 2003: p. 19.
    ${ }^{63}$ Luraghi 2001: p. 38.
    ${ }^{64}$ Luraghi 2001: pp. 45-46.

[^12]:    ${ }^{65}$ Kurylowicz 1964: p. 179; Luraghi 2003: p. 14.

[^13]:    ${ }^{66}$ Fortson 2004: p. 102.
    ${ }^{67}$ Barðdal \& Kulikov 2009: p. 470.
    ${ }^{68}$ Baerman 2009: p. 222.
    ${ }^{69}$ Ringe 1995.
    ${ }^{70}$ Ringe 1995: p. 63.
    ${ }^{71}$ Ringe 1995: pp. 65-66.

[^14]:    ${ }^{72}$ Lander 2009: p. 590.
    ${ }^{73}$ Luraghi 2003: pp. 50-51.
    ${ }^{74}$ Mihas \& Noonan: pp. 3-4.
    ${ }^{75}$ Luraghi 1987: pp. 365-366.
    ${ }^{76}$ Blake 2001: p. 173.
    ${ }^{77}$ Blake 2001: p. 173.
    ${ }^{78}$ Fortson 2004: p. 104.

[^15]:    ${ }^{79}$ Fortson 2004: p. 113.
    ${ }^{80}$ Aristar 1996: p. 207.
    ${ }^{81}$ Kurylowicz 1964.
    ${ }_{83}^{82}$ Aristar 1996: pp. 207-209.
    ${ }^{83}$ Narrog 2014: p. 74.
    ${ }^{84}$ Narrog 2014: p. 75.
    ${ }^{85}$ Luraghi 2003: pp. 35-36.

[^16]:    ${ }^{86}$ Luraghi 1987: pp. 365-366.

[^17]:    ${ }^{87}$ Eska 1993: p. 23.
    ${ }^{88}$ Eska \& Evans 1993: p. 43.
    ${ }^{89}$ Schrijver 2008: p.
    ${ }^{90}$ Schrijver 2008: p.
    ${ }^{91}$ Stifter, Braun \& Vignola 2015.

[^18]:    ${ }^{92}$ Meid 1994: p. 3.
    ${ }^{93}$ Delamarre 2003: p. 331.
    ${ }^{94}$ Delamarre 2003: p. 331.
    ${ }^{95}$ Delamarre 2003: pp. 344-346.

[^19]:    ${ }^{96}$ Delamarre 2003: p. 345.
    ${ }^{97}$ Delamarre 2003: pp. 337-338.
    ${ }^{98}$ Delamarre 2003: p. 126.
    ${ }^{99}$ Delamerre 2003: p. 346.
    ${ }^{100}$ Delamarre 2003: p. 50.

[^20]:    ${ }^{101}$ Delamarre 2003: pp. 339-340.
    102 Delamarre 2003: p. 115.
    ${ }^{103}$ Delamarre 2003: p. 246.
    ${ }^{104}$ Delamarre 2003: p. 344.
    ${ }^{105}$ Delamarre 2003: p. 183.
    ${ }^{106}$ Delamarre 2003: p. 174.
    ${ }^{107}$ Delamarre 2003: p. 225.
    ${ }^{108}$ Eska \& Evans 1993: p. 37.
    ${ }^{109}$ Eska \& Evans 1993: p. 40.

[^21]:    ${ }^{110}$ Eska 1993: pp. 23-24.
    ${ }^{111}$ Eska \& Evans 1993: p. 34.
    ${ }^{112}$ Eska 1989: p. 2.
    ${ }^{113}$ Jordán Cólera 2007: pp. 769-770.

[^22]:    ${ }^{114}$ Villar 1997: p. 917.
    ${ }^{115}$ Meid 1993: pp. 26-30.
    ${ }^{116}$ Stifter 2012: p. 93.
    ${ }^{117}$ Eska 1989: p. 160.
    ${ }^{118}$ Eska 1989: pp. 37 \& 161.

[^23]:    ${ }^{119}$ Eska 1989: pp. 74-75 \& 161.
    ${ }^{120}$ Eska 1989: pp. 117 \& 161.
    ${ }^{121}$ Esks 1989: p. 161.
    ${ }^{122}$ Eska 1989: p. 75.
    ${ }^{123}$ Eska 1989: pp. 64 \& 163.
    ${ }^{124}$ Eska 1989: pp. 104 \& 163.
    ${ }^{125}$ Eska 1989: pp. 112 \& 163.
    ${ }^{126}$ Eska 1989: pp. 42 \&163.
    ${ }^{127}$ Eska 1989: pp. 101 \& 164.
    ${ }^{128}$ Eska 1989: pp. 66 \& 164.
    ${ }^{129}$ Fortson 2004: p. 113.
    ${ }^{130}$ Eska groups the Continental Celtic languages into Hispano-Celtic, Transalpine Celtic and Cisalpine Celtic. Hispano-Celtic is here called Celtiberian, Transalpine Celtic is Transalpine Gaulish, and Cisalpine Celtic is Lepontic and Cisalpine Gaulish taken together.
    ${ }^{131}$ Eska 1993: p. 24.

[^24]:    ${ }^{132}$ Schrijver 2007: p. 367.
    ${ }^{133}$ Schrijver 2007: p. 367.

[^25]:    ${ }^{134}$ Griffith 2011.

[^26]:    ${ }^{135}$ Thurneysen 1946: p. 162.
    ${ }^{136}$ dil.ie/33623

[^27]:    ${ }^{137}$ Hewson \& Bubenik 2006: p. 350.

[^28]:    ${ }^{138}$ Bauer 2014.

[^29]:    ${ }^{139}$ Kavanagh 2001: p. 893.
    ${ }^{140}$ In the manuscript, it is actually not written above or next to the word exacerbatione, however, it it is clear it must be glossing this word instead of the word it is actually written at.

