# The Acquisition of Negation 

 in WelshBob Morris Jones

bmj@aber.ac.uk

$1^{\text {st }}$ December 2022

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## Professor J.E. Caerwyn Williams

I dedicate this study to the memory of Professor J.E. Caerwyn Williams, professor of Irish at the University College of Wales, Aberystwyth 1965-1979, a distinguished and much respected Celtic scholar. My family and myself arrived in Aberystwyth in the summer of 1974 when I took up a research position in the Department of Education. He warmly gave me support and encouragement at a time when they were greatly appreciated and continued to provide help and interest in my work - and all in a quiet and unassuming manner.

## Acknowledgements

The greatest acknowledgement goes to the families who co-operated with the research project and whose interactions with the children have done so much to provide valuable data about the acquisition of Welsh. Thanks are also due to the research workers who patiently collected the data and undertook the arduous task of transcribing the audio recordings. An early version of part of this study was delivered at the Welsh Syntax Seminars (later the Welsh Linguistics Seminars) in 2006 'The acquisition of negation in Welsh: a first look' and a later more detailed version of part of the study in 2019 'The Acquisition of Negation in L1 Welsh, Another Look'. I am grateful to the responses which I received there. I am especially grateful to comments and support from Bob Borsley, with whom I have been fortunate to co-author work on negation. I should also like to thank Information Services of Aberystwyth University whose perseverance, especially by Fred Ziegler, solved a problem with the digital document which contains the original manuscript for this study. Yet again, I thank my wife, who has tolerated a distracted and (on occasions) forgetful husband.

## Conventions

The Glosses

| 1PL | first plural |
| :---: | :---: |
| 1SG | first singular |
| 2PL | second plural |
| 2SG | second singular |
| 3PL | third plural |
| 3SG | third singular |
| ADV | adverbial particle |
| C | complementizer |
| CL | clitic |
| CNTF | counterfactual |
| CP | complementizer phrase |
| $\mathrm{NP}_{\text {def }}$ | definite noun phrase |
| F | feminine |
| FUT | future tense |
| IMPF | imperfect tense or, an alternative label, imperfective tense |
| IMPV | imperative |
| M | masculine |
| $m$-form | third person form of the present tense of bod 'be' beginning with $m$ |
| $o$-form | the forms oes, o's, 's of the copula bod 'be' |
| NEG | negative |
| NomP | nominal phrase, including pronominal heads |
| NP | noun phrase |
| PERF | perfect aspect |
| PERV | perfect tense or, an alternative label, perfective tense |
| PL | plural |
| POS | positive |
| PRED | predicatival |
| Prep | preposition |
| PRES | present tense |
| PROG | progressive aspect |
| PT | particle |
| Q | question |


| RESP | responsive |
| :--- | :--- |
| $s$-form | present tense negative forms of the copula bod 'be' |
| SG | singular |
| T | tense |
| TP | tense phrase |
| VP | verb phrase |
| V' | part of VP |
| XP | any phrase |
| $y$-form | third person forms of the present tense of $b o d$ 'be' beginning with $y$ |

The Examples
spellings of words are mainly based on colloquial forms; homonyms are distinguished by digits or
finally placed apostrophe; lower case is used but proper nouns have an initial capital
<> scope symbols, which indicate the sequence to which information within square brackets applies;
without scope brackets the information applies to the preceding word
[ ] enclose information which is not part of the text of an example (which is italicised):
/ repetition
// repetition with change(s)
x digit repetition plus number of times
\% a comment on the utterance

+ imit an imitation of previous utterance
? best guess
$=\quad$ brief explanation of word or phrase
$=$ ? alternative transcription
=! paralinguistic noises
> overlap with following speech
< overlap with preceding speech
@Bck indicates background information
$+\ldots$ unfinished utterance
+/. unfinished utterance
\$ \$ finally-placed main clause
@c after a word indicates a child form
\# between words or phrases indicates a pause within an utterance
\%com on separate line provides a comment on utterance(s)
$\mathrm{xxx}, \mathrm{xx}, \mathrm{x}$ incomprehensible data
\& unfinished word
A--- etc anonymous way of naming the children

| ,$"$ | clause external peripheral material in initial position |
| :--- | :--- |
| $"$ | clause external peripheral material in final position |
| ,$"$, | clause external peripheral material in internal position |
| $:$ | in word spellings indicates circumflex diacritic on preceding letter |
| + | is used where a sequence of words is taken to be a lexical unit e.g. $i+$ gyd for $i$ gyd 'all' |

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## Preliminaries


#### Abstract

Aim

This study presents a linguistic account of the acquisition of negation in Welsh by seven first-language children variously between the ages of 17 and 30 months. It also gives descriptions of negative words and patterns in the Welsh of the adults who interacted with the children and whose Welsh indicates the characteristics of the input data on which acquisition is founded. On the basis of the descriptive accounts and longitudinal data, the study proceeds to a linguistic explanation of how children acquire negation in Welsh.


## The data

The data are in a corpus which was collected by a research project with the financial support of a grant provided by the ESRC. http://users.aber.ac.uk/bmj/abercld/cronfa18_30/sae/intro.html gives the details of the project and the grant.

The corpus is a written record of audio-recordings of spontaneous interactions between the children and adults in the homes of the children. The adults were field workers on the staff of the project and family members. Occasionally, other young children contributed to the interactions but were not considered in the analyses. Table 0.1 below shows that none of the children were recorded in every month of the project. One of the children was in the project from the $17^{\text {th }}$ to the $21^{\text {st }}$ month and another was in the project from the $21^{\text {st }}$ to the $30^{\text {th }}$ month.

The audio-recordings are transcribed using the conventions of CHILDES and details about the conventions and copies of the transcriptions are available at https://childes.talkbank.org.

## The general approach

The bulk of this work gives detailed linguistic descriptions, with copious illustrations, of negation in the Welsh of the adults and the children, providing analyses of the phrases in which Welsh negative words occur. In some instances, the discourse context is also provided. The frequencies of the words and patterns are given. It is only on the basis of a comprehensive and well-illustrated empirical account along with frequency counts that a linguistic explanation of the acquisition of negation can eventually be attempted.

This work refers frequently to the descriptive and theoretical account of negation in Welsh by Borsley and Jones (2005) and takes advantage of the taxonomy which they provide. However, there are two differences. The linguistic descriptions given in this study are confined to the performance data which are produced by the adults and the children. On the basis of these descriptions and longitudinal information, a theoretical explanation of acquisition emerges which is different to the theoretical approach to negation in adult Welsh which is available in Borsley and Jones (2005).

## Statistics

The study provides statistical information which indicates the productiveness of patterns and words but more significantly helps to chart the longitudinal paths of the acquisition of negation. The statistics are based on very basic descriptive calculations involving frequencies, percentages and averages, but there are two points which need to be made about the calculations.

First, there are seven children in the corpus, and the statistics could be presented separately for each child. This approach can be unwieldly and does not provide a simple overall picture. A useful alternative is to group the children in terms of their age in months and to provide statistics for each age group. However, significant differences in the performance of individual children are pointed out.

Second, this study makes great use of average frequencies. But there are two ways of calculating the averages. One approach can calculate the averages on the basis of the total number of children in each age group. The numbers of children are given in table 0.1 . The table is organized to provide the most advantageous way of comparing the number of recordings in each age month for each child.

Table 0.1. The numbers of children at each age in months (\#1 etc anonymously represent each child)

| Children | Age in Months |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| \#1 | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  |  |  |  |  |
| \#2 |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |
| \#5 |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |
| \#6 |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |
| \#4 |  |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |
| \#7 |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |
| \#3 |  |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Totals | 1 | 4 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 3 | 2 | 1 |

For example, the average score for children at 20 months of age can be based on the performances of the six children at that age. Table 0.2 shows an alternative approach in which the averages are based on the total number of recordings in each month.

Table 0.2. The numbers of recordings at each age in months

| Children | Age in Months |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| \#1 | 2 | 2 | 2 | 3 | 2 |  |  |  |  |  |  |  |  |  |
| \#2 |  | 2 | 2 | 2 | 3 | 2 | 2 | 4 | 3 | 4 | 3 |  |  |  |
| \#5 |  | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 2 | 4 | 3 |  |  |  |
| \#6 |  | 2 | 2 | 2 | 2 | 4 | 4 | 1 | 4 | 3 | 2 |  |  |  |
| \#4 |  |  | 1 | 2 |  | 1 | 3 | 3 | 2 | 3 | 4 | 5 |  |  |
| \#7 |  |  |  | 1 | 1 | 2 | 3 | 3 | 2 | 4 | 4 | 3 | 3 |  |
| \#3 |  |  |  |  | 1 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 1 | 1 |
| Totals | 2 | 8 | 9 | 12 | 11 | 16 | 18 | 18 | 17 | 22 | 19 | 11 | 4 | 1 |

These two approaches produce quite different averages. Consider an invented total score of 100 at age 20 months. Based on the total number of children (six), the average frequency is 16.66 , but based on the total number of recordings, (twelve), the average frequency is 8.33 . This is not a problem if the same
approach is consistently followed. It is the approach which is based on the number of recordings which is adopted in this study to calculate averages.

Tables 0.1 and 0.2 show that the totals of children / recordings in each month vary over the age range of the project: the totals at the earlier and later ages are smaller than those between 18 and 28 months. But the age range from 18 to 27 and on to 28 contains reasonable numbers of children and recordings. Based on a reluctance to waste hard-won data, the charts and tables provided in this study record the information for all ages. The seventeenth and thirtieth involve only one child each and several of the charts given in chapter 6 show that these months can be statistically quite different.

In summary, the statistics are based on frequencies for age groups (in months), and the average frequencies are based on the total number of recordings at each age. It is the average frequencies which provide the basis for the longitudinal paths of development.

## Chapter 1 Negative Words in Welsh

The negative words are either words which create a negative phrase or are words which need a negative context.

All examples are taken from the corpus unless otherwise indicated.

## 1 The Welsh of the adults

Table 1.1 lists the negative words in the Welsh of the adults who interacted with the children in the corpus. The words are ordered alphabetically on the left-hand side and ranked in terms of descending frequencies on the right-hand side.

Table 1.1. Negative words in the Welsh of adults

| byth '(n)ever' | 3 | dim 'no, not, nothing' | 2427 |
| :---: | :---: | :---: | :---: |
| chwaith '(n)either' | 48 | na | 2211 |
| $d / t$ | 325 | peidio NEGATIVE | 329 |
| dim 'no, not, nothing' | 2427 | $d / t$ | 325 |
| dim byd 'nothing' | 55 | nage 'no' | 212 |
| erioed '(n)ever' | 7 | naddo 'no' | 78 |
| heb 'without' | 21 | dim byd 'nothing' | 55 |
| mo 'not' | 2 | chwaith '(n)either' | 48 |
| na | 2211 | $s$ 'a / s'o / s'mo | 41 |
| na2 'nor' | 9 | heb 'without' | 21 |
| na5 | 6 | neb 'no one' | 19 |
| naddo 'no' | 78 | na2 'nor' | 9 |
| nage 'no' | 212 | erioed '( n )ever' | 7 |
| neb 'no-one' | 19 | na5 | 6 |
| nunlle / nunman 'nowhere' | 3 | nunman / nunlle 'nowhere' | 3 |
| peidio NEGATIVE | 329 | byth '(n)ever' | 3 |
| $s$ 'a/s'o / s'mo | 41 | mo 'not' | 2 |

There are three negative words which do not occur in the Welsh of the adults in the corpus and are not in table 1.1 - nad, nid and onid. They are used before the initial focus phrase in fronted clauses in
formal Welsh. Other negative words can perform this function in spoken Welsh as shown in chapter 3, so their absence is due to a stylistic restriction. Some of these words have variant forms due to:

- mutation (e.g. dim byd can occur as ddim byd),
- intrusive final consonants before vowels (e.g. na can become nac),
- or contraction (e.g. $\operatorname{dim}$ can become 'm).

The details will be given in the relevant chapters. The glosses in table 1.1 give very general indications of the uses of these words but their meanings are detailed in more precise terms in the following chapters. There are some words which are not given glosses, namely:

- na a negative particle, used as a one-word phrase or preverbally (chapter 2)
- na5 a negative preverbal particle, used in subordinate clauses (chapter 3)
- $d / t \quad$ a negative particle which precedes some verbs in negative clauses (chapters 3 and 4)
- peidio a verb which is used in negative imperatives and also precedes non-finite verb phrases (chapter 5)
- s'a/s'o/s'mo negative forms of the present tense of the copula bod 'be' (chapter 3)


## 2 The Welsh of the children

The negative words which occur in the Welsh of the children are given in table 1.2, again ordered alphabetically on the left-hand side, and ranked in terms of descending frequencies on the right-hand side.

Table 1.2. Negative words in the Welsh of the children

| byth '( n$) \mathrm{ever}$ ' | 0 | $n a$ | 1630 |
| :---: | :---: | :---: | :---: |
| chwaith '(n)either' | 5 | dim 'no, not, nothing' | 459 |
| $d / t$ | 6 | nage 'no' | 123 |
| dim 'no, not, nothing' | 459 | peidio NEGATIVE | 54 |
| dim byd 'nothing' | 18 | naddo 'no' | 26 |
| erioed '(n)ever' | 0 | dim byd 'nothing' | 18 |
| heb 'without' | 0 | neb 'no one' | 7 |
| mo 'not' | 0 | $d / t$ | 6 |
| na | 1630 | chwaith '(n)either' | 5 |
| na2 'nor' | 4 | na2 'nor' | 4 |
| na5 | 0 | na5 | 0 |
| naddo 'no' | 26 | byth '(n)ever' | 0 |
| nage 'no' | 123 | erioed '( n )ever' | 0 |
| neb 'no-one' | 7 | heb 'without' | 0 |
| nunlle / nunman 'nowhere' | 0 | mo | 0 |
| peidio NEGATIVE | 54 | nunlle / nunman 'nowhere' | 0 |
| $s^{\prime} a / s$ 'o /s'mo | 0 | $s{ }^{\prime}{ }^{\prime} / s^{\prime} \mathrm{o} / \mathrm{s}$ 'mo | 0 |

Of the seventeen items in the list of the adults, ten occur in the performances of the children. Missing are na5, byth, erioed, heb, mo, s'a/s'o / s'mo and nunlle / nunman. There are also differences in the frequencies of the negative words which occur in the Welsh of the adults and the children.

## 3 The presentation of the study

The most frequent negative word - the negative particle na-is discussed in chapter 2 , which looks at its use in the Welsh of the adults and the children. The next most frequent item - dim 'not, no, nothing' - is a major undertaking and its use by the adults is discussed in chapter 3 and its use by the children in chapter 4 . The remaining negative words in the Welsh of the adults and the children are discussed in chapter 5 . There is a considerable amount of detail in these chapters, which in places is quite dense, but they are all shaped by the content of the performance data and a comprehensive account is needed to convey an accurate picture. Summaries and tables attempt to present concise accounts which reveal the general trends. The final chapter, chapter 6, provides an overall view, gives the longitudinal paths of development and considers an explanation of the acquisition of negation in Welsh. The descriptions in chapters 3 and 4 are based on the taxonomy of the uses of dim 'not, no' which are
found in Borsley and Jones (2005). But a different theoretical approach is adopted for an account of the rules of acquisition which are given in chapter 6.

## Chapter 2 Na in Adult and Child Welsh: Responsive and Tag

All examples are taken from the Welsh of the adults and the children in the corpus unless otherwise indicated.

The form $n a$ is a homonym and in some contexts the transcribers faced the problem of distinguishing $n a$ from other forms of the same phonetic shape, namely, na2 'nor' and the reduced forms of the following lexemes: the locative (y)na 'there', the demonstrative pronominals (hon)na 'her, that', (hwn)na 'him, that', (hyn)na 'that', the predicative demonstrative (dy)na 'there is', and the inflected prepositional form (yn)na 'in'. Comments by the transcriber in the examples in (1) demonstrate this problem.

1 a. Child: mewn hwnna.
'in that.'
'na [=? na] cael [?].
'there have.'
\%com: this has feel of locative but could be negative.
b. Child: hwnna,, na, ie.
'that, no, yes.'
\%com: very difficult to say whether this na is negative or hwnna or yna.
c. Child: < isio hwnna 'na [/] 'na [/] 'na [/] 'na> [/] isio hwnna 'na [/] 'na [/] 'na.
want that there
'want that there.'
\%com: yna...but possibly negation.

Context helps to disambiguate and there are only a very small number of problematic examples, which have little impact on the overall analysis.

## 1 Adult usage

$N a$ is distributed in two ways in the Welsh of the adults. It can precede a finite verb, producing the sequence [ $n a$ finite verb] - we shall label this $n a$ as preverbal $n a$. It can also occur by itself without a finite verb, which we shall label as non-preverbal $n a$. When the verb begins with a vowel preverbal $n a$ acquires a final consonant and in the spoken Welsh of the corpus it variously occurs as nac, nach, nad and nag (nac is the preferred choice in formal Welsh).
$N a$, both preverbal and non-preverbal, is a function word which is used to create a negative tag or a negative responsive.

### 1.1 Tags

Tags occur on the right side of an accompanying phrase, and either preverbal $n a$ or non-preverbal na can occur. The tag itself, but not the tagged phrase, allows a choice of interrogative or declarative intonation. As Rottet and Sprouse (2008) show, there is some variation in the formation of tags in Welsh. We shall concentrate on the use of $n a$ in tags and not consider the entire tag system.

The examples in (2) show preverbal $n a$ in a tag to a negative clause (negative clauses are discussed in chapters 3 and 4).

2 a. ti ddim isio sefyll,, nag oes [\% child is standing on the toys].
you.SG NEG want stand NEG be.PRES.3SG
'you don't want / need to stand, do you.'
b. $d$ oes 'na ddim botynnau,, nag oes [\% knitted dress].
neg be.pres.3sG there neg buttons neg be.Pres.3sG
'there aren't any buttons, are there.'
c. $i e$, ,, $d$ yw $\quad$--- ddim yn crio,, nag $y w$ ?
yes neg be.pres.3sG M--- neg prog cry neg be.Pres.3sg
'yes, M--- doesn't cry, does she?

In such examples, the function of a tag is to imply a negative response to the tagged phrase. Or, in other terms, the tag re-enforces the negative polarity of the phrase. The tag also has the effect of appealing to, and thus involving, the addressee in the discourse exchange.

A negative verbal tag can also occur with a positive phrase as shown by the examples in (3). Examples (3b) and (3c) also show that the tagged phrase does not have to be a finite clause.

3 a. mae 'n drewi,, nag yw.
be.PRES.3SG PROG stink NEG be.PREs.3sG
'it stinks, doesn't it.'
b. Taid gin cacen,, nag oes?

Grandfather with cake neg be.PRes.3sG
'Grandad (has) got a cake, hasn't he?'
c. rhy boeth,, na 'dy.
too hot NEG be.PRES.3SG
'too hot, isn't it.'

There are two explanations for the difference between the examples in (2) and the examples in (3). For some speakers, the rule for the use of a negative tag is as already outlined above, namely, that the tagged phrase must be negative and the tag implies a negative response. For these speakers, a negative tag is only used with a positive phrase such as in (3) for marked semantic reasons, namely, to add circumspection to the positive statement. But for other speakers, there is a different rule for the use of a negative tag, namely, that a negative tag is used with a positive phrase and implies a positive answer or response. These two systems are thus quite different semantically:
(i) negative phrase,, negative tag $=$ negative response
(ii) positive phrase,, negative tag $=$ (a) positive response
(b) alternatively, for users of the first system, adding circumspection to a positive statement

Non-preverbal na can also occur in tag position. It occurs with phrases which can be negative or can be positive. Examples of negative phrases are given in (4).

4 a. wneith 'o 'm ffitio,, na.
do.fut.3SG it NEG fit no
'it won't fit, no.'
b. $\operatorname{dim} d a+d a s,, \boldsymbol{n a}$.

NEG sweets no
'not sweets, no.'
c. 's dim dwmi 'da fe,, na.
be.PRES.3SG NEG dummy with he no
'he hasn't got a dummy, no.'

Examples of $n a$ as a tag to a positive phrase are given in (5).

5 a. isio sand efo 'r dril,, na.
want sand with the drill no
'(you) want sand with the drill, no.'
b. ymm gwely,, na.
uhm bed no
'uhm a bed, no.'

```
c. mae 'n disgyn,,na.
    be.PRES.3SG PROG fall no
    'it's falling, no.'
```

We can give the same interpretations which were given to the verbal tags. In the examples in (4), na implies a negative response. In the examples in (5), a positive response is implied by some speakers or, alternatively, circumspection about a positive statement is conveyed.

There is no difference between the use of tags which are preverbal, [ $n a$ finite verb], and non-preverbal, $n a$ by itself.

### 1.2 Responsives

Both preverbal $n a$ and non-preverbal $n a$ can stand alone as an utterance. They provide:

- a negative answer to a previous question
- a response to a previous statement which can indicate agreement (if the previous statement is negative) or disagreement (if the previous statement is positive)
- a negative response to a previous command
- a negative question to a previous statement
- a negative response to an action which occurs or is about to occur in the extralinguistic situation, acquiring imperative force which seeks to prohibit the action

We use the label responsive to describe preverbal $n a$ and non-preverbal $n a$ in these responses. The previous question or statement may be produced by another interlocutor or, especially in the case of adults in interactions with young children, by the same speaker. We shall not attempt to illustrate all these uses in this work as such a study needs to be undertaken in an account of the Welsh responsive system in general, which would include other responsives both positive and negative. However, we return to the negative responsive system in chapters 5 and 6 .

Responsives relate back to a previous utterance in the discourse and the use of negative answer words in this anaphoric relationship is referred in the literature as anaphoric negation (Dimroth 2010 provides a wide-ranging survey). Anaphoric negation is a reasonable term when $n a$ (or equivalent in any other language) responds to a previous positive statement but does not apply when a negative responsive agrees with a previous negative statement and does not apply in a straightforward way when a negative responsive answers a previous question. We shall not pursue these details in this study.

The use of non-preverbal $n a$ is similar to the use of negative answer words in other languages such as English no but the use of preverbal na, [na finite verb], as an answer needs some explanation. The Welsh answering system (more generally the responsive system) is mainly an echo system which involves the repetition of an element of a question to provide a positive or negative answer. In this system, the finite verb can be repeated (with some exceptions and with adjustments for number and person) to produce positive answers; and negative answers are produced by placing na before the finite verb, [ $n a$ finite verb]. All this also applies to agreements and disagreements andas well as questions relating to previous utterances. Jones B.M. (1999) gives a detailed account of this system, but this brief sketch will serve the purposes of this study.

Examples of preverbal $n a$ and non-preverbal $n a$, both standing alone but relating to a previous utterance, are given in (6) and (7) respectively.

```
6 \text { a. Adult: ti ddim isio bod yn2 hogan i' Twm,, nag oes.}
    you.SG. NEG want be PRED girl to Tom NEG be.PRES.3SG
    'you don't want to be a girl to Tom, do you?'
```

Child: oes.
be.PRES.3SG
'yes.'
Adult: nag oes.
NEG be.PRES.3SG
'no.'
b. Child: wedi torri.

PERF break
'broken.'
Adult: wedi torri.
PERF break
'broken.'
$n \boldsymbol{a}$ ' $d y$.
NEG be.PRES.3SG
'no.'
c. Adult: $m a$ ' $r$ garej yn2 llawn.
be.PRES.3SG the garage PRED full
'the garage is full.'
Child: nag yw.
NEG be.PRES.3SG
'no.'

```
    Adult: oh nag yw e?
    oh NEG be.PREs.3SG it
    `oh no?'
7 a. Adult: pwy wnaeth?
    who dod.PERF.3sG
    'who did it?'
    Child: mam.
    'mother.'
    Adult: na. [=! laughs]
    'no.'
b. Adult: beth yw hwn?
    what be.PREs.3SG this
    'what's this?'
    Child: tywod.
    'sand.'
    Adult: na.
    'no.'
c. Adult:
    t' isio mwmw@c bach?
    you.SG want moo-moo little
    `do you want a little moo-moo?'
Child: na.
    'no.'
    Adult: na?
    'no?'
```

The use of preverbal $n a$ in interrogatives which respond to a previous statement as in (6c) and nonpreverbal $n a$, as in example ( 7 c ), can often be no more than a perfunctory response.

Both preverbal $n a$ and non-preverbal $n a$ as responsives can be accompanied by a following phrase. They still relate back to something which has been said or to a situation, and do not form a constituent with the accompanying phrase. The latter provides additional information which either re-enforces the negative answer or the agreement / disagreement, or suggests some alternative to that which is the object of the answer or the agreement / disagreement.

Examples of preverbal $n a$ and non-preverbal $n a$ are given in (8) and (9) respectively co-occurring with a negative accompanying phrase.
a. Child: hwnna [/] hwn [/] boot [/] hwnna [/] hwnna [//]boot 'im[?] agor,, na 'dy.
boot NEG open NEG be.PRES.3SG
'boot (does) not open, does it.'
Adult: na 'dy,,, 'dy boot ddim yn agor.
NEG be.PRES.3SG be.PRES.3SG boot NEG PROG open 'no, the boot isn't opening / doesn't open.'
b. Child: hwnna 'im het,, nag oes.
that NEG hat NEG be.pres
'that not hat, no.'
Adult: nag oes,,, $\quad d$ oes gynni hi ddim het.
NEG be.PRES.3SG NEG be.PRES.3SG with.3SG.F she NEG hat 'no, she hasn't got a hat.'
c. Child: ti isio crips [= @c crisps]?
you.SG want crisps
'(do) want crisps?'
Adult: nag oes,,, 'im rwan.
NEG be.PRES.3SG NEG now
'no, not now.'
9 a. Adult: pwy liw yw 'r se:t 'na,, \# mm?
who colour be.PRES.3SG the seat there mm
'what colour is that seat mm ?
Child: coch.
'red.'
Adult: na,,, dim coch.
no NEG red
'no, not red.'
b. Adult: beth yw hwn'tel?
what be.PRES.3SG this then
'what is this, then?'
panda,, ife?
panda Q
'panda, yes?'
Child: ci.
'dog.'
Adult: na,,, s'a $i$ 'n credu mai ci yw e.
no be.PRES.NEG I PROG believe PT dog be.PRES.3SG it
'no, I don't believe that it is a dog.'
c. Adult: efo pwy?
with who
'who with?'
Child: efo taid.
with grandad
'with grandad.'
a taid.
'and grandad.'
Adult: na,,, dim efo Taid.
no NEG with Grandad.
'no, not with Grandad.'

A negative accompanying phrase is typically modelled on the content of the previous utterance which is the target of the response and conforms with the polarity of that utterance.

Examples in (10) and (11) show preverbal na and non-preverbal $n a$ on the left side of a positive accompanying phrase.

```
10 a. Adult: 'dy 'r coets ddim yn gallu mynd i+mewn yfanna,, na 'dy.
    be.PRES.3SG the pram NEG PROG can go into there NEG be.PRES.3SG
    'the pram can't go into there, can it.'
    Child: na 'dy.
    NEG be.PRES.3SG
    'no.'
    Adult: na 'dy,,, mae 'n2 rhy fawr.
    NEG be.PRES.3SG be.PRES.3SG PRED too big
    'no. it is too big.'
    b. Adult1:o'dd e 'n crio?
    be.IMPF.3SG he PROG cry
    'was he crying?'
    Adult2: nag o'dd[x 2],,, o'dd e 'n2 fabi da iawn iawn.
    NEG be.IMPF.3SG be.PRES.3SG he PRED baby good very very
    'no, he was a very good baby.'
    c. Adult: oes 'na rhywbeth yn'o fo?
    be.PRES there something in.3SG.m it
    'is there something in it?'
```

| nag oes,,, | mae | 'n2 | wag. |
| :--- | :--- | :--- | :--- |
| NEG be.PRES.3SG be.PRES.3SG PRED empty |  |  |  |
| 'no, it's empty.' |  |  |  |

11 a. Child: isio bedan [= @c brechdan] eto?
want sandwich again
'want a sandwich again?'
Adult: isio brechdan eto?
want sandwich again
'want a sandwich again.'
$\boldsymbol{n a},,, d w \quad i$ 'di cael digon,, diolch.
no be.PRES.3SG I PERF have enough thanks
'no, I've had enough, thanks.'
b. Child: Anti $+S$--- gafael hwnna.

Antie+S--- hold that
'Antie+S--- hold that.'
\%com: here K--- wants to hold coal bucket and not an imperative.
Adult: na,,, mae 'n2 rhy drwm.
no be.PRES.3SG PRED too heavy
'no, it's too heavy.'
c. Adult: pwy ni 'n mynd $i$ ' weld?
who we PROG go to see
'who are we going to see?'
Child: $G---$.
'G---.'
Adult: na,,, Nain a Taid.
'no, Grandmother and Grandfather.'

In these instances, the accompanying phrase is not modelled on the previous utterance but is a new phrase conveying new information which can provide the grounds for a negative response.

In southern dialects, $n a$ can also occur before the interrogative particle efe. The examples in (12) show this sequence occurring as a responsive.

12 a. Child: llew.
'lion.'

Adult: na,,, dim llew.
NEG NEG lion
'no, not a lion.'
ond ci mawr.
but dog big
'but a big dog.'
Child: na,,, dim ci mawr.
NEG NEG dog big
'no, not a big dog.'
Adult: oh nag efe?
oh NEG Q
'oh no / isn't it?'
b. Adult: ie,,, $a$ beth $y w \quad h w n$ ?
yes and what be.PRES.3SG this
'yes, and what is this?'
Child: brwm.
'broom.'
Adult: brwm,, ie.
'broom, yes.'
car Dad yw hwnna.
car Dad be.PRES.3SG that
'that's Dad's car.'
oh nag efe.
oh NEG Q
oh no / isn't it.'

These are the only two examples in the corpus of nag efe.

## 2 Child usage

The Welsh of the children shows that they can use na like the adults in responsives and in tags. But there is an additional use which is not found in the language of adults and which is discussed in section 2.3 below.

### 2.1 Tags

Examples of preverbal na and non-preverbal $n a$ are found in tag position in the children's Welsh. The examples in (13) and (14) show them tagged to a negative phrase.

13 a. Child: 'im[?] yn ffitio car,, na 'dy.
NEG PROG fit car NEG be.PRES.3SG
'not fitting, is it.'
b. Child: 'im yn brathu $S--$, , $\boldsymbol{n a}$ 'dy.

NEG PROG bite $S$-- NEG be.PRES.3SG
'not biting S--, is it.'
c. Child: 'im isio bocs,, nag oes [=!some grunts].

NEG want box neg be.PRES.3SG
'not want a box, no.'
14 a. Child: dim wedi torri,, na?
NEG PERF break no
'not broken, no?'
b. Child: dim yn cael,, na.

NEG PROG have no
'not allowed, no.'
c. Child: dim isio rheina,, na.

NEG want those NEG
'not want those, no.'

And examples of positive phrases are given in (15-17).

15 a. Child: hwn yn sefyll,, na 'dy.
this PROG stand NEG be.PRES.3SG
'this one standing, isn't it.'
b. Child: fi gallu mewn yfanna,, na $d w$.

I can in there NEG be.PRES.1SG
'I can in there, can't I.'
c. Child: mae 'n2 oer,, na 'dy.
be.PRES.3SG PRED cold NEG be.PRES.3SG
'it's cold, isn't it.'
16 a. Child: mae ' $n$ bwyta hwnna,, na [\% shaking her head and referring to sweets].
be.PRES.3SG PROG eat that no
'he eats that, no.'
b. Child: agor fynna,, na.
open there no
'open there, no.'
c. Child: mae 'n2 drwm,, na.
be.pres.3SG PRED heavy no
'it's heavy, no.'
\%com: na added as if to say it won't lift it.
17 a. Child: <hwn yn ffitio,, na 'dy> [/] hwn yn ffitio,, na 'dy.
this prog fit neg be.pres.3sG
'this fitting, isn't it.'
\%com: negating with negative tag and look.
b. Child: hwnna suddo yn3 iawn,, na 'dy.
that sink adv right neg be.PREs.3SG
'that sinking ok, isn't it.'
\%com: negative tag implying- dydy hwnna ddim yn suddo yn iawn.
c. Child: wow+wow@c bwyta fi,,na 'dy.
wow-wow eat I neg be.PREs.3SG
'bow-wow eat me, isn't it.'
\%com: negation with tag - dydy wow+wow ddim yn bwyta fi, nady.

The comments by the transcriber in the examples in (17) suggest another use of a negative tag with a positive phrase, namely, to negate the phrase. This is similar to the use of phrasal na, which is discussed in section 2.3.

### 2.2 Responsives

The literature on the use of equivalents of non-preverbal $n a$ in other languages such as English no, French non and German nein presents extensive and detailed discussion on their semantics in early child language involving contrasts such as rejection, denial, and nonexistence amongst others. A wideranging discussion of the research on this topic is available in Dimroth (2010). This work on Welsh na will not attempt a detailed study of its semantics on this very detailed level but we return to consider the role of $n a$ in the Welsh responsive system in chapter 6.

Examples of preverbal $n a$ and non-preverbal $n a$ standing alone as responsives are given in (18) and (19) respectively.

18 a. Adult: mae 'n siarad efo mam,, yndy.
be.PRES.3SG PROG talk with mother,, be.PRES.3SG
'she's talking with mum, yes.'
Child: uhna 'dy.
uh neg be.PREs.3SG
'uh no'.
b. Adult: mae 'n2 wag.
be.PRES.3SG PRED empty
'it's empty.'
Child: na 'dy.
NEG be.PRES.3SG
'no.'
c. Adult: ody ddi isie cysgu?
be.PREs.3sG she want sleep
'does she want to sleep/'
Child: nag oes.
neg be.PRes.3sG
'no.'
19 a. Adult: gaf i weld?
have.fut.1SG I see
'may I see?'
Child: $\boldsymbol{n a}$.
'no.'
b. Adult: $t i$ 'm isio fo?
you.SG NEG want it
'don't you want it?'
Child: na.
'no.'
c. Child: $\boldsymbol{n a}$ [ $\%$ mother tries to wipe child's nose]!
'no.'

Examples of preverbal $n a$ and non-preverbal $n a$ with a negative accompanying phrase are given in (20) and (21).
$\begin{array}{lll}20 \text { a. Adult: } & \text { jac }+ \text { codi }+ \text { baw 'dy } \quad \text { ' } ? \\ & \text { jack-lift-soil } \quad \text { be.PRes.3sG it } \\ & \text { 'it's a jcb.' }\end{array}$

Child: na 'dy,,, $\quad \operatorname{dim} j a c+c o d i+b a w$.
NEG be.PRES.SG NEG jack-lift-dirt
'no, not a jcb.'
b. Adult: hei yli [=! laughs].
hey look.IMPV.2SG
'hey, look.'
@ Bck: I take one of the dinosaurs and pretend that it is after Sion's bottle which he is drinking.

Child: na 'dy,,, 'dy 'im yn gael 'o.
NEG be.PRES.3SG be.PRES.3SG NEG PROG have it
'no, he doesn't have it.'
c. Adult: oes 'na jiraff yn byw ynl yr ardd?
be.PRES.3SG there giraffe PROG live in the garden
'is there a giraffe living in the garden?'
Child: oh nag oes,,, dim yfanna.
oh NEG be.PRES.3SG NEG there
'oh no, not there.'
21 a. Adult: hwn yn mynd $i^{\prime}$ weithio?
this PROG go to work
'this (one) going to work?'
Child: na, hwn ddim isio mynd $i^{\prime}$ fanna $x x$ [=? tifor's' ti].
no this NEG want go to there xx
'no, this one want(s) to go to there xx. .'
b. Adult: dos $\quad i^{\prime}$ no:l dy fotel $i$ ' fi,, 'ta!
be.IMPV.2SG to get CL.2SG bottle for I then
'go and get your bottle for me, then.'
Child: [=!crying] na,,, $\quad x x x$.

> 'no, xxx.'
na,,, fi 'm isio llefrith.
NEG I NEG want milk
'no, I don't want milk.'
c. Adult: oh ody pws yn2 saff nawr?
oh be.PRES.3SG puss PRED safe now
'oh puss is safe now.'
Child: na,,, dim 'to.
NEG NEG yet
'no, not yet.'

Examples of accompanying phrases which are positive are given in (22-23).

22 a. Adult: mae 'r babis yn mynd $i+f y n y$ ' $r$ grisiau?
be.PRES.3SG the babies PROG go up the stairs
'the babies are going upstairs.'
Child: yndy.
be.PRES.3SG
'yes.'
Adult: yndyn'.
be.PRES.3PL
'yes.'
Child: na 'dy,,, i+lawry grisiau maen nhw $i$ ' fod.
NEG be.PRES.3SG down the stairs be.PRES.3PL they to be 'no, downstairs they are supposed to be.'
b. Adult:
mae 'o 'n brathu fi rwan.
be.PRES.3SG it PROG bite I now
'it's biting me now.'
@ Bck: take dinosaur and put my finger in its mouth.
Child: na 'dy,,, tynnu fo.
NEG be.PRES.3SG pull it
'no, pull it.'
c. Adult: isio fi drwsio fo.
want I repair it
'want me to fix it.'
Child: nag oes,,, yfi.
NEG be.pres.3sG I
'no, me.'
23 a. Adult: llwy mam?
spoon mother
'mum's spoon?'
Child: na,,, fi.
no I
'no, me.'
b. Adult: isio pibpib@c, hwnna?
want beep-beep, that
'want beep-beep, that one?'

```
Child: na,,, hwn.
    no this
    'no, this.'
c. Adult: gwyn 'dy hwnna.
white be.PREs.3SG that
'that's white.'
Child: na,,, goch.
NEG red
'no, red.'
```

All the examples in (18-23) show that the children are able to use preverbal $n a$ and non-preverbal $n a$ in these two contexts like the adults.

### 2.3 Phrasal na

There is another use of $n a$ in the acquisition data which is not in the Welsh of the adults. It occurs either before or after a phrase and the transcriptions do not contain separating commas. On this basis, we can guardedly claim it forms a constituent with that phrase and has the function of negating the phrase. That is, we have phrasal negation and not anaphoric negation. We shall label na in this use as phrasal na. But the data are not clear-cut and the transcribers' comments in the transcriptions indicate that there is a degree of uncertainty as to whether $n a$ is being used as a phrasal negator or as a tag in final position or as a responsive in initial position.

24 a. na fel 'na,, na $x x[=$ ? na 'dy].
no like that no xx
'no like that, no xx.'
b. oh na cicio pe:l [\% unsure whether a comma is appropriate after na].
oh no kick ball
'oh no kick ball.'
c. na wneud go:l [\% sentential negative $n a$ here quite clear].
no do goal
'no do goal.'
d. na fynna.

NEG there
'not / neither there.'
e. na hwnna.

NEG that
'not / neither that.'
f. na Ginger,, na [/] na

NEG ginger NEG
'not / neither Ginger, no.'
25 a. hwnna 'di torri na.
that PERF break no
'that broken no.'
b. hwn yn2 fach na [\% negation with tag].
this PRED small no
'that small no.'
c. a wedi cwmpo 'to na [\% that is, not fallen again].
and PERF fall again no
'and fallen again no.'

Further, in examples in which na occurs initially there is the possibility that the negative co-ordinator, $n a 2$ 'neither' (discussed in chapter 5), occurs, which is especially obvious in examples like those in (26).

26 a. na fynna.
NEG there
'not / neither there.'
b. na hwnna.

NEG that
'not / neither that.'
c. na Ginger,, na [/] na

NEG ginger NEG
'not / neither Ginger, no.'

There are two other problems with phrasal $n a$. One is that there are examples of $n a$ in final position in which it is preceded in the transcriptions by the symbol \# as in (27a), which is a convention which indicates a pause between words. The other is that $n a$ is followed by missing data in some cases, as in (27b), which makes it difficult to judge the function of $n a$.

```
27 a. yfama # na.
    here NEG
    'here no/not.'
```

b. na $x x x$.

NEG XxX
'no/not xxx.'

All these difficulties (whether we have a phrasal negator or an anaphoric negator or a tag; the negative co-ordinator na2; the pause symbol \#; missing data) work to present limited and uncertain evidence that $n a$ can be used as a phrasal negator, and that as such there is the possibility that it may be a precursor of $\operatorname{dim}$ (discussed in chapters 3 and 4), just as no is said to be used in the early stages of the acquisition of negation in English in examples like no mummy go and wear mitten no (Klima and Bellugi (1966) provide an early account of the developmental stages in English). Dimroth (2010) provides an extensive survey of views on this issue. A crucial matter is the place of examples of preverbal $n a$ in the longitudinal development of negation, and we shall examine this in chapter 6.

## 3 Summary and frequencies

### 3.1 Preverbal and non-preverbal na

Table 2.1 gives the frequencies for preverbal $n a$ and non-preverbal $n a$ in the Welsh of the adults and the Welsh of the children.

Table 2.1. The frequencies of preverbal and non-preverbal $n a$ in the adults' and children's Welsh (the percentages are based on 2209 and 1630 respectively)

|  | Adults | Children |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Preverbal | 596 | $26.98 \%$ | 237 | $14.54 \%$ |
| Non-preverbal | 1613 | $73.02 \%$ | 1393 | $85.46 \%$ |
|  | 2209 |  | 1630 |  |
| na +efe | 2 | 0 |  |  |
| Phrasal na | 0 | 62 |  |  |
|  | 2211 |  | 1692 |  |

Chart 2.1 gives a graphic display of the percentages of preverbal $n a$ and non-preverbal $n a$ in the Welsh of the adults and the children.


The frequencies show that, in the adults' informal speech, non-preverbal $n a$ is much more frequent than preverbal $n a$, accounting for $73.02 \%$ of the total occurrences of 2209 . The input data exposes children to non-preverbal na far more than it does to preverbal na. The totals show that in the Welsh of the children non-preverbal $n a$ is much more frequent than preverbal $n a$, accounting for $85.46 \%$ of the total clear occurrences of 1630 . Preverbal na accounts for $14.54 \%$. The usage of the children is similar to that of the adults in that both use non-preverbal $n a$ far more frequently than preverbal $n a$. But there is a difference in that preverbal $n a$ is more common in adult speech than in the speech of the children. Its proportion in adult speech is nearly twice its proportion in the speech of the children.

Table 2.2 records that there are 62 examples of phrasal na but this simple total does not take into account the two problems which are mentioned in section 2.3 (a pause before na in final position and missing data). Table 2.2 thus also gives the frequencies for examples which do not have these problems and examples which do.

Table 2.2. Phrasal na, pause and missing data

| missing data | 14 | $22.58 \%$ |
| :--- | ---: | ---: |
| pause | 3 | $4.84 \%$ |
| others | 45 | $72.58 \%$ |
|  |  |  |

As can be seen, only three-quarters of examples which precede or follow a phrase without commas in the transcripts can be considered as possible examples of phrasal na.

### 3.2 Responsive or tag

Table 2.3 provides the frequencies for the use of both preverbal $n a$ and non-preverbal $n a$ as a responsive or a tag in the Welsh of the adults and the children.

Table 2.3. The frequencies of responsives and tags conveyed by both preverbal and non-preverbal na in the adults' and children's Welsh (The percentage bases exclude the missing data)

| Responsive | Adults |  | Children |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1771 | 80.21\% | 1535 | 94.46\% |
| Tag | 437 | 19.79\% | 90 | 5.54\% |
|  | 2208 |  | 1625 |  |
| Missing data | 1 |  | 5 |  |
|  | 2209 |  | 1630 |  |

In the case of the adults and the children responsives are far more frequent than tags but the proportions are different: the children make more use of responsives than tags.

We can provide a more detailed picture by distinguishing the use of preverbal $n a$ or non-preverbal na to convey a responsive or tag. The details are given in table 2.4.

Table 2.4. The frequencies of preverbal and non-preverbal in responsives and tags in the adults' and children's Welsh
(The percentages are based on the totals for the responsives and tags separately)

Adults Children

|  | Responsive |  | Tag |  | Responsive |  | Tag |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Preverbal | 290 | 16.37\% | 306 | 70.02\% | 180 | 11.73\% | 57 | 63.33\% |
| Non-preverbal | 1481 | 83.63\% | 131 | 29.98\% | 1355 | 88.27\% | 33 | 36.67\% |
|  | 1771 |  | 437 |  | 1535 |  | 90 |  |

Table 2.4 reveals a symmetry in the Welsh of both the adults and the children: tags are predominantly preverbal and responsives are predominantly non-preverbal.

### 3.3 Polarity of tags and tagged phrases

Table 2.5 gives the frequencies for the polarity of the tagged phrase.

Table 2.5. Tags and the polarity of the tagged phrase in the adults' and children's Welsh

|  | Adults |  |  | Children |  |  |  |
| :--- | ---: | ---: | :---: | ---: | ---: | ---: | ---: |
|  | Tagged Phrase |  | Totals | Tagged Phrase |  | Totals |  |
|  | Positive | Negative |  | Positive | Negative |  |  |
| Preverbal na | 9 | 293 | 302 | 37 | 16 | 53 |  |
| Non-preverbal na | 35 | 96 | 131 | 20 | 13 | 33 |  |
|  |  | 44 | 389 | 433 | 57 | 29 | 86 |

A graphic display of the percentages which are based on the frequencies is given in chart 2.2.


In the Welsh of the adults, of the total of tagged phrases ( 433 - missing data rules out four examples of the original 437 in Table 2.3), $89.84 \%$ are negative and only $10.16 \%$ are positive. Overall, the statistics for the Welsh of the adults provide grounds for claiming that the system which the children experience in the input data is the one in which a negative verbal tag [ $n a$ finite verb] is licensed by a negative phrase. However, the Welsh of the children is different. The statistics show that the tagged phrase is more likely to be positive ( $66.28 \%$ ) than negative ( $33.72 \%$ ). The usage of the children does not follow that of the adults who predominantly use a negative preverbal tag with a negative phrase.

A different picture emerges when we examine preverbal $n a$ and non-preverbal $n a$ separately in the Welsh of the adults, as shown in chart 2.3


In the adults' Welsh, of the total occurrences of preverbal na (302), $97.02 \%$ occur with a negative phrase. Only $2.98 \%$ occur with a positive phrase. But of the total occurrences of non-preverbal na (131), $73.28 \%$ are negative and $26.72 \%$ are positive. That is, with a tag which has preverbal na, positive tagged phrases amount to $2.98 \%$ but with a tag which is non-preverbal na they amount to $26.72 \%$. There are grounds here for claiming that non-preverbal $n a$ is not entirely licensed like preverbal na. Chart 2.4 gives the same contrasts for the children.


The numbers for the percentage bases are small but, as with the adults, preverbal $n a$ and non-preverbal $n a$ are different. We shall see in chapter 6 that children acquire non-preverbal na before preverbal na and on this basis we should consider giving more emphasis to the adult usage of non-preverbal $n a$ which is provided in chart 2.3 and which shows a greater use of positive tagged phrases with non-preverbal na..

### 3.4 Conclusions

The previous sections show that there are three main aspects of the use of $n a$ in the language of the adults and the children:

- it occurs as a preverbal particle [na finite verb] or it occurs non-preverbally as na alone
- both preverbal na and non-preverbal na occur as a tag
- both preverbal na and non-preverbal na occur as a responsive

The input data from the Welsh of the adults exposes children to the following:

- non-preverbal na is far more frequent than preverbal na (Table 2.1)
- responsives are more frequent than tags (Table 2.2)
- both preverbal na and non-preverbal na are used in responsives and tags but a negative tag is more likely to be preverbal $n a$ and a negative responsive is more likely to be non-preverbal $n a$ (Table 2.3)
- a negative preverbal tag, [ $n a$ finite verb], is mainly licensed by a negative tagged phrase and not a positive tagged phrase (Table 2.4); the same applies to non-preverbal na but to a lesser degree.

The children mainly follow the usage of the adults apart from:

- the possible use of non-preverbal na as a phrasal negator
- the polarity of the tagged phrase, which is mainly negative with the adults but is mainly positive with the children.


## Chapter 3 Dim in Adult Usage

All examples are taken from the Welsh of the adults in the corpus unless otherwise indicated.

There are four forms of dim: the unmutated (radical is the traditional terem) form dim, the mutated form $d$ dim and two contracted forms ' im and ' $m$. The form ' $m$ occurs after a vowel and 'im after a consonant (in the corpus, the spelling ' im is used after vowels in some instances). There is also the form $m o$, which is illustrated in sections 1 and 2.2. Examples in $(1-3)$ provide illustratrations of full and contracted forms of dim.

| 1 a. 'dy mochyn ddim yn isda ar se:t? |  |
| :--- | :--- | :--- |
| be.PRES.3SG pig NEG PROG sit on seat |  |
|  | 'a pig doesn't sit on a sit?' |

b. na,,, $d \quad y w \quad$ Sam+Ta:n 'im yn cwmpo,, odye?
no NEG be.PRES.3SG Sam Fire NEG PROG fall be.PRES.3SG he 'no, Fireman Sam isn't falling, is he?'

2 a. $d$ oes 'na ddim ddigon o siwgwr yn'o fo,, $A--$. NEG be.PRES.3SG there NEG enough of sugar in.3SG.M it A--'there's not enough sugar in it, A---.'
b. 's 'a 'm digon o siwgwr yn'o fo,, S---.
be.PRES.3SG there NEG enough of sugar in.3SG.M it S --'there isn't enough sugar in it, S---.'
3 a. $d w \quad i d d i m$ yn gwbod.
be.pres.1sG I NEG PROG know
'I do not know.'
b. $d w \quad i$ ' $\boldsymbol{m}$ yn gwybod.
be.Pres.1SG I NEG prog know
'I don't know.'

The full form in these examples is ddim. The examples in (1) show the full form and the contracted form following a consonant, and the examples in (2) and (3) show the full form and the contracted form after a vocalic element.

## 1 Overview

This chapter describes different uses of dim in the Welsh of the adults. These uses are found in the account of Borsley and Jones (2005), who refer to them as different dims rather than different uses
(Borsley and Jones 2005:151-153), also occasionally used here. First there is the role of dim in forming negative clauses. There are three dims for this: quantifier dim, pseudo-quantifier dim (that is, mo) and adverbial dim. They are respectively illustrated in the following examples from the Welsh of the adults.

4 a. a fydd dim dwr yna wedyn $i^{\prime}$ ti gal bath. and be.fut.3SG NEG water there afterwards for you.SG have bath 'and there will be no water afterwards for you to have a bath.'
b. gei di mo hwnna.
have.fUT.2SG you.SG NEG that.
'you won't get that.'
c. $d w \quad i d d i m$ wedi gorffen eto.
be.pres.1sg I neg perf finish yet
'I haven't finished yet.'

We also consider another use of quantifier $\operatorname{dim}$ in negative clauses which we shall label dependent quantifier $d i m$ and which occurs in a negative context.

5 ne'st ti ddim byta dim cinio?
do.PERF.2SG you.SG NEG eat NEG dinner
'didn't you eat any dinner.'

Second, $\operatorname{dim}$ is used to negate focus phrases which occur initially in fronted clauses

6 dim Tomas wnaeth malu 'o.
neg Tomas do.PERF.3SG break it
'it wasn't Tomas who broke it.'

Third, there is argument dim which can occur by itself in an argument position in a clause where a phrase could occur.

```
7 paid a: twtsiad dim.
    cease.IMPV.2SG with touch NEG
    'don't touch anything.'
```

Fourth, there are other instances of $\operatorname{dim}$ which do not belong to the above uses and whose illustration we shall leave until section 7 .

In brief, we have the following major uses (or different dims):
i. quantifier $\operatorname{dim}$ (see sections 2.1 and 2.4)
ii. pseudo-quantifier dim (see section 2.2)
iii. adverbial dim (see section 2.3)
iv. focus $\operatorname{dim}$ (see section 3)
v. argument dim (see section 4)
vi. other occurrences of $\operatorname{dim}$ (see section 8 )

These dims variously occur in the following phrases:

- finite clauses (see section 2)
- fronted clauses (see section 3)
- small clauses (see section 5)
- fragments (see section 7)

In terms of mutation rules, $d \mathrm{dim}$ is the mutated form of dim. This is clearly seen in the case of quantifier dim which can occur in a non-mutation context and a mutation context. A comparison of examples (8a) with (8b) and (8c) with (8d) shows the forms of the quantifier in both contexts. Matters are more complex with adverbial dim as it mainly occurs in a mutation context. But the wider distribution of the adverbial negator has led Borsley and Jones (2005: 103-104) to claim that, on the basis of examples of the form $\operatorname{ddim}$ in a non-mutation context, it is always realized as $d d i m$ and not $\operatorname{dim}$. They therefore use the label adverbial ddim and not adverbial dim, but this study will use the latter labelling. We look at this matter in detail in section 10 .

## 2 Negation in finite clauses of normal order: quantifier dim and adverbial dim

At this stage, we are solely concerned with the placement of dim in a finite clause. Other matters concerning clausal negation are considered in section 2.5.

In Welsh, the finite verb occurs initially, followed by the subject and then the rest of the predicate (which may be nothing). A form of $\operatorname{dim}$ is variously placed within this configuration. In section 2.3.2 we re-consider what is meant by a finite clause in Welsh.

### 2.1 Quantifier dim

In the case of finite clauses which have an indefinite nominal phrase ${ }^{1}$ as subject or as object (that is, object of a finite lexical verb in a transitive clause), clausal negation is achieved by placing dim before the indefinite nominal phrase to create a negative phrase and thus a negative clause. Borsley and Jones (2005) label the use of dim in this way as quantifier dim, a label which is followed here. But quantifier dim can also occur as a dependent negator, as shown in section 2.4.

Examples produced by adults in the corpus which contain indefinite subjects are given in (8). These examples are all copular clauses. Either the form dim or ddim occurs according to the context.

8 a. a fydd dim dwr yna wedyn $i^{\prime}$ ti gal bath. and be.fut.3SG NEG water there afterwards for you.SG have bath 'and there will be no water afterwards for you to have a bath.'
b. fydd 'na ddim bwyd i' 'r cathod.
be.fut.3sG there NEG food for the cats 'there won't be any food for the cats.'
c. 's dim dwmi 'da fe, na.
be.PRES.3SG NEG dummy with he no 'he hasn't got a dummy, no.'
d. 's gynnon ni ddim cacen,, nag oes.
be.PRES.3SG with.1PL we NEG cake NEG be.PRES.3SG 'he hasn't got any cake, has he?,'

In example (8a), the subject immediately follows the finite verb and dim occurs immediately before the subject. In example (8b), the locative form 'na (a shortened form of yna 'there') occurs as an existential subject. The negative word again occurs before the indefinite nominal phrase but it occurs as ddim and not dim. This is caused by a mutation trigger (mutations are discussed in section 10). The examples in (8c) and (8d) are possessive clauses. Example (8c) follows canonical Welsh word-order - verb, subject, complement [copula + nominal phrase (possession) + prepositional phrase (possessor)]. But in a possessive clause which has an indefinite subject, the apparent transposition of the subject noun phrase and the prepositional phrase can take place as in (8d) giving [copula + prepositional phrase (possessor) + nominal phrase (possession)]. But quantifier dim still occurs before the subject phrase in its transposed

[^0]position, and its occurrence as ddim is caused by mutation (again, see section 10). A detailed discussion of possessives in Welsh is available in Jones B.M. (2018). The discussion in section 2.5 .2 shows that some speakers omit quantifier dim in copular clauses in particular circumstances.

Examples of quantifier dim before an indefinite object of a transitive verb are given in (9).

9 a. gei di ddim toys gin mam $+\ldots$
have.fut.2SG you.SG NEG toys with mother
'you won't get any toys off mum ...'
b. na,,, ge'st ti 'm spageti heddiw,,naddo.
no have.PERF.2SG you.SG NEG spaghetti today no
'no, you got no spaghetti today, no.'
c. oh ga'th hi ddim parti?
oh have.PERF.3sG she NEG party
'oh she didn't have a party.'

This position is in a mutation context and the form ddim can occur (see section 10 for mutation).

Borsley and Jones (2005: 124-126) draw attention to the use of $y r$ un 'the one' as a negative expression which can occur in place of dim un 'not one'. Examples from the corpus which are given in (10) illustrate $y r$ un a dim un.
$10 \mathrm{a} . n a$, ,, $d$ o's 'na 'r un arall. no NEG be.PRES.3SG there the one other 'there isn't another one.'
b. oes 'na ddim un arall.

NEG be.PRES.3SG there NEG one other
'there isn't another one.'

There is only one example of ' $r$ un which is used in this way in the corpus.
2.2 Pseudo-quantifier dim

There are also examples of definite objects in clauses which have a transitive verb as in the examples in (11).

11 a. oh chlywson ni mo 'r gair hwnnw o+r+blaen.
oh hear.PERF.1PL we NEG the word that before 'oh we didn't hear that word before.'
b. gei di mo hwnna.
have.FUT.2SG you.SG NEG that.
'you won't get that.'

In clauses like these, the definite object is not immediately preceded by quantifier dim but by mo in informal speech. The form $m o$ is derived from $\operatorname{dim} o$ (which would occur in formal Welsh), and Borsley and Jones label mo as pseudo-quantifier dim.

### 2.3 Adverbial ddim

So far we have considered clausal negation in finite clauses which have an indefinite subject or an indefinite or definite object, which all negate the clause by placing quantifier dim before the indefinite phrase or pseudo-quantifier mo before the definite phrase. We now consider the use of adverbial dim in clauses which do not have these characteristics: no indefinite subject, no indefinite object nor definite object.

### 2.3.1 The basics: placement

All other finite clauses are negated by placing a form of dim in post-subject position. Adverbial dim occurs in copular clauses which have a definite subject as in (12), intransitive clauses which have a definite subject as in (13), and clauses which have an auxiliary verb and definite subject as in (14).

```
1 2 \text { a. oedd Gu ddim yna,, nag oedd?}
    be.IMPF.3SG Grandmother NEG there NEG be.IMPF.3SG
    `Gran was not there, was she?'
    b. ie,,, o'dd hi ddim yn2 braf iawn,, nag oedd.
    yes be.IMPF.3SG it NEG PRED fine very NEG be.IMPF.3SG
    'yes, it wasn't very fine, was it?'
    c. oh byddi di ddim yn bwrwfe lawr,, byddidi?
    oh be.FUT.2SG you.SG NEG PROG hit it down be.FUT,2SG you.SG
    'oh you will not be hitting it down, will you?'
    d. dw i ddim wedi gorffen eto.
    be.pres.1SG I NEG PERF finish yet
    'I haven't finished yet.'
```

e. $d w \quad i d d i m$ isio hwn.
be.PRES.1SG I NEG want this
'I don't want this.'
f. oh y'n ni ddim fod mynd mewn $i^{\prime}$ 'r drar.
oh be.PRES.1PL we NEG be go in to the drawer
'oh we're not supposed to go into the drawer.'
g. $d \quad y w \quad e$ ddim ynl y lori.

NEG be.PRES.3SG it NEG in the lorry 'it's not in the lorry.'

13 a. a'th e ddim allan,, naddo?
go.PERF.3SG he NEG out no
'he did not go out, did he?'
b. synnen $i$ ddim!
surprise.CNTF.1SG I NEG
'I wouldn't be surprised!'
14 a. wneith 'o 'm mynd.
do.fUT.3SG it NEG go
'it won't go.'
b. fedraf i ddim agor hwnna.
can.PRES.1SG I NEG open that
'I can't open that.'

Adverbial dim is also found in responsives formed with preverbal $n a$, as in the example in (15).

$$
\begin{aligned}
15 \text { a. Adult: } & o ' t \quad t i \quad \text { ofn } n h w ? \\
& \text { be.IMPF.2SG you.SG fear they } \\
& \text { 'were you afraid of them?' }
\end{aligned}
$$

Child: ofn. [+ imit.]
fear
'afraid.'
Adult: nag o't ddim.

NEG be.IMPF.2SG NEG
'you were not = no.'
b. Adult: le ma' Dad 'te1?
where be.PRES.3SG Dad then
'where's Dad then?'

```
Child: yn gweiffio.
    PROG work
    'working.'
Adult: nag yw ddim,,, paid a: gweud ffasiwn gelwydd,, M---.
    NEG be.PRES.3SG NEG IMPV.NEG with say fashion lie M--
    'no, don't say such a lie, M---.'
```

The inclusion of adverbial dim in responsives is not the norm and it is much more common to use nag $o ' t$ or nag $y w$, as shown in chapter 2.

### 2.3.2 Pronominal copular clauses

The examples of adverbial dim which have been given so far contain a finite verb. In informal Welsh the overt finite verb can be omitted when certain conditions apply. A comparison of the two examples in (16) helps to explain the conditions.

```
1 6 ~ a . ~ w y t ~ t i ~ ' n ~ g w y b o d ~ p a m ?
    be.PRES.2SG you.SG PROG know why
    'do you know why?'
    b. ti 'n gwybod pam?
    you.SG PROG know why
    'do you know why?'
```

The licensing conditions are

- the finite verb must be the copula -wyt occurs in (16a) but is absent in (16b).
- the tense must be the present tense, as in wyt
- the subject must be a personal pronoun (mainly the first or second person).

For convenience of presentation, we shall label these clauses as pronominal copular clauses (or pronominal clauses).

Example (16b) illustrates the second person singular. Other persons are given in (17).

17 a. ohfi 'n cofio hwn.
oh I prog remember this
'oh I remember this.'
b. chi 'n2 iawn 'ma?
you.pl PRED right here
'are you alright here?'
c. $\boldsymbol{n i}$ ' $n$ siarad am funud.
we prog talk for minute
'we are talking for a minute.'

The occurrence of third person pronouns in verbless clauses is much less common. There is one example in the corpus.

```
18 hi yn nofio.
    she Prog swim
    'she is swimming.'
```

Strangely, this is from a file in the Bangor corpus. This, in my experience, is very uncharacteristic of northern Welsh, and it is difficult to account for its solitary occurrence.

Examples of pronominal copular clauses like those in (17) can contain adverbial dim, and examples are given in (19).

```
19 a. ti ddim yn licio?
    you.SG NEG PROG like
    'don't you like it?
    b. ti ddim isio hwn?
    you.SG NEG want this
    'don't you want this?'
    c. ti ddim i' fod i' agor 'o.
    you.SG NEG to be to open it
    'you are not supposed to open it.'
```

In these examples the second person singular $t i$ occurs, which is very common in this type of finite clause in both positives and negatives.

### 2.4 Dependent quantifier dim

In this section we describe occurrences of quantifier dim which

- occurs before indefinite nominals which are not subjects or objects.
- and which occur in negative clauses.

Borsley and Jones (2005: 114-121) use the label quantifier dim for both its occurrences in clausal negation as described in section 2.1 and for those which are discussed here. But for convenience of presentation we shall refer to the latter as dependent quantifier dim.

Examples are given in (20).
$20 \mathrm{a} . \operatorname{ti}$ ddim yn chwarae ge:m bach efo dad dim mwy? you NEG PROG play game little with dad NEG more 'you don't play a little game with dad any more?'
b. ne'st ti ddim byta dim cinio?
do.PERF.2SG you.SG NEG eat NEG dinner
'didn't you eat any dinner.'
c. oh 'dy babi yma yn cael dim llonydd.
oh be.PRES.3SG baby here PROG have NEG peace
'oh this baby isn't getting any peace.'

Examples (20a-b) contain adverbial dim, which creates the negative context. Example (20c) is unusual in that it is based on adverbial negation but has been transcribed without the adverbial negator. This is a canonical context for dependent quantifier dim and example (20c) is viewed here as a performance error. But see also section 2.5 .2 for the omission of quantifier dim.

### 2.5 More about clausal negation

There is more to clausal negation than licensing either quantifier dim or adverbial dim. Further matters involve forms of the copula in negative sentences and the occurrence of a negative preverbal particle.

### 2.5.1 Forms of the copula

The copula has different forms in negative clauses subject to:

- tense, which is the present tense,
- person - third person subjects occur, either singular or plural,
- definiteness of the subject.

Illustrations are given in examples (21-23).

21 a. mae 'n agor drws y caffi,, ynd ydy?
be.PRES.3SG PROG open door the café NEG be.PRES.3SG
'it opens the door of the café, doesn't it?'
b. na,,, 'dy 'o ddim yn agor.
no be.PRES.3SG it NEG PROG open
'no, it doesn't open.'
22 a. a ma'n nhw $i+g y d$ yn2 hapus.
and be.PRES.3PL they all PRED hapus 'they are all happy.'
b. dyn' nhwddim yn2 ddigon hir. be.PRES.3PL they NEG PRED enough long 'they're not long enough.'

23 a. ma' 'na be:l fynna.
be.PRES.3SG there ball there 'there's a ball there.'
b. oes 'na ddim coes.

NEG be.PRES.3PL there NEG leg
'there's no leg.'

The (a) examples in (21-23) are all positive (and declarative), and the forms $m a^{\prime}$, singular, and $m a$ ' $n$, plural, occur - we shall refer to these forms as the $m$-forms. The (b) examples are negative. The examples in (21b) and (22b) contain definite subjects, and the forms 'dy, singular, and dyn', plural, occur - we shall refer to these as the $y$-forms. The example in (23b) contains an indefinite subject and the form oes occurs, which also occurs as $o$ 's and the contracted version 's - which we shall refer to these as the $o$-forms. There is an exception to all this, which we shall consider below.

We can summarise the account of the third person present tense forms of the copula as follows:

| positive (and declarative) |  | $m$-forms |
| :--- | :--- | :--- |
| negative | definite subject | $y$-forms |
|  | indefinite subject | $o$-forms |

The above account is sufficient to discuss negation. But there is more to such copular forms apart from negation. See section 3.3.1 in chapter 6 and, for a fuller description, Jones B.M. $(2004,2018)$.

There is an exception to the above account of verbal forms in negative clauses, which occurs in complement clauses. In such clauses, the above rules can apply, but there is also the possibility in
informal Welsh of using the infinitive form bod 'be', which may be mutated if it occurs after a mutation trigger. Examples of negative complement clauses are given in (24).

24 a. mae hi 'n dweud bod hi ddim yn licio. be.PRES.3SG she PROG say be she NEG PROG like 'she says that she doesn't like it.'
b. watsha di bod nhw 'm yn cwmpo. watch.IMPV.2SG you.2SG be they NEG PROG fall 'watch that they do not fall.'
c. pambod D--- 'm yn gallu neud nhw, M----?
why be D--- NEG PROG can make they M ---
'why can't D--- make them?'

Examples (24a-b) show canonical contexts for a complement clause, namely, as the complement of an infinitive lexical verb or a finite lexical verb. But in Welsh, complement clauses can also occur in other contexts such as after pam 'why', as in (24a). The form bod is simply glossed as 'be' but such bod clauses can be viewed as finite clauses (see Borsley, Tallerman and Willis 2007: 76-81). Only adverbial dim has occurred in negative bod clauses in the adult's speech in the corpus, but quantifier dim can also occur in bod clauses as in the devised examples in (25).

25 a. mae 'n amlwg bod dim doli arall yna. [devised example] be.PRES.3SG PRED obvious be NEG dolly other there it's obvious that there isn't another dolly there.'
b. $d w \quad i$ ' $n$ amau bod 'na ddim arian ar+o:l. [devised example] be.pres.1sg I pred suspect be there neg money after 'I suspect that there is no money left.'

As there are no examples in the performance data, no more will be said about quantifier dim in bod clauses. There are only eight examples of negative bod clauses in the speech of the adults, so the children have little input data for this use of bod.

There are other verb forms which occur in negative clauses and which are found in southern dialects. Examples from adult speech in the corpus are given in (26).

$$
\begin{array}{lllll}
26 \text { a. s'a } \quad i \text { 'n credu mai ci yw } \quad e . \\
\text { be.NEG.PRES I PROG } & \text { believe PT } & \text { dog be.PRES.3SG it } \\
\text { 'I don't believe that it is a dog.' }
\end{array}
$$

b. s'mo G---yn cal pla:t gyda 'i bwyd 'tel, M---?
be.nEg.PRES G--- PROG have plate with CL.3SG.F food then M---'G--- doesn't have a plate with her food, then, M---?'
c. $\boldsymbol{s}^{\prime} \boldsymbol{O} \quad$ dad yn byw fynna?
be.neg.Pres dad prog live there
'dad doesn't live there?'

There are three realizations of these forms in the corpus, which are transcribed as: $s^{\prime} a, s^{\prime} o$, and $s^{\prime} m o$. They do not agree in person with the subject and occur only with the present tense. They occur in contexts where adverbial dim would occur in finite clauses but the crucial observation is that, unlike other copular forms, these forms do not occur with adverbial dim. They are glossed as be.neg.PRES and will be labelled as $s$ - negative forms. More details about them can be found in Awberry (1988).

Table 3.1 gives the frequencies for the forms of the present tense of the copula in negative clauses.

Table 3.1. Forms of the present tense of the copula in negative clauses

```
m-form 4
o-form 193
y-form 443
        640
b-form 8 (complement clauses only)
        648
s-form 41
```

There is a total of 648 examples of negative clauses where the selection of a $y$ - form or $o$ - form can be made. Of these 636 show the appropriate selection of a $y$-form or $o$ - form, and only four contain an $m$ form, all of the latter shown in (27).

27 a. mae rhai pobl ddim yn licio plant yn chwarae efo gwns,, felly. be.PRES.3SG some people NEG PROG like children PROG play withguns, therefore 'some people don't like children playing with guns, then.'
b. mae ddim ar+bento.
be.PRES.3SG NEG on roof
'he is not on top of the roof.'
c. mae dim ynx be?
be.PRES.3SG NEG ?? what
'it's not what?'

```
d. mae ddim yn2 hwyr?
    be.PRES.3SG NEG PRED late
    'it's not late?'
```

Four examples out of 648 is a mere $0.62 \%$, and this suggests that the use of $m$-forms in negative clauses is not established usage. But I have heard $m$ - forms in negative clauses in the Welsh of adults in the general population. The overwhelming evidence in the corpus is that the children are exposed to the use of $y$ - and $o$ - forms in negative clauses.

### 2.5.2 Negative preverbal particles

Where the finite verb in a negative clause is a copular form which begins with a vowel, it can be preceded by the particle $d$ or $t$ ( $d$ is a remnant of the preverbal particle nid, which is productive in formal Welsh but not in informal Welsh; it can also be devoiced to produce $t$ ). Forms of the present tense excluding the $m$-forms of the third persons and all forms of the imperfect tense are the only forms which satisfy this condition. Examples from adult Welsh in the corpus are given in (28). In informal written Welsh, this particle is written attached to the verb, such as $d y d y$, but in the corpus it is written unattached to help computer searches.

```
2 8 \text { a. d oes 'na ddim tudalen arall.}
    NEG be.PRES.3SG there NEG page other
    'there isn't another page.'
b. d ydy hi ddim wedi cysgu.
    NEG be.PRES.3SG she NEG PERF sleep
    'she hasn't slept.'
c. d oedd 'o ddim yn gwybod.
    NEG be.IMPF.1SG he NEG PROG know
    'he didn't know.'
d. d o'n i ddim yn gweld buwch.
    NEG be.IMPF.1SG I NEG PROG see cow
    'I didn't see a cow.'
```

But this particle is optional. We have already given examples (without comment) of negative clauses in which the preverbal particle is absent but which satisfy the conditions for its occurrence. Other examples can be given here in (29) for convenience.

```
29 a. 's 'a 'm digon o siwgwr yn'o fo,, S---.
    be.PRES.3SG there NEG enough of sugar in.3SG it S---
    'there isn't enough sugar in it, S---.'
b. 's dim drws ar y car melyn.
    be.PRES.3SG NEG door on the car yellow
    'there isn't a door on the yellow car.'
c. oh 'dy hi ddim yn ddweud.
    oh be.PRES.3SG she NEG PROG say
    oh she's not saying.'
d. dyn' nhw ddim yn mynd i+lawr.
    be.PRES.3PL they NEG PROG go down
    'they're not going down.'
```

We also need to add that in the case of the present tense of the copula, the forms which occur without the particle lose their initial vocalic element in declaratives: for example, oes and ydy occur in (28a) and (28b) respectively while ' $s$ and ' $d y$ occur in (29a) and (29b) respectively. There are two matters which complicate these basic options.

One matter relates to verbs other than the copula. With one exception - which we shall come to shortly - other verbs which begin with a vowel are not preceded by a negative particle in informal Welsh. There are only three examples of lexical verbs which begin with a vowel in negative clauses in the Welsh of the adults.

30 a. a'th e ddim allan,, naddo?
go.PERF.3SG he NEG out NEG.RESP
'he didn't go out, did he?'
b. achos aethon ni ddim tan dri o 'r gloch,, naddo?
because go.PERF.1PL we NEG until three of the clock NEG.RESP
'because we didn't go out until three o'clock.'
c. ewn $n i$ ' $m$ allan.
go.FUT.2PL we NEG out
'we won't go out.'

The exception to the absence of a preverbal particle occurs in northern regions with the present tense form of gwybod 'know' and, especially and perhaps exclusively, with the first person singular. It is regularly preceded by $d / t$, as in the examples in (31).

31 a. oh wel,,, $\boldsymbol{d}$ wnl $i$ 'm.
oh well neg know.Pres.1sG I NEG
'oh well, I don't know.'
b. $\boldsymbol{d}$ wnl $i$ 'm be 'dy 'o.
neg know.PRES.1SG I neg what be.PREs.3SG it
'I don't know what it is.'
c. $\boldsymbol{d}$ wnl $i$ 'm,, wir.

NEG know.PRES.1SG I NEG truly
'I don't know what it is, truly.'

There are no examples in the corpus of the inflected form of gwybod in negative clauses without the particle.

The other matter relates to copular examples which contain an indefinite subject. The examples of the negative particle in (28) all contain overt indications of a negative clause: quantifier dim in (28a) and adverbial dim in ( $28 \mathrm{~b}-\mathrm{d}$ ). There are examples in the corpus of the negative particle in clauses which contain an indefinite subject but which lack quantifier dim. Illustrations are given in (32). For comparison, other similar examples which contain quantifier dim are given in (33).

32 a. $d$ oes 'na ddigon o le,, nag oes.
NEG be.PRES there enough of room neg be.pres
'there isn't enough room, is there.'
b. d oes 'na pla:t yma.

NEG be.PRES there plate here.
'there isn't a plate here.'
c. d oes gin babi wallt,, nag oes?
neg be.PRES with baby hair neg be.PRES
'a baby doesn't have any hair, does it?
33 a. $d$ oes 'na ddim digon o le.
NEG be.PRES there NEG enough of room
'there isn't enough room.'
b. $d$ oes 'na ddim ambiwlans yma.
neg be.pres there neg ambulance here.
'there isn't an ambulance here.'
d. d oes gynno fo ddim gwallt,, nag oes?
neg be.pres with he neg hair neg be.pres
'he hasn't got any hair, has he?'

There are 203 examples of negative copular clauses with indefinite subjects which contain quantifier dim. There are a total of 19 equivalent examples which lack quantifier dim. Of the grand total of 222, the latter amount to $8.56 \%$. However, five different adults use these examples but four of them also use examples which contain quantifier dim. Given the number of examples and speakers involved, examples like those in (32) cannot be put down to performance errors, and there appears to be an established usage which is optional and relatively infrequent. This is different to the solitary example in (20c) which omits adverbial $\operatorname{dim}$ and which is taken to be a performance error.

Table 3.2 gives the frequencies of the negative preverbal particles in the speech of the adults in the corpus.

Table 3.2. The negative preverbal particle in the adults' Welsh

|  | Particle | No particle | Totals |
| :--- | ---: | ---: | ---: |
| Copula present tense $y$-form | 135 | 696 | 831 |
| Copula present tense $o$-form | 125 | 95 | 220 |
| Copula imperfect tense | 14 | 27 | 41 |
|  | 274 | 818 | 1092 |
| Lexical verbs | 51 | 3 | 54 |
|  | 325 | 821 | 1146 |

Given the exceptional use of lexical verbs, they are listed separately in the table. The 51 examples are all examples of $d$ wn i ' $m$ 'I don't know'. The three examples which lack a particle are other verbs which begin with a vowel - but as already stated lexical verbs except gwybod 'know' do not occur with a negative preverbal particle in informal Welsh. Of the total number of instances where a particle can occur in copular clauses (1092), $25.09 \%$ have a particle and $74.91 \%$ of examples have no particle. The use of the particle is an option but not a major one. The children are exposed to more examples which lack a particle than ones which contain a particle. But the percentages are different when the individual copular forms are considered. In the case of the $y$-forms a smaller percentage of their total, $16.25 \%$, has a particle and a higher percentage, $83.75 \%$, lacks a particle. But the $o$ - forms and the imperfect forms have much higher percentages of examples which contain a particle. In the case of the $o$-forms, $56.82 \%$ have a particle and $43.18 \%$ have no particle. Of the imperfect forms, $34.15 \%$ have a particle while $65.85 \%$ occur without a particle. It is not obvious why this should be the case.

### 2.5.3 Preverbal particle in complement clauses

In the Welsh of the adults, there is a very small number of examples of a negative preverbal particle which occurs in complement clauses (not only after verbs, nouns and adjectives but also after os 'if' and pam 'why'). It is a homonym and is spelled as na5 in the corpus. It occurs as nad or nag before vowels (nad is used in formal Welsh), which for consistency are spelled as nad5 and nag5. All the examples in the adult Welsh are given in (34).

34 a. oh wel,,, os nag5 o's toys 'na.
oh well if NEG be.PRES toys there
'oh well, if there are no toys there.'
b. os nag5 yw e 'n2 ofalus. if neg be.pres.3sG he pred careful 'if he's not careful.'
c. wnei di 'm tyfu 's2na5 fwyti di. do.fut.2sG you.sG neg grow if neg eat.fut.2SG you.SG 'you won't grow if you don't eat.'
d. watsia di na5 fydd e 'n cwmpo off.
watch.IMPv.2SG you.SG neg be.fut.3sG it Prog fall off
'watch that it does not fall off.'
e. S---,,, pam na5 wnei di wneud cwch iddyn' nhw?

S--- why neg do.fut.2sG you.SG do boat for.3pl they
'why don't you make a boat for them?'
f. mynd yn2 frustrated os nad5 oes 'na ta:p yn'o fo [\% so he will be frustrated]. go PRED frustrated if NEG be.PREs there tape in.3SG.m it 'gets frustrated if there isn't a tape in it.'

This preverbal particle is the equivalent of the negative preverbal particle $d / t$ which occurs in nonembedded clauses. But there is a difference between them. We have seen that $d / t$ occurs with another negative element in the clauses such as quantifier $\operatorname{dim}$ or adverbial $\operatorname{dim}$ (but see the discussion in section 2.5.2). This is an option with na5 but quantifier dim and adverbial dim are typically omitted by those speakers who use $n a 5$, which option occurs in the examples in (34). There are no examples of this preverbal particle in the Welsh of the children.

### 2.6 Summary

The previous sections have shown that clausal negation is marked by quantifier dim, pseudo-quantifier $m o$ and adverbial dim, and that the choice of one or the other is determined by the definiteness of phrases in subject and object position. There are also other rules for forms of the copula and the use of preverbal particles. Quantifier dim can also be used as a dependent quantifier. All this can be summarised as follows.

| clause characteristics | dim | placement | copular forms | particle |
| :--- | :--- | :--- | :--- | :--- |
| indefinite subject | quantifier $\operatorname{dim}$ | pre-subject | o-forms <br> bod | $d / t$ or null |
| indefinite object | quantifier $\operatorname{dim}$ | pre-object |  |  |
| definite object | pseudo-quant $m o$ <br> adverbial $\operatorname{dim}$ | pre-object <br> post-subject | $y$-forms | $d / t$ or null |
|  |  |  | bod |  |

For simplicity of presentation, this summary omits the details of the conditions which determine the selection of copular forms and the optional selection of pre-verbal particles.

## 3 Fronted clauses: focus dim

Welsh is a language which uses fronting quite extensively. A fronted clause is one in which a phrase is moved from its canonical position in clause structure to initial position. Welsh is a verb-first language, and the result is that the fronted phrase occurs initially before the finite verb. Fronted finite clauses can be negated by the methods described in section 2 . But we are concerned here with the negation of the fronted phrases, which are negated by placing dim before them (speakers in some southern dialects can use nage in place of dim; there are no examples in the corpus). Borsley and Jones (2005: 145-151 label this $d i m$ as focus dim. Examples from the corpus are given in (35).

35 a. dim $y$ playdough gorau $d w \quad i$ 'di wneud erioed.
NEG the playdough best be.PRES.1SG I PERF make ever
'it is not the best playdough that I have ever made.'
b. dim Tomas wnaeth malu 'o.
neg Tomas do.PERF.3SG break it
'it wasn't Tomas who broke it.'
c. na,,,ddim Plismon+Puw dda'th.

NEG NEG Policeman+Pugh come.PERF.3sG
'no, it wasn't Policeman Pugh who came.'
d. dim fynna ma' 'r tre:n.

NEG there be.PREs.3SG the train
'it's not there that the train is.'
e. dim isio gormod mae 'o.

NEG want too+much be.PRES.3SG he 'it's not wanting too much that he is.'
f. na,,, 'im ynl ty: o't ti.

NEG NEG in house be.IMPF.2SG you.SG
'it's not in the house that you were.'
g. dim coch yw 'r gole 'na. NEG red be.PRES.3SG the light there 'it's not red that the light is.'
h. dim mwrthwl 'dy 'o.

NEG hammer be.PRES.3SG it
'it's not a hammer that it is.'

Many of the examples in the corpus are copular clauses, and translating fronted copulars into English can be challenging, as (35d-h) show. For many speakers, only the form dim occurs as focus dim, but ddim occurs in (35c) and ' im in (35f). We shall return to this point in section 10. Given that the form dim mainly occurs, there are face-value grounds for claiming these examples contain quantifier dim. But this is not the case. Quantifier dim is restricted to occurring before indefinite noun phrases. The examples in (35) show that this dim can occur before other phrases and that distinguishing this dim as focus $\operatorname{dim}$ is well-founded.

## 4 Argument dim

There are examples of what Borsley and Jones (2005: 139-142) label argument dim, that is, dim occurring in an argument position. It can sometimes be difficult to distinguish between argument dim and quantifier $\operatorname{dim}$ and dependent quantifier $\operatorname{dim}$ when the latter occur without a following phrase in performance data (see sections 6 and 7.6). The examples in (36) are reasonable illustrations of argument dim in the adults' Welsh.

36 a. paid a: twtsiad dim.
cease.IMP.2SG with touch NEG
'don't touch anything.'
b. $d \quad y w \quad B---' m$ yn gallu gweld dim nawr.

NEG be.PREs.3SG B-- NEG PROG can see NEG now
'B--- can't see anything now.'
c. dim diddorol ynl hwnna.

NEG interesting in that
'nothing interesting in that.'
d. o'dd dim loto hwant neud dim wedyn $\$ w \quad i$ 'n2 siwr\$.
be.IMPF.3SG NEG lot of desire do NEG after be.PRES.1SG I PRED sure
'there was not a lot of desire to do anything after I'm sure.'
e. Child: tynnu hwnna.
'pull that.'
Adult: tynnu,, na [x 3].
'pull, no.'
Child: hwnna.
'that.'
Adult: $\operatorname{dim}$ [x 2].
NEG
'nothing.'
f. Adult: ymm octopws.
'uhm octopus.'
mae 'o 'n byw ynl y mo:r.
be.pres.3sg he prog live in the sea
'it lives in the sea.'
yng ngwaelod y mo:r.
in bottom the sea
'at the bottom of the sea.'
Child: yfanna [\% putting it on the top of parade as main (grandmother) had done earlier].
'there.'
Adult: na,,, dim.
no NEG
'no, nothing.'

```
g. na,,, dim+byd i+mewn.
    NEG nothing in / inside
    'nothing in / inside.'
    dim.
    NEG
    'nothing.'
```

Argument dim can be substituted with dim byd 'nothing', as ( 36 g ) shows. It can be modified by an adjective, as the example in (36c) shows. Examples (36e-f) are more difficult to read. The wider context of the exchange which is supplied by the transcribed text is sparse and interpretation is elusive. But 'nothing' seems to be the only translation and the likely interpretation is that we have argument dim in these examples.

## 5 Small clauses

Previous sections have examined dim in finite clauses which contain a finite verb, subject and predicate (including clauses which have an ellipsed predicate and pronominal copular clauses which are described in section 2.3.2).

There are negative phrases in the adult Welsh in the corpus which contain a subject and a predicate but no finite verb. They are ellipsed clauses but this study takes the liberty of labelling them as small clauses, a label which originally arose for subject-predicate patterns as constituents within clauses (Williams 1975 and Stowell 1981). All this applies to clauses which contain quantifier dim, which precedes indefinite nominal phrases, and adverbial dim which follows the subject, illustrated in (37) and (38) respectively.

37 a. dim glud yma o+gwbl.
NEG glue here at+all
'no glue here at all.'
b. na,,, dim lle iddo fo. no NEG place for.3sG.m he 'no, no room for him.'
c. a dim fflab gen ti.
and NEG flab with you.SG 'and no flab on you.'
d. gen Dad dim gwn.
with Dad NEG gun
'no gun with Dad.'

38 a. na,,,Dad ddim adre o 'r gwaith.
no Dad neg home from the work
'Dad not home from work.'
b. siocled ddim yn2 dda.
chocolate NEG PRED good
'chocolate not good.'
c. oh eliffant ddim yn ffitio.
oh elephant neg prog fit
'oh elephant not fitting.'
d. Nain ddim isio cacen.

Grandmother NEG want cake
‘Gran (does) not want a cake.'

The predicate phrases are phrases which occur as predicates in equivalent finite clauses

- a locative phrase in (37a) and (38a) - compare (12a)
- a predicatival phrase in (38b) - compare (12b)
- a progressive aspect phrase in (38c) - compare (12c)
- and an eisiau 'want' phrase in (38d) - compare (12e)

A possessive clause is given in (37c), which has normal word-order [subject + prepositional phrase]. We have seen in section 2.1 that the subject phrase and the prepositional phrase can undergo apparent transposition. This can also occur in small clauses as illustrated in (37d), which has the order [prepositional phrase + subject].

In the case of the examples in (37), the noun phrases are indefinite and, consequently, the preceding $\operatorname{dim}$ is quantifier dim. It forms a constituent with the indefinite phrase, and this give the subject-predicate structure, [[dim + subject] + predicate]. In the case of the examples in (38), ddim occurs between the subject and the predicate, and on this basis we can claim that ddim in small clauses is adverbial dim. Such clauses have the linear sequence [subject + adverbial dim + predicate].

Borsley and Jones do not discuss examples like those in (37) or (38), which occur as independent utterances. But they $(2005: 134,136)$ do discuss other subject-predicate patterns in absolute clauses and in small clauses proper which occur as the complements of certain verbs, as shown in the devised examples in (39), which are taken from Borsley and Jones.


Borsley and Jones (2005: 133-138) label ddim in examples like these as premodifying ddim. We shall not apply this terminology but will continue to refer to ddim in small clauses (as independent utterances) as adverbial dim.

## 6 Bare dim

The preceding examples of quantifier dim, adverbial $\operatorname{dim}$ and focus dim show that they precede various phrases. But quantifier dim and adverbial dim, in particular, can occur without a following phrase. For ease of presentation, we shall use the expression bare dim to label these occurrences of dim. This section describes bare dim within the constituent structure of a phrase. Section 7.6 considers bare dim as a oneword utterance.

Adverbial dim is followed by a variety of phrases which occur as predicate phrases (aspect phrases, predicatival phrases, i fod '(supposed) to be', adverbs, prepositional phrases, eisiau 'need, want' phrases, and verb phrases). Bare adverbial dim is readily recognizable: it follows the subject in ellipsed finite clauses as the following examples show.

```
40 a. dyn' nhw ddim.
    be.PRES.3PL they NEG
    'they are not.'
b. fedraf i ddim.
    can.PRES.1SG I NEG
    'I can't.'
```

Quantifier dim and dependent quantifier dim are followed solely by an indefinite nominal phrase and do not share the positional characteristics of adverbial dim. But a difficulty arises with another use of $\operatorname{dim}$ which is discussed in section 4, argument dim. A bare quantifier dim and argument dim look the same but are semantically and syntactically different. The former can be said to have an ellipsed nominal phrase whose absence is due to an overt phrase in the preceding discourse (highlighted in the following examples). Bare quantifier dim is illustrated in the examples in (41).

41 a. Adult: ti heb cael cinio heddiw,, naddo, Marisa?
you.SG without have dinner today no M---
'you haven't had any dinner today, no, M---?'
$t i \quad$ 'm isio dim.
you.SG NEG want NEG
'you don't want any (dinner).'
b. Adult: $t i$ 'n gwybod be' dy hwn?
you.SG PROG know what be.PRES.3SG this
'do you know what this is?'
Child: cwac+cwac@c arall.
quack-quack other
'another quack-quack.'
Adult: www d oes 'na ddim.
www NEG be.PRES.SG there NEG
'www there isn't one.'
c. Child: llall rwan.
other now
'the other one now.'
Adult: ohd oes 'na ddim.
oh NEG be.PRES.3SG there NEG
'oh there isn't one.'
d. Adult: $d$ oes 'na 'm sens yn'o fo,, $S$---

NEG be.PRES.3SG there NEG sense in+3SG+M he, S---
'there's no sense in him, S---.'
Child: isio pegs.
'want pegs.'
oh mwrthwl fi.
oh hammer I
'oh my hammer.'
Adult: d oes 'na ddim.
NEG be.PRES.3SG there NEG
'there isn't any (sense)' or 'there aren't any (pegs).'
e. Adult: beic arall?
bike other
'another bike?'
Child: ie.
'yes.'


Bare dim in these examples retains its quantifier meaning as is suggested by the English translations 'any' or 'one'.

## 7 Sentence fragments and ambiguity

There are examples of utterances by adults in the corpus which are made up of one or more phrases but which do not contain a finite verb nor a subject-predicate structure. We shall label such utterances as sentence fragments or just fragments for short. Negative fragments have dim in initial position, giving $d i m+$ XP, and examples are given in (42-56).

On the basis of the constituency of a fragment alone, it can be difficult to determine whether dim is quantifier dim, adverbial dim, or focus dim. It is emphasised that this is a difficulty when analysing corpus examples out of context and does not necessarily arise in actual speech which provides sufficient context. We can, however, identify the types of phrases which occur in negative fragments and note
whether these types can be preceded by quantifier dim or adverbial dim in normal-order finite clauses or small clauses or by focus dim in fronted-order finite clauses, Table 3.3 summarises the possibilities.

Table 3.3. Dim and following phrases in fragments in the adults' Welsh

|  | Quantifier | Adverbial | Focus |
| :--- | :--- | :--- | :--- |
| Definite Nominal Phrase |  |  | $\checkmark$ |
| Adjective Phrase |  | $\checkmark$ |  |
| Progressive Phrase | $\checkmark$ |  |  |
| Predicatival Phrase | $\checkmark$ |  |  |
| I fod | $\checkmark$ |  |  |
| Indefinite Nominal Phrase | $\checkmark$ |  | $\checkmark$ |
| Adverbs |  | $\checkmark$ | $\checkmark$ |
| Prepositional Phrase |  | $\checkmark$ | $\checkmark$ |
| Verb Phrase |  | $\checkmark$ | $\checkmark$ |
| Perfect Phrase | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Eisiau | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Wh-word |  |  |  |

This basic heuristic aid establishes five groups.

- focus only
- adverbial only
- focus or quantifier
- focus or adverbial
- focus, adverbial or quantifier

On the basis of constituency alone, two groups are unambiguous and three are ambiguous. Examples and discussion are provided in sections 7.1 to 7.6 . Section 7.8 looks at the use of textual context to establish whether we have quantifier dim, adverbial dim or focus dim.

### 7.1 Focus dim

There are phrases which occur in fragments and which are limited to focus phrases in fronted clauses. These are definite nominal phrases (definite noun phrases and definite pronouns) and adjective phrases. Definite nominals are illustrated in both types of phrases in (42) and adjectives are illustrated in (43).

42 a. na,,, dim Sam+Ta:n.
NEG NEG Sam+Ta:n
'no, not Sam+Tân.'
b. dim Tomas wnaeth malu 'o.
neg Tomas do.PERF.3SG break it
'it wasn't Tomas who broke it.'
43 a. dim coch, gwyrdd,, ie.
NEG red green yes
'not red, green, yes.'
b. $\operatorname{dim}$ coch yw 'r gole 'na.

NEG red be.PREs.3SG the light there
'it's not red that the light is.'

Definite nominals and adjectives do not follow adverbial dim nor quantifier dim, and there are good grounds for claiming that it is focus dim which occurs in examples like those in (42a) and (43a). Example (43a) in particular can be read as containing focus dim. The latter has contrastive implications, and this is emphasised by the presence of the acceptable alternative gwyrdd 'green'.

### 7.2 Adverbial dim

There are phrases which can occur as fragments and are limited to predicate phrases which follow adverbial dim in finite clause. These are progressive aspect phrases as in (44), predicatival phrases as in (45), and $i$ fod phrases as in (46).

44 a. $\operatorname{dim} y n \quad d o d \quad i+f f w r d d$.
NEG PROG come away
'not coming off.'
b. oh byddi di ddim yn bwrwfe lawr,, byddidi?
oh be.FUT.2SG you.SG NEG PROG hit it down be.FUT,2SG you.SG
'oh you will not be hitting it down, will you?'
45 a. na,,, dim yn2 bosib.
no NEG PRED possible
'no, not possible.'
b. ie,,, o'dd hi ddim yn2 braf iawn,, nag oedd.
yes be.IMPF.3sG it NEG PRED fine very NEG be.IMPF.3sG
'yes, it wasn't very fine, was it?'

46 a. na,,, ddim fod cadw swn na2 crio.
no NEG be keep noise nor cry
'no, not supposed to make a noise nor cry.'
b. oh y'n ni ddim fod mynd mewn $i$ ' $r$ drar.
oh be.PRES.1PL we NEG be go in to the drawer
'oh we're not supposed to go into the drawer.'

These phrases do not occur as focus phrases in fronted clauses so we can rule out focus dim; and quantifier dim is confined to indefinite nominals. All this supports the view that it is adverbial dim which occurs before progressive aspect phrases, predicatival phrases and ifod phrases in fragments.

### 7.3 Quantifier dim or focus dim

Indefinite nominal phrases can occur in fragments. They can also occur after quantifier dim in finite clauses and after focus dim in fronted clauses as the examples in (47) show.

47 a. na,,, dim babi.
no NEG baby
'no, no baby / not a baby.'
b. a fydd dim dwr yna wedyn $i^{\prime}$ ti gal bath. and be.FUT.3SG NEG water there afterwards for you.SG have bath 'and there will be no water afterwards for you to have a bath.'
c. dim mwrthwl 'dy 'o.

NEG hammer be.PRES.3SG it
'it's not a hammer that it is.'

In fragments which are indefinite nominal phrases, then, dim can be quantifier dim or focus dim. We can rule out adverbial dim as it does not occur before indefinite phrases. We shall include here two examples which contain indefinite English phrases.

48 a. na,,, dim <naughty girl> [\% Saesneg].
NEG NEG
'no, not a naughty girl.'
b. wel,,, ddim <busybees>[\%Saesneg] ond +/.
well NEG but
'well, not busy bees but ...'

### 7.4 Adverbial dim or focus dim

There are phrases which can occur as fragments, as predicate phrases in finite clauses and focus phrases in fronted clauses. The phrases are locative adverbs, prepositional phrases, perfect aspect phrases and verb phrases, as shown in (49-52) respectively.

49 a. dim yfanna.
NEG there
'not there.'
b. oedd Gu ddim yna,, nag oedd?
be.IMPF.3SG Grandmother NEG there NEG be.IMPF.3SG
'Gran was not there, was she?'
d. dim fynna ma' $\quad$ tre:n.

NEG there be.PRES.3SG the train
'it's not there that the train is.'
50 a. na,,, ddim ynl fanna.
no NEG in there
'no, not in there.'
b. $d$ yw e ddim ynl y lori.

NEG be.PRES.3SG it NEG in the lorry
'it's not in the lorry.'
c. na,,, 'im ynl ty: o't ti.

NEG NEG in house be.IMPF.2SG you.SG
'it's not in the house that you were.'
51 a. dim wedi torri.
NEG PERF break
'not broken.'
b. $d w \quad i$ ddim wedi gorffen eto.
be.pres.1sG I NEG PERF finish yet
'I haven't finished yet.'
c. ddim wedi gorffen mae o. [Devised example]

NEG PERF finish be.PRES.sg he
' $=$ he hasn't finished.'
52 a. na,,, ddim dringo.
no NEG climb
'no, no climbing
b. wneith 'o ' $\boldsymbol{m}$ mynd.
do.FUT.3SG it NEG go
'it won't go.'
c. dim cysgu mae o. [Devised example]

NEG sleep be.PREs.3SG he
' $=$ he's not sleeping.'

There are no examples of fronted perfect aspect phrases nor fronted verb phrases in the adults' Welsh and devised examples are given. On the basis of the data in examples (49-52) we can say that the fragments contain either focus dim or adverbial dim. Quantifier dim is confined to indefinite noun phrases and can be easily discounted.

We can also include adverbs of time, as in (53).

53 a. dim eto.
NEG again
'not again.'
b. na,,, dim heddiw.
no NEG today
'no, not today.'
c. dim rwan,, na.

NEG now no
'not now, no.'

Such examples can occur as the complement in a copular clause which have subjects which describe events. There are no examples of the latter in the corpus. We shall also include an English phrase which is often heard and is given in (54).

```
54 na,,,dim <all gone> [% Saesneg].
    NEG NEG
    'no, not all gone.'
```

The Welsh equivalent would involve the perfect aspect, na, dim wedi mynd i gyd 'no, not all gone.'

The examples of negative fragments which contain verb phrases, such as the one in (52a) clearly negate the verb. But in interactions with children they can have imperative force. Further examples are given in (55).

55 a. dim taflu pethau.
NEG throw things
'no throwing things.'
b. a dim cicio nhw.
and NEG kick they
'and no kicking them.'
c. na,,, ddim torri 'r llyfr.

NEG NEG cut the book 'no, no cutting the book.'
d. a $\operatorname{dim} p i+p i \quad$ trowsus.
and NEG pee-pee trousers
'and no peeing trousers.'

Examples like this are common in interactions between children and adults when the latter seek to control activities. But they are not absent from adult-adult interactions and a common example is dim parcio 'no parking.' We can claim that the acquisition of imperative force is a contextual effect. Welsh possesses the verb peidio which can be used to product finite imperatives, as described in chapter 5.

### 7.5 Adverbial, quantifier or focus dim

There are two patterns which allow an interpretation of dim which is either adverbial, quantifier or focus. One of these patterns contains the lexeme eisiau 'want, need', as in the examples in (56).

56 a. 'im isio ta:n.
NEG want fire
‘(do) not want a fire.'
b. $d w \quad i d d i m$ isio hwn.
be.PRES.1SG I NEG want this
'I don't want this.'
c. nag oes,,, 's dim isio agor drws.
neg be.pres be.pres neg want open door
'no, there's no need to open the door.'
d. dim isio gormod mae 'o.
neg want too+much be.pres.3sg he
'it's not wanting too much that he is.'

Dim can also precede $w h$-words in questions which relate to a preceding utterance. Only the $w h$-word beth 'what' (shortened to be) occurs in the corpus. There are three examples and all are given here in their wider discourse context.

57 a. Child: dim yn2 sownd.
NEG PRED sound
'not stuck.'
@ Bck: yes, does not want my finger to get stuck. E--- not that keen on this sort of teasing.
Adult: $\operatorname{dim} b e$ ?
NEG what
'not what?'
b. Child: dim nicers [\% looking under skirt of the other Barbie].
neg knickers6
'no/not knickers.'
Adult: $\operatorname{dim} b e$ ?
neg what
'no/not what?'
c. Child: ymm [x 2],,, <dim morlo>[/] dim morlo xxx.
uhm
'no/not seal xxx, $\quad$ NEG seal $\quad$ xxx
Adult: dim $b e$ ?
NEG what
'no/not what?'

In example (57a), a predicatival phrase occurs in the previous discourse and it could be said that the adverbial negator occurs in the adult's response (dim yn be is also possible rather than dim be). In the cases of ( $57 \mathrm{~b}-\mathrm{c}$ ), indefinite nouns occur in the previous discourse and dim could be quantifier dim or focus dim. But we do not know what is being questioned. This will depend on how much of the previous discourse the adult has heard or whether the adult has not clearly heard or understood what has been said and is using an echo-question. We shall treat such examples as ambiguous.

### 7.6 Bare dim as one-word utterance

There are examples of bare dim which make up one-word utterances, and as such they are sentence fragments (we include here examples in which $\operatorname{dim}$ is modified - see section 9 for details of the
modification of dim). There is insufficient clausal information to identify the uses of dim so we give examples in their wider textual context in (58).

58 a. Adult1: ti ' $n 2$ iawn yma am munud bach, $E--$ ?
you.sG PRED alright here for minute small E---
'are you alright here for a little minute, E---?'
Adult2: dim cweit [\% fitting ramps on].
NEG quite
'not quite.'
b. Adult1: 'dy Anti--- wedi mynd?
be.Pres.3sG Antie--- PERF go
'has Anti--- gone?'
Adult2: ddim cweit.
NEG quite
'not quite.'
c. Adult: mae 'na ddigono le $i^{\prime}$ un arall,,oes?
be.PRES.3SG there enough of room for one other be.PRES.3sG
'there's enough room for another one, isn't there?'
oh dim cweit.
oh Neg quite
'oh not quite.'
d. Child: <be 'dy hwn> [/] be 'dy hwnna?
what be.PRES.3SG that
'what is that?'
Adult: ymm jac+codi+baw?
uhm jack+lift+dirt
'uhm JCB?'
na,,, dim cweit.
no Neg quite
'no, not quite.'
e. $d$ oedd gin iddim ceir pan o'n i 'n2 fach.
neg be.Impf.3sG with I neg cars when be.ImpF.1sG I pred small
'I didn't have any small cars when I was little.'
dim $o+g w b l$.
NEG at-all
'none at all.'

```
f. Adult1:be 'dy 'o,, S---?
    what be.PREs.3sG it S---
    'what is it, S---?'
    Child: crocodeil.
    'crocodile.'
    Adult2: crocodeil.
    'crocodile.'
    dim cweit.
    NEG quite
    'not quite.'
    ond mae gynno fo geg fel crocodeil [% it's the ghostbuster wolf].
    but be.PRES.3sG with.m.SG it mouth like crocodile
    'but it's got a mouth like a crocodile.'
g. Child: yli crocodeil [% calling whale a crocodile].
    see.IMPv.2SG crocodile
    'see / look, a crocodile.'
    Adult: crocodeil?
    ‘crocodile.'
    Child: [=! sound wa@c]
    Adult: dim cweit.
    NEG quite
    'not quite.'
```

Bare $\operatorname{dim}$ when a one-word fragment can have any of the uses of dim but even when the wider context is considered it can be difficult to identify which use is involved in performance data. It can be adverbial, quantifier, focus or argument.

The examples in (59) show a common example of bare dim in an expression of good manners which also contain the word diolch 'thank' - na, diolch 'no, thanks'. (In the vernacular, na, dim, diolch can also occur as $n a$, ' $m$, diolch). This expression commonly responds to a previous utterance which contains eisiau 'want'.

59 a. Child: isio bisged [\% handing me her half-eaten biscuit]?
want biscuit
'want a biscuit?'

Adult: na,,, dim,, diolch.
no NEG thank
'no, thanks.'
b. Child: isio paned?
want cup-of-tea
'want a cup of tea / cuppa'?
Adult: na,,, dim,, diolch.
no NEG thank
'no, thanks.'
c. Adult: $d$ Mam ddim isie hwnna.
neg be.pres.3sg Mother neg want that
'Mum doesn't want that.'
paid hyd+yn+oed meddwl am y peth.
stop.IMPV.2SG even think about the thing
'don't even think about it.'
dim,, diolch!
NEG thank
'no, thanks.'

Diolch can be a noun, which has the plural form diolchiadau, or a verb as in $d w i$ wedi diolch $i$ bawb 'I have thanked everyone'. The delivery of this expression in speech presents it as a phrase with no comma pause dim diolch, but it makes no sense to read dim as forming a negative phrase with diolch and thus negating the thanks. A full response to (59a), for instance, makes this clear, as illustrated by the devised example in (60).
$60 n a,$, , $d w \quad i$ ddim isio bisged,, diolch. [devised example] no be.Pres.1SG I NEG want biscuit thank no, I don't want a biscuit, thanks'.

The full response contains adverbial dim in post-subject position and this provides grounds for claiming that bare dim in examples like those in (59) is adverbial dim. It occurs, however, as the form dim. An alternative analysis is that dim negates that which is being offered in the previous utterance, namely, a biscuit in (59a). In which case the full response would be as in the devised example in (61).

```
6 1 n a , , , d w ~ i ~ d d i m ~ i s i o ~ d i m ~ b i s g e d , , ~ d i o l c h . ~ [ d e v i s e d ~ e x a m p l e ] ~
    no be.PRES.1SG I NEG want NEG biscuit thank
    no, I don't want any biscuit, thanks'.
```

In this light, dim is the dependent quantifier. Faced with this choice, we shall say that dim in the phrase dim diolch can be ambiguous. But it is a very common expression of courtesy and good manners, which is much encouraged by parents, and we shall give it this special use.

### 7.7 Disambiguation

Ambiguity for an analyst of the corpus arises because of the lack of sufficient clausal information in the fragment to determine the use of dim. However, the textual context of the fragment can provide details about the use of dim. In the examples in (62a-b), the contrast with previous utterances suggests that we have focus dim .
$62 \mathrm{a} . i e,$, , $d w r$ sy mewn fanna.
yes water be.Pres in there
'yes, water is in there.'
dim sos coch.
NEG sauce coch
'not red sauce.'
b. Adult: 'sanne oren,, ie.
socks orange yes 'orange socks, yes.'

Child: na,,, dim 'sanne oren. NEG NEG socks orange 'no, not orange socks.'

In the examples in (63a-b) the textual context suggests that we have adverbial dim. These examples are taken from the children's Welsh.

63 a. Child: |  | $y$ chafi yw hwnna. |
| ---: | :--- |
|  | ugh be.PRES.3SG that |
|  | 'that is ugh.' lit. 'ugh is that.' |
| Adult: | pam bod e 'n2 ychafi? |
|  | why be it PRED ugh |
|  | 'why is it ugh?' |

```
    Child: mae e hen.
    be.pres.3SG it old
    'it's old.'
    Adult: oh Paddington bach.
    oh Paddington little
    ynde?
    Q
    'isn't it?'
    Child: na,,, dim licio hwnna.
    neg neg like that
    'not like that.'
b. Child: eroplen. [+ imit]
    'aeroplane.'
    dim ffitio.
    NEG fit
    'not fit.'
Adult: ffitio?
    `fit?'
Child: na.
    'no.'
Adult: mae 'n2 anodd,, yndy?
    be.PRES.3SG PRED difficult be.PRES.3SG
    'it's difficult, isn't it?'
```

In the examples in (64) the context suggests that we have quantifier dim.

64 a. Child: hwnna 'dy babi.
that be.PREs.3SG baby
'that is a baby.'
Adult: ie,,, heb wall.
yes without hair
'yes, without hair.'
dim gwallt.
NEG hair
'no hair.'
b. $\operatorname{dim}$ to.

NEG roof
'no roof.'
car heb dol.
car without roof
'car without a roof.'

Quantifier dim can also be judged to occur if a quantifier word is in the negative phrase, as in the examples in (65).

65 a. Adult1: <greyday> [\% English] heno.
grey day tonight 'grey day tonight.'
Adult2: oh ydy,,, dim loto haul. oh be.pres.3sG neg lot of sun oh yes, not a lot of sun,'
b. oh eira, ie.
oh snow yes
'oh snow, yes.'
dipyn bach,, ie [\% now looking through the window].
bit little yes
'a little bit, yes.'
dim digon $i^{\prime}$ wneud dy:n eira,, nag oes?
neg enough to make man snow neg be.PRES
'not enough to make a snow man, is there?'

The example in (65b) also contains another clue, namely, the copular form oes in the tag. As we have seen in section 2.5.1 this form occurs in indefinite locative copular clauses and which are typical contexts for quantifier dim.

Textual context can help to disambiguate. But interpreting the context is a matter of judgement and in some cases this is based on best guess. Contextual disambiguation can resolve ambiguity except for adverbial/quantifier/focus ambiguity involving eisiau and dim beth?. But see chapter 6, section 3.2.3.

### 7.8 Summary

Table 3.4 summarises uses of dim in fragments. The examples have been disambiguated.

Table 3.4. The functions of dim in fragments

| Focus | Definite Nominals | 63 |
| :---: | :---: | :---: |
|  | Indefinite Nominals | 85 |
|  | Adjectives | 12 |
|  | Adverbs | 55 |
|  | Prepositional Phrases | 36 |
|  | Verb Phrases | 18 |
|  | English Phrases | 2 |
|  | One-word dim | 3 |
| Adverbial | Progressive aspect | 31 |
|  | Predicatival phrase | 6 |
|  | bod 'be' phrase | 1 |
|  | Prepositional Phrases | 1 |
|  | Verb Phrases | 5 |
|  | English Phrases | 1 |
|  | One-word dim | 2 |
| Quantifier | Indefinite Nominals | 29 |
|  | One-word dim | 2 |
| Thanks | Bare dim | 13 |
| Adverbial, Quantifier or Focus | Eisiau 'want, need' | 26 |
|  | Wh-word | 3 |
|  |  | 29 |
|  |  | 394 |

In summary, the negation of fragments can be achieved by quantifier dim, adverbial dim, or focus dim, depending on the type of following phrase. It is challenging to resolve the ambiguity in performance data and is even more of a challenge with sentence fragments which are one-word utterances.

## 8 Other instances of dim

There are other instances of dim which do not come under the account which is given in previous sections.

Dim typically occurs in a negative context. But there are examples like the following in the Welsh of the adults in the corpus, which contain the expression da i ddim 'good for nothing'.

66 a. mae 'n2 dda i' ddim.
be.PRES.3SG PRED good for NEG
'it's good for nothing.'
b. neu fyddan $n h w ' n$ mynd yn2 sych ac yn2 dda $\boldsymbol{i}^{\prime}$ ddim wedyn, ymm. or be.fUT.3PL they PROG go PRED dry and PRED good for NEG after uhm 'or they will get dry and good for nothing after, uhm.'

No other negative element occurs in these examples, and the occurrence of the $m$-form of the copula in example (66a) shows that we have a positive clause. Some speakers mutate the adjective as in (65a) and (66b) and others use the unmutated form $d a$.

We see in example (15) in section 2.3.1 that adverbial dim can occur in verbal responsives. The form nage is a non-verbal responsive, and example (67) shows that it can be accompanied by ddim.

67 Adult: beth $y w$ hwn?
what be.PREs.3SG this
'what is this?'
Child: cadel [= @c cadair].
chair
'chair.'
Adult: nage ddim.
no NEG
'no.'
dim cader yw e.
NEG chair be.PRES.3SG it
'it's not a chair.'

It is difficult to explain why ddim occurs with nage apart from the fact that the pattern nage ddim almost mirrors the use of ddim in verbal responsives as in (15), namely nag o't ddim and nag yw ddim, and ddim may have emphatic value in examples like the one in (67).

Dim can also occur before a finite clause.

```
6 8 ~ n a , , , d i m ~ a m ~ e i ~ f o d ~ y n l ~ d y ~ g e g ~ d i .
    NEG NEG for CL.3SG.M be in CL.2SG mouth you.2SG
    'no, not because it is in your mouth.'
```

The example in the corpus shows dim before an adverbial clause. We shall adopt the label pre-clausal dim. Borsley and Jones (2005: 237-238), who illustrate this use with a complement clause, use the label clausal dim.

Dim can also occur before a predicative demonstrative clause. The latter is a clause which is headed by one of the predicative demonstratives in Welsh, namely, dyma 'here / this is', dyna 'there that is' and $d a c w$ 'yonder is'. There is one example in the corpus, given in (69a), which begins with dyna.

69 a. dim 'na2 beth yw honna.
NEG that's what be.PRES.3SG that
'that's not what that is.'
b. *dim beth yw honna. [devised example]

NEG what be.PRES.3SG that
'*not what is that.'

A predicative demonstrative clause provides a way of negating the wh-clause. Example (69b), which is a devised example, shows that such a clause cannot be negated by an initial dim.

There is also an example of dim occurring in clause-final position in a positive finite clause, as in the following exchange.

70 Adult: oh rheina yw 'r wye,, ie?
oh these be.PRES.3sG the eggs yes
'oh these are the eggs, yes?'
Child: na,,, dim.
NEG NEG
'no, not.'
peli.
'balls.'
Adult: peli 'dy rheina dim.
balls be.PRES.3SG these NEG
lit. 'balls are these not.'

The child's use of dim in the exchange in (70) is difficult to interpret. But it is the adult's use of dim in final position in the final part of the exchange which is relevant here. There is only one example in the
corpus. In view of the adult's initial utterance in the exchange, dim could be negating the clause in the final utterance. However, this is another example of emphatic dim but in this case the emphasis supports a positive clause. A similar emphasis of a positive phrase is heard in the positive response oes dim 'yes!' (but there are no examples in the corpus). The use of dim in this way does not occur in all Welsh dialects. The example in (70) is from one of the Aberystwyth files.

There are examples in the Welsh of the adults which have the sequence $\operatorname{dim}+\mathrm{NP}_{\text {def }}+\mathrm{XP}$. We discuss similar examples in the children's language in section 7 of chapter 4 . There are only four examples in the adults' Welsh (three from one adult and one from another adult) and they are all given in (71).

71 a. dim Dad 'ma,, na.
neg Dad here neg
'not Dad here, no.'
b. dim hwnna fynna?
neg that there
'not that there?'
c. na,,, ddim Sali+Mali heddi.
neg neg Sali+Mali today
'no, not / no Sali Mali today.'
d. na,,, dim Daniel 'di malu.
neg neg Daniel perf break
'no, not Daniel broken.'

These examples have a subject and a predicate and on this basis alone they resemble small clauses. But they contain a definite subject and, if small clauses, the negative word would follow the definite subject, [Subject + dim + Predicate] (see (38a) in section 5). As negative small clauses, then, they are ill-formed, [ $[\mathrm{dim}]$ [subject predicate]]. An alternative interpretation is that they are reduced fronted clause, such as dim Dad (sydd) yma 'it is not dad (who is) here.' and dim hwnna (sydd) fynna? 'is it that (which is) there?'. In this reading, they have the structure [ $\operatorname{dim}^{\mathrm{NP}} \mathrm{def}$ [XP]] in which the XP is an adverb as in (71a, b, c) or a perfect aspect phrase as in (71d). With only four examples in the corpus, the numbers are so small that this ambiguity has no impact on the overall picture of the use of $\operatorname{dim}$ in the Welsh of the adults. However, the example in (71c) is open to two interpretations. Sali Mali is a fictional character from Welsh books and television for children. In this sense it is a proper name and creates a definite nominal phrase and is a reduced fronted clause. But it can also be used indefinitely to indicate a programme or book containing the character. If the latter, (71c) is a small clause with an indefinite subject which is preceded by quantifier, $\operatorname{dim}+\mathrm{NP}_{\text {def }}+\mathrm{Adv}-[[\operatorname{dim}$ Sali Mali] [heddi]] '(there's) no Sali Mali today'.

There is one example in which dim occurs in a position which can be occupied by a complement clause.

72 Adult1: sa:l.
'ill.'
Adult2: sa:l.
'ill.'
Adult2: gobeithio dim.
hope NEG
'hope not.'

In this example, dim could be said to stand for the complement phrase in [gobeithio [dy fod ti ddim yn $s a ̂ l]]$ 'hope that you are not ill', in which case it could be considered to be argument dim. But the latter can be replaced by dim byd 'nothing', which is not possible with this example, *gobeithio dim byd 'hope nothing'. An alternative for gobeithio dim is gobeithio na 'lit. hope no'.

Finally, there is one example of $\operatorname{dim}$ which imitates the use of a child.

73 Adult: | well $t i \quad$ neud. |  |
| ---: | :--- |
|  | better you.sG do |
|  | 'you ('d) better do it.' |

Child: dim.
NEG
'not.'
Adult: $b e$ ?
'what?'
Child: dim.
NEG
'not.'
Adult: be ti 'n feddwl, 'dim'?
what you.SG prog mean neg
'what do you mean 'not' ?'

In this exchange, the repetition of dim is part of the adult's questioning of the child's use of dim.

## 9 Modification of dim

There are examples of dim in which it occurs with cweit 'quite' or $o g w b l$ 'at all', as shown in (74) and (75), which also provide the previous discourse context. In the examples, it is bare dim which is modified.

```
74 a. Adult1: ti 'n2 iawn yma am munud bach,, E---?
    you.SG PRED alright here for minute small E---
    'are you alright here for a little minute, E---?'
    Adult2: dim cweit [% fitting ramps on].
    NEG quite
    'not quite.'
    b. Adult1: 'dy Anti--- wedi mynd?
    be.PREs.3SG Antie--- PERF go
    'has Anti--- gone?'
    Adult2: ddim cweit.
    NEG quite
    'not quite.'
    c. Adult: mae 'na ddigon o le i' un arall,, oes?
    be.PRES.3SG there enough of room for one other be.PRES.3SG
    'there's enough room for another one, isn't there?'
    oh dim cweit.
    oh NEG quite
    'oh not quite.'
    d. Child: <be 'dy hwn> [/] be' dy hwnna?
                                    what be.PRES.3SG that
                    'what is that?'
    Adult: ymm jac+codi+baw?
        uhm jack+lift+dirt
        `uhm JCB?'
        na,,, dim cweit.
        no NEG quite
        'no, not quite.'
    e. na,,, dim bont 'dy hwn.
    NEG NEG bridge .PRES.3SG this
    'this is not a bridge.'
```

$d w \quad i d d i m$ yn2 siwr yn3 union be 'dy rhain?
be.pres.1sG I NEG PRED sure ADV exact what be.pres.3sg these
'I'm not exactly sure what these are.'
dim cweit yr un peth.
neg quite the one thing
'not quite the same thing.'
dim $o+g w b l$.
neg at-all
'none at all.'

At first sight it may seem that dim is negating either cweit 'quite' or $o g w b l$ 'at all'. But it is more reasonable to claim that dim is negating something in the previous discourse and that cweit 'quite' and $o \mathrm{gwbl}$ 'at all' modify dim. The function of cweit 'quite' is to limit (or reduce or constrain) the extent of negation; this can create a sympathetic rejection or denial. The function of $o g w b l$ is to emphasise that $d i m$ applies in its entirety. The use of dim in examples like these can be established by examining the wider discourse context. Examples (74a-b) show that dim is adverbial dim - dim cweit yn iawn 'not quite right' and dim cweit wedi mynd 'not quite gone'. Example (74c) shows that dim is quantifier dim - dim cweit digon o le. In (74d), it is focus dim. Example (74e) also supplies sufficient clausal information to show that we have focus $\operatorname{dim}$. In (75), the wider discourse context shows that this $\operatorname{dim}$ is quantifier dim - dim ceir o gwbl. In effect, in these examples, we have a fragment which is headed by dim, which is modified by either cweit 'quite' or $o$ gwbl 'at all'.

## 10 Forms of dim and mutation

The main aim of this section is to consider a claim by Borsley and Jones (2005: 103-104) that when the form ddim occurs as the adverbial negator it is not a mutated form of dim but is a radical form which helps to distinguish the adverbial negator from quantifier $\operatorname{dim}$ and focus dim. Quantifier dim can also occur as $d d i m$ in a mutation context, as we shall see.
10.1 Full and contracted forms of dim

Before looking at the mutation data we shall consider the frequencies of the three forms, dim, ddim and ' $\mathrm{im} / \mathrm{m}$, given in chart 3.1.


In the Welsh of the adults, $d d i m$ is by far the most frequent form.

These figures alone do not provide an informative view of the forms of dim as the latter are linked to the frequencies of the different uses of dim and to their occurrences in mutation and non-mutation contexts. Mutations are considered in the next sub-section, and we shall present the frequencies of the different uses of dim in section 11.

### 10.2 Mutations

Certain initial consonants in Welsh can be mutated. Mutations are caused by overt triggers, which can be specific lexical items like the preposition $i$ 'to, for' in examples of da iddim 'good for nothing' in (56). Borsley and Tallerman (1996) and Tallerman (2006) also propose the XP trigger hypothesis (XPTH) whereby any full phrase, XP, can soft mutate the immediately following word. For instance, the phrasal trigger in (8b) fydd 'na ddim bwyd i' 'r cathod is the existential subject 'na 'there' (contracted from yna 'there'). Against the background of mutations, ddim is a mutated form of dim. That is, dim occurs in a non-mutation context and it is mutated to ddim in a mutation context.

However, in finite clauses, adverbial dim is consistently in a mutation context (after the subject phrase) and, under traditional mutation rules, its radical form does not occur. On this basis adverbial dim always occurs as ddim. There is a claim by Borsley and Jones (2005: 103-104) that, on the basis of the occurrences of the form ddim in a non-mutation context in examples like ddim yn gweithio 'not working' or ddim ar agor 'not open', the form ddim is not a mutated form of dim but is a radical word form and can thus be distinguished in form from quantifier $\operatorname{dim}$ and focus $\operatorname{dim}$ (although this is not the only distinguishing criterion which they use).

In this section, we shall examine not only to what extent $\operatorname{dim}$ is mutated to $d d i m$ in a mutation context but also to what extent the form ddim occurs in a non-mutation context. In all cases of mutation discussed here, the trigger is a preceding XP and hence they all come under XPTH.

We can list mutation contexts and non-mutation contexts for dim as follows.

- mutation contexts
- post-subject, which affects
- objects in transitive finite clauses, that is, quantifier $\operatorname{dim}$ as in (9)
- adverbial ddim in
- finite clauses, specifically,
- copular clauses, as in (12)
- intransitive clauses, as in (13)
- auxiliary verb clauses, as in (14)
- small clauses as in (38)
- post-existential yna 'there' as in finite clauses, which affects quantifier dim as in (8b)
- post-prepositional phrase, which affects quantifier dim in transposed possessives in a finite clause as in (8d) and a small clause as (37d)
- non-mutation contexts
- post-verb in finite clauses, which affects quantifier dim as in (8a)
- initial position in
- fronted clauses as in (35), which affects focus dim
- small clauses which have an indefinite subject as in (37a-c), which affects quantifier dim
- fragments as in (42-57), which affects quantifier dim, adverbial ddim and focus dim
- fragments which are reduced fronted or relative clauses as in (71), which affects focus dim

Table 3.5 gives the frequencies for occurrences of the adverbial and quantifier negators in mutation contexts.


For the adverbial negator, $99.74 \%$ of the total number of examples (1141) are mutated and for the quantifier $99.06 \%$ of the total number of examples (106) are mutated. The very small number of examples which contain unmutated forms cannot be attributed to established usage. Quantifier $\operatorname{dim}$ can also occur in a non-mutation position in a finite clause (post-verb as in (8a)) and the frequencies are given in table 3.6.

Table 3.6. Quantifier dim in a non-mutation context (the contracted forms are also given although they do not mutate)

|  | dim | ddim | $\mathrm{im} / \mathrm{m}$ |
| :--- | ---: | ---: | ---: |
| quantifier | 65 | 0 | 3 |

On the basis of both tables 3.5 and 3.6, the mutation of both adverbial negator and the quantifier negator almost entirely follows the traditional rules of mutation.

The main non-mutation position in respect of $\operatorname{dim}$ is the initial position in fronted clauses, in reduced fronted or relative clauses, and in small clauses with an indefinite subject. The presentation of the statistics for this position is more complex. For the claim of Borsley and Jones to be right, not only should the adverbial negator occur as ddim but the quantifier and the focus negator should occur as dim and not $\operatorname{ddim}$ (which would intrude upon the distinctive use of the adverbial negator). All the details are given in table 3.7. In this table, ambiguous examples have been resolved through judgements of the textual context (see table 3.4 for details).

Table 3.7. Forms of dim in initial position (the contracted forms are given for comparison)

|  | ddim dim | Totals | $\mathrm{im} / \mathrm{m}$ |  |
| :--- | ---: | ---: | ---: | ---: |
| Mutation expected, adverbial dim | 10 | 36 | 46 | 0 |
| Radical expected |  |  |  |  |
| - Focus, clause | 13 | 125 | 138 | 1 |
| - Focus, fragment | 71 | 199 | 270 | 1 |
| - Quantifier, small clause | 4 | 15 | 19 | 0 |
| - Quantifier, fragment | 0 | 29 | 29 | 0 |
| - NE NP |  |  |  |  |
| - Pre-clausal XP | 0 | 3 | 3 | 0 |
|  | 0 | 1 | 1 | 0 |
|  | 88 | 372 | 460 | 2 |

## Ambiguous

- Adverbial/Focus/Quantifier eisiau $\quad 3 \quad 18 \quad 21 \quad 7$

A graphic display of percentages based on the details in table 3.7 is given in chart 3.2.


The figures for those contexts in which the form ddim as the adverbial negator is expected are comparatively small but it is the form dim which mainly occurs, accounting for $78.26 \%$ of the total of 46. The adverbial negator then does not always occur as ddim. Further this chart shows that the form ddim is not confined to the adverbial negator in initial position but also occurs as quantifier dim and focus dim, amounting to $19.13 \%$ of the total of 460 . Of the ambiguous examples, it can be seen that the form $\operatorname{dim}$ is the most frequent, accounting for $85.71 \%$ of the total of 21 . There is no overwhelming evidence to support the claim of Borsley and Jones (2005: 103-104) that the adverbial negator is always ddim. Given the percentages in chart 3.2, there are grounds for claiming that ddim is spreading into contexts where dim is expected. However, the description of mutation given here does not undermine Borsley and Jones' overall analysis of negation in Welsh, which is mainly based on a variety of other matters.

## 11 Summary

Table 3.8 provides an array of the uses of dim and the phrases in which they occur in adult negation in the corpus. The ambiguous examples Focus/Quantifier (totalling 116) and Focus/Adverbial (also totalling 116) have been disambiguated through judging the textual contexts of the examples in the corpus.

Table 3.8. Frequencies of the uses of dim in adult speech in the corpus
(Table 3.4 gives 394 as total for fragments; 20 have been given to the one-word phrase type here)

|  | Finite | Small | Fronted | Fragment | One-word | Totals |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Adverbial | 1593 | 32 |  | 45 | 2 | 1672 | 68.89\% |  |
| Quantifier | 207 | 20 |  | 29 | 2 | 258 | 10.63\% |  |
| Pseudo-quantifier | 2 |  |  |  |  | 2 | 0.08\% |  |
| Dependent Quantifier | 4 |  |  |  |  | 4 | 0.16\% |  |
| Focus |  |  | 142 | 272 | 3 | 417 | 17.18\% |  |
| Thanks |  |  |  |  | 13 | 13 | 0.54\% |  |
| Foc/Adv/Quant |  |  |  | 29 |  | 29 | 1.20\% |  |
| Argument | 3 |  |  | 1 | 3 | 7 | 0.29\% |  |
| Other instances |  |  |  |  |  | 23 | 0.95\% |  |
| Da i ddim |  |  |  |  |  |  |  | $100.41 \%$ |
| Nage ddim |  |  |  |  |  |  |  | $50.21 \%$ |
| $\operatorname{dim}+\mathrm{NP}_{\text {def }}+\mathrm{loc}$ |  |  |  |  |  |  |  | $40.12 \%$ |
| Pre-clausal |  |  |  |  |  |  |  | $10.04 \%$ |
| Post-clausal |  |  |  |  |  |  |  | $10.04 \%$ |
| Complement place |  |  |  |  |  |  |  | $10.04 \%$ |
| Imitation |  |  |  |  |  |  |  | $10.04 \%$ |
| Missing data |  |  |  |  |  | 2 | 0.08\% |  |
|  | 1809 | 52 | 142 | 376 | 23 |  |  |  |
|  |  |  |  |  |  | 2427 |  |  |

Table 3.8 shows that the adverbial negator in finite clauses is the most frequent of the uses of $\operatorname{dim}$ by a large margin - which accounts for the dominance of the form ddim in adult Welsh shown in chart 3.1. Focus dim and quantifier dim are the next most frequent but far behind the adverbial negator. Most of the uses of focus dim occur in fragments while adverbial dim and quantifier dim occur mainly in finite clauses. Pseudo-quantifier dim, dependent quantifier dim and argument dim are very low frequency. The input data which the children experience provide them with far more examples of the adverbial negator than any other use of $\operatorname{dim}$ and these are predominantly finite clauses. This is significant observations when we come to describe child usage in the next chapter.

## Chapter 4 Dim in Child Welsh

All examples are taken from the Welsh of the children in the corpus unless otherwise indicated.

The presentation of the account of child usage mainly follows the organization of the presentation of adult usage, describing negation in normal-order finite clauses, fronted-order finite clauses, small clauses and fragments. But there are two differences: one involves pronominal copular clauses which are discussed in section 2 and the other involves examples which have the linear sequence $\operatorname{dim}+\mathrm{NP}_{\text {def }}$ + XP discussed in section 7.

## 1 Negation in finite clauses of normal order: quantifier dim and adverbial ddim

In this section, finite clauses are clauses which have an overt finite verb. Pronominal copular clauses are separately discussed in section 2 .

### 1.1 Quantifier dim, pseudo-quantifier dim and dependent quantifier dim

There is only one example of the occurrence of quantifier dim in a finite clause in the Welsh of the children.

```
1 Mam,,,mae gin fo 'im llaw,,Mam.
Mother be.pres.3sG with he neg hand Mother
'Mum, he hasn't got a hand.'
```

This example is a transposed version of a possessive clause (see section 2.1 of chapter 3 for details). Quantifier dim occurs before llaw 'hand', the transposed subject. As this is the only example of quantifier dim in a finite clause it is not safe to conclude that clausal negation using quantifier $\operatorname{dim}$ has been fully acquired. But there are examples of quantifier dim in small clauses, as shown in section 5 .

There are no examples of pseudo-quantifier dim in the Welsh of the children in the corpus. There are only two examples in the adult Welsh. There are no examples of dependent quantifier dim. There are only four examples in the language of the adults. Low frequency in the input can be correlated with nil frequency in the children's language.

### 1.2 Adverbial dim

There is a greater number of occurrences of adverbial dim in finite clauses. As previously outlined in chapter 3, adverbial dim occurs in post-subject in clauses which have no indefinite subject, no indefinite object nor definite object. Examples of copular clauses, containing various predicate phrases, are given in (2).

2 a. $d w \quad i$ ' $\boldsymbol{m}$ isio $m w+m w$.
Eisiau phrase
be.PRES.3SG I NEG want moo+moo
'I don't want a moo-moo.'
b. o't ti ' $\boldsymbol{m}$ yn licio swn. Aspect phrase
be.Impf.2SG you.sG neg prog like noise
'you didn't like noise.'
c. $d w \quad i$ ' $\boldsymbol{m}$ licio. Verb phrase
be.pres.1sg I neg like
'I don’t like.'
d. 'dy diod ddim yma.
be.PREs.3sG drink neg here
'a drink isn't here.'
e. o'dd babi ddim yn2 dda xxx iawn. Predicatival phrase
be.IMPF.3SG baby NEG PREDgood xxx very very
'baby wasn't well xxx very.'
f. mae dim rhy fawr $i^{\prime} M$---. Intensifier phrase
be.PRES.3sG NEG too big for Marisa
'it isn't too big for Marisa.'
g. mae dynes 'im $i$ ' fod $i$ ' mynd. Ifod $i$ phrase be.PRES.3SG woman NEG i be to go 'woman is not supposed to go.'
h. na 'dy,," mae <'o ' $\boldsymbol{m}\rangle\left[\begin{array}{ll}\text { ? }] ~ y n l ~ B a n g o r . ~ P r e p o s i t i o n a l ~ p h r a s e ~\end{array}\right.$
neg be.pres.3sg be.pres.3sg he neg in Bangor
'no, he's not in Bangor.'

The predicate phrases in these examples are the types of predicate phrases which are found in adult Welsh. But the occurrence of verb phrases in examples like (2c) can be described as a version of aspect phrases in examples like ( 2 b ), with the aspect particle $y n$ being absent. On the same basis, the occurrence of an intensifier phrase in examples like (2f) can be described as a version of a predicatival phrases in examples like (2e), with the predicatival particle $y n$ being absent. This produces the following
taxonomy of predicate phrases: eisiau phrase, aspect / verb phrase, adverbial phrase (as a predicate), predicatival / intensifier phrase, and $i$ fod $i$ phrase. In each case, we see dim is positioned after the subject and before the predicate, and this is the position in which adverbial dim occurs in adult Welsh. Pro-drop occurs in (2f), but the adverbial negator can be said to occur before the predicate and after the dropped subject.

There is only one example in which adverbial $\operatorname{dim}$ is out of position in a finite clause.

```
3 a. ma' [/] ma' hwnna 'n gallu dim yn agor.
    be.PRES.3SG that PROG can NEG PROG open
    'that can not open'
    b. ma' hwnna ddim yn gallu agor. [devised example]
    be.PRES.3SG that NEG PROG can open
    'that can't open'
```

The example in (2b) is a devised example which shows what the child is judged to be trying to say, in which ddim occurs after the subject and before the predicate. In the child's version ddim occurs after the verb gallu 'can'. (This example is also unusual in that the progressive aspect occurs before the lexical verb.) The example in (3a) was produced by one child at 19 months, and the same child at 27 months produced the following example which shows the proper placement of dim, but in a sentence fragment.

4 oh ddim yn gallu rhoi hi. oh NEG PROG can put/give it 'oh, can't put/give it.'

The overwhelming conclusion is that the children know about the proper positioning of adverbial dim in finite clauses. But see the discussion of small clauses in section 5.

There are no examples of adverbial dim with auxiliary verbs in the children's Welsh. There are only two examples of adverbial dim with an inflected lexical verb and both are imitations of adult speech. One will suffice as an illustration.

5 Adult: $d w \quad$ iddim yn gwybod lle mae 'o?
be.PRES.1SG I NEG PROG know where be.PRES.3SG it
'I don't know where it is?'

```
    uhd wnl i'm.
    uh NEG know.PRES.1SG I NEG
    'uh I don't know.'
Child: d wnl i 'm. [+ imit]
    NEG know.PRES.1SG I NEG
    'uh I don't know.'
```

As pointed out in section 2.5 .2 of chapter $3 d w n i$ ' $m$ 'I don't know' occurs in the speech of speakers in northern Welsh. It can be cautiously claimed that it is unlikely that the child is aware of the syntax which is suggested by its orthographic presentation in (5). These two solitary examples of what is for the child a likely holophrastic expression cannot be taken as reasonable grounds that the children have acquired adverbial dim in intransitive clauses.

### 1.3 More about clausal negation

### 1.3.1 Forms of the copula

It will be recalled from the discussion in section 2.5 .1 of chapter 3 that the third persons of the copula have $m$-forms in positive (and declarative) clauses and $o$ - or $y$-forms in negative clauses. There are no examples of $o$-forms in the Welsh of the children (it will be recalled that $o$-forms occur with indefinite subjects). There are examples of $y$-forms in the children's speech, as given in (6).

6 a. 'dy diod ddim yma.
be.PRES.3SG drink NEG here
'drink is not here.'
b. 'dy 'im yn brathu Anti+S-- ,, na 'dy.
be.PRES.3SG NEG PROG bite Anti+S--, NEG be.PRES.3SG
'it doesn't bite Auntie S---, does it?'
c. $t$ ydy hwn'im yn mynd i+lawr.

NEG be.PRES.3SG this NEG PROG go down
'this is not going down.'

There are also examples of $m$-forms in negative clauses in the children's speech, as given $2(\mathrm{f}-\mathrm{h})$ and (7).

7 a. mae dim rhy fawr $i^{\prime} \quad$ M-----.
be.PRES.3SG NEG too big for M-----
'it's not too big for M-----.'

```
b. pam maen nhw <'im yn> [?] dreifio?
why be.PRES.3PL they NEG PROG drive
'why aren't they driving?'
```

$M$-forms are hardly used at all by the adults in negative clauses (see table 3.1 in section 2.5 .1 in chapter $3)$. The frequencies for both the adults and the children are given in chart 4.1.


We can see that there is a greater proportion of $m$-forms in negative clauses in child speech than in adult speech, accounting for $59.05 \%$ of the total of 22 compared with a mere $0.62 \%$ in adult speech. Reliable generalizations are constrained by the small number of examples in the children's Welsh. On this limited basis, we can say that the children have not entirely acquired adult usage of $y$-forms in negative clauses.

### 1.3.2 Negative preverbal particles

It will be recalled from section 2.5 .2 in chapter 3 that copular forms which begin with a vowel can be preceded by the form $d$ or $t$, giving dydy, dydyn, does, doedd or tydy, tydyn, toes, toedd. The copular forms which begin with a vowel are the $y$-forms and o-forms and the past imperfect forms.

Examples of prefixed copular forms in the speech of the children are given in (8), and examples of unprefixed forms are given in (9).

8 a. d ydy 'o 'm isio.
neg be.pres.3sG he neg want
'he doesn't want (it).'
b. d $\boldsymbol{y}^{\prime} \boldsymbol{n} \quad n h w$ 'im ar.
neg be.pres.3pl they neg on
'they're not on.'
c. $\boldsymbol{t}$ ydy hwn 'im yn mynd i+lawr.
neg be.pres3sg this neg prog go down 'this is not going down.'
9 a. 'dy diod ddim yma.
be.PRES.3SG drink NEG here
'drink is not here.'
b. 'dy im $\quad$ yn brathu Anti--- „, na 'dy.
be.PRES.3SG neg prog bite Anti---, neg be.Pres.3sG
'it doesn't bite Auntie---, does it?'
c. o'dd ti 'm yn licio'r teigr yna.
be.Impr.3sg you.Sg neg prog like the tiger there 'you didn't like that tiger.'

The frequencies of the particles in the adults' and children's Welsh are given in chart 4.2.


It will be recalled that the choice of a preverbal particle is optional in informal spoken Welsh, so the presence or absence of the particle does not affect the grammaticality of negative clauses in Welsh. Of the total of relevant examples in adult Welsh, $74.91 \%$ of examples have no particle, indicating that this
is the norm. The numbers of relevant examples in the children's Welsh is very small, but of the total of $25,84 \%$ occur without the particle. The children are following adult norms.

We exclude examples of the negative particle before finite inflected versions of the verb gwybod 'know' $d w n i$ 'm 'I don't know', which occurs in northern dialects (see table 3.2 for adult Welsh)). There are only two examples in the speech of the children, and both are imitations of a preceding utterance by an adult (previously discussed in relation to example (5) above).

```
1 0 \text { a. Adult: dw i ddim yn gwybod lle mae 'o?}
    be.PRES.1SG I NEG Prog know where be.PRES.3SG he
    'I don't know where it is.'
    uhd wnl im.
    uh NEG know.PREs.1SG NEG
    'uh I don't know.'
Child: d wnl 'im.[+ imit]
    NEG know.PRES.1SG NEG
    'I don't know.'
b. Child: be 'dy hwn,'ta?
    what be.PRES.3SG this then
    'what's this, then?'
Adult: uh, d wnl 'im.
    uh NEG know.PRES.1SG NEG
    'uh I don't know.'
Child: d wnl 'im.[+ imit]
    NEG know.PRES.1SG NEG
    'I don't know.'
```

It is not necessarily the case the child has acquired an understanding of the structure of this expression, and it may be holophrastic as considered in section 1.2

## 2 Pronominal copular clauses

We see in section 2.3.2 of chapter 3 that some copular clauses can occur without the finite copula, as in $t i$ ' $n$ iawn, which in adult Welsh can be translated as 'you are right'. The linear sequence in such copular clauses resembles that of a small clause. In adult Welsh it can be claimed that such clauses are finite clauses. But such a claim cannot necessarily be made for the children's Welsh. They may be finite clauses or they may be small clauses. Consequently, we shall treat such clauses separately,
distinguishing them from finite clauses on the one hand and small clauses on the other. Examples are given in (11).

11 a. ti 'm yn2 shei. you.SG NEG PRED shy
'you're not shy.'
b. fi 'im isio hwn.

I NeG want this
'I don't want this.'
c. fi ddim yn wneud 'o.

I neg prog do it
'I'm not doing it.'
d. ti ddim isio wneud ar y fanna [\% push car]. you.SG NEG want do on the there
'you don't want to do it there.'
e. fi dim isio $x x x$ [ $\%$ obscured by crying].

I NEG want xx
'I don't want xx.'

All the examples in the corpus show that adverbial dim is placed in its canonical position, that is, postsubject, as the examples in (11) demonstrate.

## 3 Fronted clauses: focus dim

The form dim also occurs before the focussed phrase in fronted clauses, and examples in the children's speech from the corpus are given in (12).

12 a. dim blodyn 'dy 'o.
neg flower be.Pres.3sG it
'it's not a flower (it's not a flower that it is).'
b. dim fel 'na mae $\quad i^{\prime}$ fod, naci?
neg like there be.pres.3sG to be no
'it's not supposed to be like that, no.' lit. 'not like that it is supposed to be, no.'
c. dim melyn $y w h w n$.
neg yellow be.pres.3sg this
'it's not yellow (it's not yellow that this is).'

```
d. dim Penny 'dy hwnna.
NEG Penny be.Pres.3SG that
'that's not Penny (it's not Penny that that is).'
```

In the corpus, all examples of fronted clauses in the children's speech are copular ones, as the examples in (12) illustrate. There are 17 examples of negated focussed phrases in fronted clauses in the corpus, and they all contain the form dim, which is the choice in adult Welsh, except for one example, which contains 'im.

13 'im isio ta:n mae 'o.
neg want fire be.pres.3sg he 'he doesn't want a fire.'

Overall, however, the children's usage in fronted clauses follows adult norms. We return to the phrase 'im/'m isio in section 8.1.

## 4 Argument dim and one-word fragments

There are eight examples of dim standing alone as one-word fragments in the children's Welsh and we can consider them as possible examples of argument dim. But, lacking the details of the constituent structure of clausal context, it can be difficult to determine whether we have argument dim or whether we have quantifier $\operatorname{dim}$ or adverbial dim occurring as bare dim.

There is one example which clearly contains argument dim.

```
1 4 \text { Adult: be ma' mam yn cadw 'nl y bag?}
    what be.PRES.3SG mam Prog keep in the bag
    'what does mam keep in the bag?'
Child: \operatorname{dim}[x 2].
    NEG
    'nothing.'
```

Dim byd 'nothing' can replace dim in this example, showing that we have argument dim.

However, it is not clear whether the children fully understand the use of single occurrences of dim. Some examples, when considered in the wider textual context, are challenging to interpret - that is whether we have argument $\operatorname{dim}$, quantifier $\operatorname{dim}$, adverbial dim, or something else (occurrences of dim in the examples are translated as 'nothing' but this does not necessarily reflect how they are being used
by the children). This is clearly shown with one illustration showing the puzzled reaction of the adult in the interaction which contains three of the examples of $\operatorname{dim}$ in a one-word fragment.

15 Adult: ti 'n cadw rheina rwan?
you.SG PROG keep these now
'are you going to keep / put away these now?'
$y r$ wye bach 'na?
the eggs small there
'those small eggs.'
Child: na.
'no.'
Adult: well ti neud.
better you.sG do
'you'd better do it.'
Child: dim.
neg
'nothing.'
Adult: be?
what
'what?'
Child: dim.
neg
'nothing.'
Adult: be ti 'n feddwl, dim?
what you.SG PROG think, NEG
'what do you mean, nothing?'
Child: dim.
neg
'nothing.'

Other examples which show an unclear use of dim in a one-word fragment are given in (16).

| 16 a. Adult: | 'dy me:me: 'n cal diod? |
| ---: | :--- |
|  | be.PREs.3SG me:me PROG have drink |
|  | 'is the me:me: having a drink?' |
| Child: | dowl [?]. |
|  | yes |
|  | 'yes.' |

Adult: $b e$ ?
'what?'
Child: $\operatorname{dim}$ [?].
NEG
'nothing.'
b. Adult: Dad wedi dod.

Dad PERF come
'Dad (has) come.'
Child: na, dim.
no, NEG
'no, nothing.'
c. Adult: oh rheina yw 'r wye ie?
oh those be.PREs.3SG the eggs yes
'oh those are the eggs, yes?'
Child: na, dim.
no, NEG
'no, nothing.'
d. Child: Mam bia hwnna.

Mother own that
'that's mum's.'
Adult: be 'dy 'o?
what be.PRES.3SG it
'what is it?'
Child: dim.
NEG
'nothing.'

In adult Welsh some of these examples could be interpreted as a use of dim which evades a question like 'forget it'. This is more likely of a stroppy teenager than children of this age. These examples of $\operatorname{dim}$ in a one-word fragment are neither argument dim nor bare dim but may be being used to deny or negate a previous utterance, similar to na ( $n a$ accompanies dim in some of the examples).

## 5 Small clauses

As previously outlined in chapter 3, small clauses are taken to be a phrase which is made up of a subject phrase and a predicate phrase but lacks a finite verb. However, because of the problem of pronominal clauses, we shall only consider examples which contain noun phrases which are not pronominal phrases
as their subjects. Examples from the children's usage are given in (17). Examples (17a-c) contain indefinite subjects and are preceded by quantifier dim and examples ( $17 \mathrm{~d}-\mathrm{g}$ ) contain definite subjects and have adverbial dim in post-subject position. Some of the predicate phrases which are listed in (2) in section 1.2 also occur as predicates in small clauses.

17 a. dim golwg ynl [?] ardd. Prepositional phrase
NEG sight in garden
'no mess in the garden.'
b. dim eliffant yna. Adverbial phrase

NEG elephant there
'no elephant there.'
c. dim blocs heddiw. Adverbial phrase

NEG blocks today
'no blocks today.'
d. hwn 'im yn ffitio chwaith. Aspect phrase
this NEG PROG fit neither
'this not fit either.'
e. Ioan 'im yna.

Adverbial phrase
Ioan NEG there
'Ioan not there.'
f. car ddim isio mynd $i^{\prime}$ fanna. Eisiau phrase
car NEG want go to there
'car (does) not want to go there.'
g. $G$--- ' $\boldsymbol{m}$ dallt.

Verb phrase
G--- NEG understand
'G--- not understand.'

In all these examples, dim and dim are properly placed. But there is one example in which dim is out of position.

18 a. M--- licio 'm isio mynd $i^{\prime}$ ffair.
M--- like NEG want go to fair
'M--- like not want go to (the) fair.'
b. M--- ddim licio isio mynd $i$ ' ffair. [Devised example]

M--- NEG like want go to fair
'M--- not like want to go to (the) fair.'

The only position that a form of dim could occur in such an example is after the subject, as in the devised example in (18b). But the catenation of the verb licio 'like', the lexeme eisiau 'want' and the verb mynd 'go' makes this example difficult to interpret and it may be anomalous in performance and not in competence. Overall, and along with examples of finite clauses given in section 1.2, the examples of small clauses underline the fact that the children have acquired a firm understanding of the positioning of adverbial dim.

## 6 Sentence fragments

There are many examples of fragments which occur as utterances in the children's Welsh. It will be recalled from chapter 3 that classifying dim in fragments on the basis of phrasal structure alone is not straightforward. We shall follow the order of presentation adopted for the description of adult usage and consider the same criteria for establishing its function in the children's Welsh. As discussed section 7.7 of chapter 3, disambiguation is possible through interpreting textual context but here we shall illustrate the problems which interpreting fragments on the basis of phrase structure alone can present

As mentioned, we shallrefer to different uses of $\operatorname{dim}$ but we adopt a very different approach to sentence fragments in section 3.2 of chapter 6 .

### 6.1 Focus dim

The discussion of adult usage in chapter 3 shows that definite nominals and adjectives only occur after focus dim. In the children's Welsh, there are examples of definite nominals, but only one (unusual) examples of an adjective phrase, given in (19d).

19 a. \&Esme [//] dim Esmerelda.
neg Esmeralda
'not Esmeralda.'
b. na, dim ffor 'na.
no NEG way there
'no, not that way.'
c. dim hwnna.

NEG that
'not that.'
d. $\operatorname{araf}[?] \operatorname{dim}$.
slow NEG
'slow not.'

Presumably the child is trying to produce dim araf 'not slow' in (19d).

### 6.2 Adverbial dim

Adverbial dim occurs before fragments which are progressive aspect phrases or predicatival phrases.

20 a. ddim yn licio.
NEG PROG like
'not like / liking.'
b. dim yn 2 sownd.

NEG PRED sound
'not sound.'
c. 'im $i$ ' fod cadw swn. I fod phrase

NEG to be keep noise
'not supposed to make a noise.'

These phrases do not occur as focus phrases and we can say that adverbial dim occurs here.

### 6.3 Quantifier or focus dim

Dim also occurs before indefinite nominals in which case it can be either quantifier dim or focus dim.
$21 \mathrm{a} . n a$, dim ci mawr.
NEG NEG dog big
'not a big dog / no big dog.'
b. na,,, dim 'sanne oren.

NEG NEG socks orange
'not / no socks.'
c. dim nicers [\% looking under skirt of the other Barbie].

NEG knickers
'not / no knickers.'

### 6.4 Adverbial dim or focus dim

There are phrases which can occur as predicates in finite clauses and small clauses and as focus phrases in fronted clauses, and we can say that in fragments, dim can be adverbial dim or focus dim. These are
locative and temporal adverbs, prepositional phrases, bod 'be' phrases, verb phrases, and the perfect aspect.

22 a. dim yfanna.
NEG there
'not there.'
b. dim ar y llawr.

NEG on the floor
'not on the floor.'
d. dim licio hwn.

NEG like this
'not like this.'
e. dim wedi torri,, na?

NEG PERF break NEG
'not broken.'
f. $\operatorname{dim}$ heno.

NEG tonight
'not tonight.'

### 6.5 Adverbial, quantifier or focus dim

We see in section 7.5 of chapter 3 that the lexeme eisiau 'want, need' allows the formation of clausal negation by quantifier $\operatorname{dim}$, adverbial $\operatorname{dim}$ or focus $\operatorname{dim}$, which means that $\operatorname{dim}$ in a fragment can be either one of them. Examples from the children's Welsh are given in (23).

23 a. dim isio hwn.
NEG want this
'(do) not want this.'
b. dim isio mwmw@c.

NEG want moo-moo
'(do) not want moo-moo.'
c. dim isio wneud.

NEG want do
'(do) not want do it.'

We have more to say about examples like this in section 8.1.

## $\mathbf{7 d i m}+\mathbf{N P}_{\text {def }}+\mathbf{X P}$

There is a use of dim in the language of the children which also occurs in adult Welsh in the corpus (see the examples in (71) in section 8 of chapter 3). The examples have the linear sequence $\operatorname{dim}+\mathrm{NP}_{\text {def }}+$ XP.

24 a. dim hwnna yn mynd.
NEG that PROG go
'not that going.'
b. 'im Noddy yna.
neg Noddy there
'not Noddy there.'
25 a. dim hwn y babi,,na.
NEG this the baby, no
'not this the baby, no.'
b. dim hwnna gwartheg.

NEG that cattle
'not that cattle.'

There are two differences between the examples of the adults in (71) in chapter 3 and the children's examples. The first difference relates to frequencies. Table 4.1 gives the statistics for the sequence dim $+\mathrm{NP}_{\text {def }}+\mathrm{XP}$ in Welsh of the adults and the children.

Table 4.1. $\operatorname{dim}+\mathrm{NP}_{\text {def }}+\mathrm{XP}$ in the adults' and children's Welsh

Adults Children

| Aspect phrase | 1 | 4 |
| :--- | :--- | ---: |
| Locative phrase | 3 | 4 |
| Definite nominal phrase | 0 | 3 |
| Indefinite nominal phrase | 0 | 2 |
|  | 4 | 13 |

The numbers are small but there are proportionally fewer examples of this pattern in the Welsh of the adults $(0.16 \%)$ than in the Welsh of the children ( $2.83 \%$ ), based on the totals of occurrences of dim in the adults' and the children's Welsh. The second difference relates to the phrases which occur as the XP. Aspect phrases and locatives occur in the Welsh of the adults and the Welsh of the children. But in the children's Welsh, there are examples in which the XPs are nominal phrases, both definite and indefinite as in (25).

Without the negative word, the examples in (24) would be small clauses, hwnna yn mynd 'that going' and Noddy yna 'Noddy there' - [Subject Predicate]. But the negative word is attached initially in the examples in (24) compared with its post-subject subject position in the small clauses in (17d-g). This produces ill-formed small clauses - [[dim [Subject Predicate]]. It is argued in section 8 of chapter 3 that examples like those in (24) are reduced fronted clauses in the Welsh of the adults. In the case of the children the same claim can be made, giving the structure [[dim Subject] [Predicate]]. But we cannot discount the interpretation that they are producing ill-formed small clauses.

In the case of examples like those in (25), without the negative word, the resulting sequence is made up of two nominal phrases like hwn y babi 'this the baby' and hwnna gwartheg 'that cattle' — in which $h w n$ and hwnna are demonstrative pronouns. Such sequences do not occur as a small clause in adult Welsh. But we could again apply an analysis which is based on reduced clauses. The examples in (25) are attempts by the children to produce negative versions of fronted copular clauses which would have a medially-placed copula in adult Welsh: dim hwn ydy y babi lit. 'not this is the baby' and dim hwnna ydy gwartheg lit. 'not that is cattle'. The children's version lack the medially-placed copula but have focus $\operatorname{dim}$ negating the initial phrase [ $\left[\operatorname{dim} \mathrm{NP}_{\mathrm{def}}\right]$ [predicate]].

## 8 Forms of dim

### 8.1 The full and contracted forms of dim

Chart 4.3 compares the frequencies of the adults (given in chart 3.1 in section 10 of chapter 3 ) with the frequencies of the children, and chart 4.4 presents the same comparison in terms of percentages.



The charts show that the main difference is in the use of the contracted forms, being proportionally used more by the children than the adults. This suggests that it is unlikely that they are acquired after one of the full forms, especially not $d d i m$, which is by far the least frequent. See the next section and chapter 6 for more details.

### 8.2 Forms of dim and lexemes

There is much more to the full and contracted forms in the Welsh of the children. Table 4.2 reveals another difference, namely, that in the children's Welsh the contracted forms occur more with the lexeme eisiau 'want, need' (which is realized as isio, isie or ise in spontaneous Welsh) than with other lexemes. In contrast, in the adults' Welsh, the contracted forms occur more with other lexemes than with eisiau.

Table 4.2. Dim and eisiau and other words in the adults' and children's Welsh

|  | Children |  |  | Adults |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | eisiau | other words | totals | eisiau | other words | totals |
| ddim | 9 | 14 | 23 | 227 | 1103 | 1330 |
| $\operatorname{dim}$ | 29 | 162 | 191 | 53 | 468 | 521 |
| $\mathrm{im} / m$ | 169 | 62 | 231 | 162 | 336 | 498 |
|  | 207 | 238 | 445 | 442 | 1907 | 2349 |

Charts 4.5 and 4.6 provide the percentages of the occurrences of the combinations.


A comparison of the percentages shows that the contracted forms occur with eisiau in $37.98 \%$ of the total of 445 relevant examples in the Welsh of the children while the same combination in the Welsh of the adults accounts for only $6.9 \%$ of the total of 2349 .

The contracted form is even more frequent before eisiau 'want' in fragments in the children's Welsh. Examples are given in (26).

26 a. ' $\boldsymbol{m}$ isio.
NEG want
'(do) not want.'
b. ' $\boldsymbol{m}$ isio llwy.
neg want spoon
'(do) not want spoon.'
c. 'im isio hwnna.

NEG want that
'(do) not want that.'
d. 'im isio $m w+m w$.
neg want moo-moo
'(do) not want moo-moo.'

The frequencies for the forms of $\operatorname{dim}$ in fragments in the Welsh of the children and the adults are given in table 4.3.

Table 4.3. Dim and eisiau and other words in fragments in the adults' and children's Welsh

|  | Children |  |  | Adults |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  | eisiau | other words | totals | eisiau | other words | totals |  |
| ddim | 6 | 5 | 11 | 3 | 87 | 90 |  |
| dim | 26 | 128 | 154 | 16 | 310 | 326 |  |
| $\mathrm{im} / m$ | 125 | 22 | 147 | 7 | 1 | 8 |  |
|  | 157 | 155 | 312 | 26 | 398 | 424 |  |

Charts 4.7 and 4.8 provide this information in terms of percentages.



In the Welsh of the children, there are 312 examples of a form of dim in a fragment and 147 of these are a contracted form which occurs before eisiau, which amounts to $40.07 \%$ of the grand total of 312 . In the Welsh of the adults, there are only eight examples of dim in a fragment. Seven occur with eisiau but this amounts to only $1.65 \%$ of the total number 424 examples of fragments. There are then no substantial input data for contracted forms in fragments and their occurrences in the Welsh of the children must be seen as being unique to their grammar.

The usage which sees the contracted form in initial position in fragments is especially apparent in the Welsh of one child - A--- (\#1 in tables 0.1 and 0.2 in Preliminaries) - who is in the project for the first five months only. Table 4.4 gives the frequencies for $\mathrm{A}--$ - and the other children.

Table 4.4. Dim and eisiau and other words in A---'s and the six other children in fragments

|  | A--- |  |  | Six other children |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | eisiau | other words | totals | eisiau | other words | totals |
| ddim | 5 | 1 | 6 | 4 | 13 | 17 |
| $\operatorname{dim}$ | 13 | 8 | 21 | 16 | 154 | 170 |
| $\mathrm{im} / m$ | 67 | 11 | 78 | 102 | 51 | 153 |
|  | 85 | 20 | 105 | 122 | 218 | 340 |

Chart 4.9 gives the percentages for the occurrences of $\mathrm{im} / \mathrm{m}$ in the Welsh of A--- and the other children.


There is a total of 78 examples of a form of dim with eisiau and other words in the Welsh of A--- and $85.90 \%$ of these occur with eisiau. There is a total of 153 similar examples in the Welsh of the other six children and of these a lesser proportion of $66.67 \%$ occurs with eisiau. These six children are in the corpus for longer periods of time. Proportionally, A--- uses $\mathrm{im} / \mathrm{m}$ with eisiau more than the other children. There are only seven examples which have been produced by the adults and only two of these are in the recordings for A---. Clearly, the input language is not a factor which accounts for the children's frequent use of ' $m$ isio.

It is reasonable to think that the children, in particular A---, analyse ' $m$ isio as forming one word which has negative meaning. This compares with the possible holophrastic use of $d$ wn $i$ ' $m$ (or possibly $d$ $w n$ 'im) 'I don't know'. In the early months at least, 'm isio may likewise be holophrastic. In this light, it is interesting to re-visit example (13) which has a contracted form in initial position in a fronted clause - this can be explained if 'm isio is seen as holophrastic. We give this matter greater scrutiny in chapter 6.

### 8.3 Mutations

We shall follow the presentation which is used for adult usage which is given in section 10.2 of chapter 3.

Table 4.5 gives the frequencies for occurrences of the adverbial and quantifier negators in mutation contexts.

Table 4.5. Adverbial ddim in finite clauses and small clauses and quantifier dim in finite clause, both in mutation positions
(the contracted forms are also given although they do not mutate)

|  | $\operatorname{dim}$ | ddim | Totals | 'im/'m |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Adverbial, post-subject, finite clause | 7 | 2 | 9 | 28 |
| Adverbial, post-subject, small clause | 4 | 5 | 9 | 18 |
| Adverbial, post-subject, pronominal | 5 | 5 | 10 | 32 |
|  | 16 | 12 | 28 | 78 |


| Quantifier, post-existential subject | 0 | 0 | 0 |  | 0 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Quantifier, post-prepositional phrase | 0 | 0 | 0 |  | 1 |
|  | 0 | 0 | 0 |  | 1 |
| Totals | 16 | 12 | 28 | 79 |  |

There are no examples of a mutateable form of the quantifier in a mutation position, and there are no examples of the quantifier in the non-mutation position after the verb. For the adverbial negator, $42.86 \%$ of the total number of 28 examples are mutated, which leaves $57.14 \%$ unmutated. The numbers are small but there is no overwhelming evidence that the children are following conventional rules of mutation.

As outlined in chapter 3, the main non-mutation position in respect of $\operatorname{dim}$ is the initial position in a phrase, that is, initial position in fronted clauses, small clauses with indefinite subjects, and fragments. We can also include here those examples which follow the pattern $\operatorname{dim}+\mathrm{NP}_{\text {def }}+\mathrm{XP}$, discussed in section 7. The details are given in table 4.6. The use of dim in fragments has been disambiguated for these statistics.

Table 4.6. Forms of dim in initial position in the children's Welsh (the contracted forms are given for comparison)

|  | $d \mathrm{dim}$ | dim | Totals | $\mathrm{im} / \mathrm{m}$ |
| :--- | ---: | ---: | ---: | ---: |
| Mutation expected (adverbial negator) | 4 | 39 | 43 | 18 |
| Radical expected |  |  |  |  |
| - Focus, fronted clause | 0 | 16 | 16 | 0 |
| - Focus, fragment | 1 | 58 | 59 | 1 |
| - Quantifier, small clause | 0 | 6 | 6 | 0 |
| - Quantifier, fragment | 0 | 11 | 11 | 0 |
| - dim + NP ${ }_{\text {def }}+\mathrm{XP}$ | 0 | 12 | 12 | 1 |

Ambiguous
$\begin{array}{llllll}\text { - Adverbial/Focus/Quantifier } & 6 & 26 & 32 & 128\end{array}$

A graphic display of the details in table 4.6 is given in chart 4.10.


Chart 4.10 shows that where the adverbial negator can occur in initial position, the form ddim occurs in only $9.30 \%$ of examples. The form dim occurs in $90.70 \%$ of examples. The frequencies and percentages
for the expected mutation re-enforce the view that the children do not use the form ddim as the radical form of the adverbial negator. For the children the main full form in initial position is dim.

## 9 Summary

Table 4.7 provides a summary of the uses of dim in the children's Welsh in the corpus. (On the basis of phrase structure alone there were 60 examples in fragments which were ambiguous focus/adverbial and 23 examples in fragments which were ambiguous focus/quantifier. These have been disambiguated through a consideration of textual context.) The ambiguous examples adverbial/quantifier/focus evade disambiguation (but see section 3.2.3 of chapter 6).

Table 4.7. Frequencies of the uses of dim in phrase types in the children's Welsh

|  | Fin. | Pron. | SC | Fronted | Fragment | One- <br> word | Missing | Placement | dim+NP ${ }_{\text {def }}$ <br> XP |  | Totals |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

Table 4.7 shows that there are two main uses of dim, namely, adverbial ( $38.78 \%$ ) mainly in fragments and the ambiguous occurrences of dim in fragments ( $35.29 \%$ ). The focus use is next $(17.21 \%)$ and the remainder are very low frequency uses. The frequencies for the children's Welsh are different to those of the adults' Welsh (given in table 3.8 of chapter 3 ). In the latter adverbial ddim is the main negator, followed by focus dim in fragments. Much more is said about these frequencies in chapter 6.

The table also shows that fragments are the main phrase in which dim occurs. Pronominal copular clauses are listed separately as it is difficult to say whether they are finite clauses or small clauses. Charts 4.11 and 4.12 give the possibilities.


Resolving the ambiguity in favour of one or the other is given in chart 4.12.


The reassignment of the frequencies makes little difference to the overall dominance of the fragments. We shall see in chapter 6 that the type of phrase in which dim occurs is a more significant factor than the uses of dim when the longitudinal paths of acquisition are considered.

## Chapter 5 Other Negative Words in Adult and Child Welsh

All examples are taken from the Welsh of the adults and the children in the corpus unless otherwise indicated.

This chapter examines the remainder of the negative words which are given in table 1.1 in chapter 1 , namely the verb peidio, the responsives and tags nage 'no', naddo 'no', the pronouns dim byd 'nothing', neb 'no-one', nunlle 'nowhere', the preposition heb 'without', the adverbs erioed '(n)ever' and byth '(n)ever', and two words which are involved in co-ordination na2 'nor' and chwaith 'neither'

## 1 Peidio

In the English translations in the examples which are given in this section, peidio is translated as 'don't' or 'not' but it is difficult to provide an equivalent English lexeme in the glosses. 'Stop' is appropriate in the case of present contemporaneous situations but not in the case of future situations. In the glosses, then, NEG is used.

### 1.1 Overview

That peidio is a negative word is shown by the fact that it takes a negative tag, which as we see in section 3.3 of chapter 2 occurs with a negative phrase. In (1a) a verbal tag occurs which contains the negative preverbal particle $n a$. In (1b), non-preverbal $n a$ occurs.

Peidio is a verb which is used in three ways in the Welsh of the adults in the corpus: (i) it is used in its finite forms to produce a negative imperative clause as in (1a-c); (ii) it is used in its infinitive form to negate a verb phrase as in (1d); and (iii) it is used as an intransitive verb to indicate cessation as in (1e).

1 a. paid ti collie,,na nei di?
NEG.IMPV.2SG you.SG lose it NEG do.FUT.2SG you.SG
'don't lose it, will you?'
b. paid torri sbectols Mam,, na.

NEG.IMPV.2SG break glasses mother no
'don't break mum's glasses, no.'
c paid a: rhoi ynl dy geg.
NEG.IMPV.2SG with put in CL.2SG mouth
'don't put (it) in your mouth.'
d. well $i^{\prime}$ ti beidio rhoi hwn ynl dy geg. better for you.SG stop put this in CL.2SG mouth '(you'd) better not put this in your mouth.'
e. Adult1: o'dd hi 'n bwrw glaw? be.IMPF.3SG it PROG hit rain 'was it raining?'
Adult2: na,,,o'dd hi wedi peidio am ychydig,, on'd o'dd hi? no be.IMPF.3SG she PERF stop for few PT be.IMPF.3SG it 'no, it had stopped for a while, hadn't it?

The intransitive use of peidio in (1e) is uncommon generally, and there is only one example in the corpus. The more common alternative in informal Welsh is to use the verb stopio 'stop'.

The frequencies for these three uses in the Welsh of the adults and the children are given in table 5.1. 'Others' refers to a small number of examples which do not come under the main uses.

Table 5.1. The frequencies of the main uses of peidio in the adults' and children's Welsh

|  | Adults |  | Children |  |
| :--- | ---: | ---: | ---: | ---: |
| finite imperative | 320 | $97.27 \%$ | 52 | $96.30 \%$ |
| infinitive | 5 | $1.52 \%$ | 0 | $0 \%$ |
| intransitive | 1 | $0.30 \%$ | 0 | $0 \%$ |
| others | 3 | $0.91 \%$ | 2 | $3.70 \%$ |
|  |  |  | 54 |  |

As can be seen, the finite imperative use of peidio dominates the usage of the adults and the children. The children's language reflects the frequencies in the input data from the Wesh of the adults.

### 1.2 More about negative imperative clauses

Peidio is used to form a negative imperative clause which seeks to stop the occurrence of a present situation or to prevent the occurrence of a future situation. The examples in (2) are taken from the Welsh of the adults.

| 2 a. paid | a: | rhedeg. |
| :--- | :--- | :--- |
| NEG.IMPV.2SG with | run |  |
| 'don't run.' |  |  |

b. oh paid a: tynnu gwallt hi.
oh NEG.IMPV.2SG with pull hair she
'don't pull her hair.'
c. hei peidiwch a: lluchio nhw.
hey NEG.IMPV.2PL with throw they
'hey don't throw them.'

The examples in (3) are taken from the children's Welsh.

3 a. paid a: mynd,, Mam.
NEG.IMPV.2SG with go Mum
'don't go, Mum.'
b. paid a: cadw nhw i+gyd yfama.

NEG.IMPV.2SG with keep they all here
'don't keep them all here.'
c. paid a: twtsiad!

NEG.IMPV.2SG with touch
'don't touch.'

All these examples show that adverbial dim is not used to form a negative imperative. The negative meaning is in the lexical semantics of peidio. We can make three points about the syntax of the negative imperatives which are in the corpus.

First, the examples in (2) and (3) show that the verb phrase which is the complement of peidio is preceded by the preposition $\hat{a}$ 'with'. Some speakers at least some of the time can leave out the preposition. The examples in (4) are taken from the Welsh of the adults.

4 a. oh paid torri nhw.
oh NEG.IMPV.2SG break they
'oh don't break them.'
b. ie,,, paid cyffwrdd.
yes NEG.IMPV.2SG touch
'yes, don't touch.'
c. oh paid byta 'i law e.
oh NEG.IMPV.2SG eat CL.3SG.M hand he
'oh don't eat his hand,'

The examples in (5) are taken from the children's Welsh.

5 a. paid mynd fynna.
NEG.IMPV.2SG go there
'don't go there.'
b. paid byta go'mod $[=$ @ c gormod $]$.

NEG.IMPV.2SG eat too-much
'don't eat too much.'
c. paid tynnu hwnna off.

NEG.IMPV.2SG pull that off
'don't pull that off.'

Table 5.2 gives the frequencies of the presence or absence of the preposition in the Welsh of the adults and the children.

Table 5.2. The preposition $\hat{a}$ in negative imperatives in the adults' and children's Welsh (percentages based on known data)

|  | Adults |  | Children |  |
| :--- | ---: | ---: | ---: | ---: |
| With the preposition | 235 | $88.68 \%$ | 18 | $75 \%$ |
| Without the preposition | 30 | $11.32 \%$ | 6 | $25 \%$ |
|  |  | $\frac{265}{24}$ |  |  |
| Missing data | $\frac{3}{268}$ |  | $\frac{2}{26}$ |  |

The frequencies show that the presence of the preposition is by far the main option. However, the corpus reveals a dialect difference. The frequencies are given in table 5.3.

Table 5.3. The presence or absence of the preposition $\hat{a}$ in the Aberystwyth and Bangor files

|  | Adults |  | Children |  |
| :--- | ---: | ---: | ---: | ---: |
|  | + Prep. | - Prep. | + Prep. | - Prep. |
| Aberystwyth | 22 | 30 | 1 | 6 |
| Bangor | 213 | 0 |  | 18 |

All the examples which lack a preposition are in the Aberystwyth files, which gives grounds for claiming that omitting the preposition is a feature of southern dialects. But it needs to be noted that examples with the preposition also occur in the Aberystwyth files.

Second, the examples given so far illustrate pro-drop. In the adults' Welsh there are also examples of negative imperative clauses which have an overt pronoun subject.
$\begin{array}{lllll}6 & \text { a. paid } & \boldsymbol{t i} & a: & \text { mynd yfanna. } \\ & \text { NEG.IMPV.2SG } & \text { you.SG } & \text { with } & \text { go there }\end{array}$
'don't you go there.'
b. paid ti a: sgrechian fel 'na!

NEG.IMPV.2SG you.SG with scream like that
'don't scream like that.'
c. paid ti colli rheina.

NEG.IMPV.2SG you.SG lose those
'don't lose those.'

The frequencies for a dropped or overt pronoun subject in the Welsh of the adults and the children are given in table 5.4.

Table 5.4. Pro-drop or overt subject in negative imperatives in the adults' and children's Welsh

|  | Adults |  | Children |  |
| :--- | ---: | ---: | ---: | ---: |
| Pro-drop | 283 | $88.44 \%$ | 52 | $100 \%$ |
| Overt subject | 37 | $11.56 \%$ | 0 | $0 \%$ |
|  | $\frac{320}{320}$ |  | 52 |  |

As can be seen, there are no examples of an overt pronoun subject in the Welsh of the children. And in the Welsh of the adults, the norm is to use pro-drop. The option of pro-drop or overt subject is a feature of all imperatives, positive and negative, in informal Welsh but an overt subject is the norm in nonimperatives.

Third, the examples given so far contain a verb phrase complement. But there are also examples which omit the complement, leaving only finite peidio with or without a subject pronoun. The examples in (7) are taken from the adults' Welsh.

7 a. ie,, paid rwan.
yes NEG.IMPV.2SG now
'yes, don't now.'
b. paid ti.

NEG.IMPV.2SG you.sg
'don't you.'

And the example in (8) is taken from the children's Welsh.

8 ah Anti+S---,,, paid.
ah Auntie+S--- neg.Impv.2sG
'ah Auntie+S---, don't.'

Table 5.5 gives the frequencies for ellipsed negative imperatives and full negative imperatives.

Table 5.5. Frequencies for ellipsed and full negative imperatives in the adults' and children's Welsh (percentages based on known data)

| full imperatives | Adults |  | Children |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 263 | 83.23\% | 21 | 48.84\% |
| ellipsed imperatives | 53 | 16.77\% | 25 | 51.16\% |
|  | 316 |  | 46 |  |
| missing data | 4 |  | 6 |  |
|  | 320 |  | 52 |  |

In the adults' Welsh, the use of full imperatives is very much in the majority. In the children's Welsh, there is a greater use of ellipsed imperatives than in the adults' Welsh.

There is one example in the Welsh of the adults which has been transcribed with the preposition but which omits the complement.

```
9 M---,, paid a:
    M--- NEG.IMPv.2SG with
    'M---, don't.'
```

There is a possibility that paid a: may be an alternative inflectional form of the $2^{\text {nd }}$ singular, namely, paida, which has the ending - $a$ which generally occurs in second person singular imperatives.

Fourth, we can note that the verb peidio can inflect for the singular and the plural second person. The singular paid is seen in examples in (1a) and the plural form peidiwch is in (2c); both are repeated here for convenience.

10 a. paid a: rhoi ynl dy geg.
neg.IMPv.2SG with put in CL.2SG mouth
'don't put (it) in your mouth.'
b. hei peidiwch a: lluchio nhw.
hey NEG.IMPV.2PL with throw they
'hey don't throw them.'

Frequencies are given in table 5.6.

Table 5.6. Singular or plural negative imperatives in the adults' and children's Welsh

|  | Adults |  | Children |  |
| :--- | ---: | ---: | ---: | ---: |
| Singular | 300 | $94.04 \%$ | 51 | $98.08 \%$ |
| Plural | 20 | $5.96 \%$ | 1 | $1.92 \%$ |
|  | $\frac{320}{320}$ |  | $\frac{52}{52}$ |  |

There is a traditional, and perhaps by now conservative, convention whereby the singular form is used between intimates and the plural form is used as an indication of respect. Within some families this convention is followed so that children use the plural form when addressing their parents and the latter use the singular form when addressing the children. The frequencies in table 5.6 give no grounds for the maintenance of this convention. But we have to bear in mind that this convention is not followed in all families and, also, in families where it might be followed, the children may be too young to have mastered this distinction.

### 1.3 Infinitival peidio

Table 5.1 records that there are only five examples of infinitive peidio in the corpus, all in the Welsh of the adults. There are two contexts in which the infinitival form of peidio is used to negate a verb phrase in the corpus. One is in an $i$-clause (that is, loosely, a VP which has a subject, all of which is preceded by the form $i$ 'for, to') as the examples in (11) show.

11 a. well $i^{\prime}$ ti beidio rhoi hwn ynl dy geg. better for you.SG NEG put this in CL.2SG mouth '(you'd) better not put that in your mouth.'
b. na $\left[\mathrm{x} \mathrm{4],,}\right.$, well $i^{\prime} t i \quad$ beidio twtsiad. no better for you.SG NEG touch 'no, better not touch.'
c. well $i$ ' $G---$ beidio mynd $i^{\prime}$ 'r fridge. better for G--- NEG go to the fridge 'better not go to the fridge.'

The other context is a subject-less VP.

```
ma' rhaid peido mynd yn3 agos at y ta:n,, yntefe.
    be.PRES.3sG necessity NEG go ADV near to the fire PT.Q
    'you must not go near to the fire, isn't it.'
```

In both contexts, the proposition $\hat{a}$, which appears in finite clauses, does not occur.

There is one example in which the VP complement of peidio has been omitted.

13 ti 'n dweud wrthi am beidio.
you.SG PROG tell to.3sG.F about NEG
'you tell her to stop.'

As shown in table 5.1 in section 1.1, there are no examples of infinitive peidio negating a VP in the children's Welsh.

## 2 Responsives and tags: nage and naddo

### 2.1 Nage

In the corpus, the lexeme nage occurs as the forms nage and naci. Nage occurs in the Welsh responsive and tag systems and is thus similar to $n a$, which is discussed in chapter 2 . It can be translated with 'no' in English.

### 2.1.1 Responsive

Nage can be used as a response to a previous utterance (including the speaker's own utterances) in the discourse or to a situation.

The following examples show an adult responding to a situation, indicated by the transcriber's comments tagged by @Bck.
$14 \mathrm{a} . @$ Bck: K--- starts putting everything he can in the fish tank.
Adult: hei be ti 'n wneud?
hey what you.SG PROG do
'hey what are you doing?'
hei[x 3] naci.
‘hey, hey, hey no.'
b. @Bck: playing with the fire things.

Adult: ha na [x 3],, $K$---.
'hah no, no, no, K---.'
naci [x 3].
'no, no, no.'

It can be challenging to distinguish between a response to a situation and one to a previous utterance, as the following examples show. It is likely that nage is responding to a situation when it follows a whquestion, especially one headed by beth 'what'.

15 a. Adult: oi be $t i$ 'n wneud?
hoi beth you.SG PROG do
'hoi, what are you doing?'
oh naci,,, dim ynl y bocs yna.
oh NEG NEG in the box there
'oh no, not in that box.'
b. Adult: hei be $t i$ 'n wneud?
hey what you.SG PROG do
'hey what are you doing?'
hei[x 3] naci.
'hey, hey, hey no'

In the case of responses to previous utterances, the data have been collected (by computer program) on the basis of the immediately preceding utterance. This is satisfactory for the vast majority of examples but there are exceptions as shown by the following example from the adults' Welsh.

```
1 6 ~ a . ~ A d u l t : ~ d i m ~ b u w c h ~ ' d y ~ h w n n a .
    NEG cow be.PRES.3SG that
    'that's not a cow.' lit. 'not a cow is that.'
    dw i ddim yn meddwl.
    be.PRES.1SG I NEG PROG think
    'I don't think so.'
    naci.
    'no.'
```

It is more reasonable to interpret nage as responding not to the previous utterance, $d w i d d i m y n$ meddwl but to the fronted clause in the preceding utterance.

Nage is used as a responsive to fronted clauses. If the preceding phrase is negative, nage can indicate either agreement or disagreement. If the preceding phrase is positive, nage disagrees with what has been said. The examples in (17) are taken from the adult's responses to a fronted clause.

17 a. Child: $a[/] a$ pinc 'dy hwnna? and pink be.pres.3sG that 'pink is that?'

## Adult: nage.

'no.'
b. Child: hen Tina 'dy 'o. [M--- calls anything she does not like hen, meaning old.]
old Tina be.Pres.3sG it 'it's old Tina.' lit. 'old Tina is it.'

Adult: oh nage,,, ma' Tina 'n2 ffrind $i^{\prime} G---$ oh neg be.pres.3sg Tina pred friend to G--'oh no, Tina is a friend to G---.'

The examples in (18) show children using nage as a responsive to fronted clauses.

18 a. Adult: bwni fach yw honna?
bunny little be.PREs.3sG that
'a little bunny is that.'
Child: naci.
'no.'
b. Adult: moto+beic 'dy hwn.
motorbike be.pres.3sG this
'a motor bike is that.'
Child; naci,,, car.
NEG car
'no, car.'

Nage is also used as a responsive to other phrases. The following examples are taken from the Welsh of the adults.

19 a. Father: Dad chwythu [?] ti at Twm,, ie? [Small clause]
Dad blow you.sG to Tom yes
'Dad blow you to Tom, yes

Mother: naci $\$$ siwr $\$$.
NEG sure
'no, sure.'
b. Child:
gwyn.
[Fragment]
'white.'
Adult:
nage,,, pinc.
'no, pink.'
c. Child: ie.
[Responsive]
'yes.'
Adut: naci \$siwr\$.
'no, sure.'

The children also use nage as a responsive to other phrases.

20 a. Adult: hwnna ynl cwpan?
[Small clause]
that in cup
'that in a/the cup?'
Child: naci,,, ynl botel a top a glas.
NEG in bottle and top and blue
'no, in a/the bottle and top and blue.'
b. Adult: oh dy:n bach.
[Fragment]
oh man little
'oh a little man.'
Child: naci,,, dynes.
NEG woman
'no, a woman.'
c. Adult: S1--- chwarae efo S2---.

S1--- play with S2---
'S1--- play with S2---.'
$i e$.
[Responsive]
'yes.'
Child: naci,,, w i isio dwad.
NEG be.PRES.1SG I want come
'no, I want to come.'

Of particular interest is that nage is used to respond to finite clauses of normal word-order. As we see in section 1.2 of chapter 2, such clauses use the echo system. Examples of nage being used by adults in place of an echo responsive are given in (21).

b. Child: gaf i fynd i+fyny fanna.
have.PRES.1sG I go up there 'can I go up there?.
Adult: naci,,, dos $i^{\prime}$ chwarae efo $S$---. NEG go.IMPv.2SG to play with S--'no, go and play with S---.'

The children also use nage to respond to finite normal-order clauses, which otherwise use the echo system.


```
d. Adult: tyd rwan 'tel.
    come.IMPV.2SG now then
    'come on now then.'
```

Child: naci.
'no.'

In summary, in both the Welsh of the adults and the children, nage is used with a specific function as a response to fronted clauses and as a general response to other clauses, including normal-order finite clauses which also use the echo system.

### 2.1.2 Tag

As a tag, nage is used with fronted clauses which contain a negative fronted phrase. The example in (23) is from the Welsh of an adult.

23 dim peth cyfri 'dy hwn,, naci.
NEG thing count be.PRES.3SG this no
lit. 'not a counting thing is this, no'

The examples in (24) show children using nage as a tag to a fronted clause which has a negative fronted phrase.

24 a. dim gwely 'dy 'o,, naci.
NEG bed be.pres.3SG it NEG
'not a bed is it, no.'
b. dim fel 'na mae $\quad i$ fod,, naci?

NEG like that be.PRES.3SG to be NEG
'not like that it's supposed to be, no?'

The examples in (25) show the adults using nage as a tag to a variety of other phrases which are negative, including a normal-order finite clause which otherwise uses the echo system.

25 a. dan ni ddim yn mynd $i$ ' no:l 'o rwan,, naci?
be.PRES.1PL we NEG PROG go to fetch it now NEG
'we're going to fetch it no, no?'
b. na,,, dim siso,, naci.

NEG NEG see-saw NEG
no, not a see-saw, no.'
c. na,,, $\operatorname{dim}$ ar $y$ wal,, naci $[\mathrm{x} 3]$.
neg neg on the wall neg
'no, not on the wall, no, no, no.'

There are examples of nage in the Welsh of the adults which the transcribers have represented as a tag to a positive phrase. But these examples show that the speaker rejects or disagrees with the tagged phrase. That is, the tag does not have its conventional function of conforming with the polarity of the tagged phrase as in the examples in (23) and (25). In the example in (26), it is the final utterance which indicates the adult's disagreement that the dog's name is not Ben but Sally, and the relevant example Ben 'dy ci Moira, naci 'Ben is Moira's dog, no' conveys this disagreement.


27 a. Child: car Dad [\% picture of burning car on the news].
car Dad
'Dad's car.'
Adult: car Dad,, argo', naci.
car Dad portent NEG
'Dad's car,, heavens, no'
b. Adult1:brws gwallt pwy oedd o?
brush hair who be.ImpF.3sG it
'whose brush was it?'
Child: brws [/] brws [/] brws Anti---.
brush Antie---
'Antie May's brush'

```
    Adult1:brws Anti---,, naci.
    brush Antie--- NEG
    `Antie---'s brush, no.'
c. Adult: le aethon ni dydd+sadwrn?
    where go.PERF.1PL we Saturday
    'where did we go Saturday?'
Child: yh steddfod.
    uh eisteddfod
    'uh eisteddfod.'
    Adult: steddfod,, nage.
    eisteddfod NEG
    `eisteddfod, no.'
```

In such examples, nage is a responsive but the transcribers have used the orthographic conventions for tags. Or we could say that tags can have an additional function of disagreement with the tagged phrase.

From the children's Welsh, examples of tags to other tagged phrases all contain positive phrases, as illustrated in in (28). It is much more difficult to establish whether nage in such examples is a responsive which disagrees with the tagged phrase. But there are some grounds for this view when the wider context is considered. And example (28c) contains a comment (\%com) by the transcriber which confirms that nage disagrees with the tagged phrase.

28 a. mam isda yfanna,, naci.
mother sit there NEG
'mum sit there, no.'
<mam isda yfanna> [/] <xx isda yfanna> [/] <mam isda yfanna> [//] mam isda lori.
mum sit lorry
'mum sit lorry.'
b. Adult: 'dy hwnddim yn aros ar ei phen anyway.
be.PRES.3SG this NEG PROG stay on CL.3SG.F head anyway
'this does not stay on its head anyway.'
Child: hwn,, naci [\% does not want the adult to wear the bike helmet].
'this, no.'
hwnna na,, naci [/] naci [\% does not want the adult to wear the bike helmet].
that NEG NEG NEG
'that no, no.'
c. hwnna yfanna,, na, naci.
that there no NEG
\%com: dydy hwn ddim yfanna.
'that there, no, no.'

It seems that the transcribers have used tag orthographic conventions to indicate the close relationship between nage and the preceding clause. These matters have only come to light at the time of conducting this study. This indicates the difficulty, in preparing a corpus, of foreseeing all possible research questions which are pursued by later researchers.

### 2.1.3 Frequencies

Table 5.7 provides the frequencies for responsives and tags. The tags are taken to be those which are transcribed as tags.

Table 5.7. Frequencies of nage as responsives or tags in the adults' and children's Welsh


Like the adults, the children use nage as a responsive more than as a tag. As a responsive and tag, it is not tied to fronted clauses but is used with a variety of phrases.

Table 5.8 provides that details of the types of phrases which nage tags in the Welsh of the adults and the children.

Table 5.8. Frequencies of the phrases which are tagged by nage in the adults' and children's Welsh

|  | Adults |  | Children |  |
| :--- | :--- | :--- | :--- | :--- |
| Fronted order finites negative | 1 | $8.33 \%$ | 2 | $25 \%$ |
| Fronted order finites positives | 1 | $8.33 \%$ | 0 | $0 \%$ |
| Normal order finites negative | 1 | $8.33 \%$ | 0 | $0 \%$ |
| Non-finites negative | 2 | $16.67 \%$ | 0 | $0 \%$ |
| Non-finites positive | 6 | $50.00 \%$ | 6 | $75 \%$ |
| Demonstrative | 1 | $8.33 \%$ | 0 | $0 \%$ |
|  |  |  | $\frac{8}{12}$ |  |

The frequencies are small but it can be seen that nage is not confined to agreeing with the polarity of the tagged phrase and that it is not confined to fronted clauses. In both the Welsh of the adults and the children, nage mostly tags non-finites (either small clauses or fragments) which are positive.

Table 5.9 provides the frequencies for the distribution of responsives.

Table 5.9. Frequencies of the phrases immediately preceding nage in the adults' and children's Welsh

|  | Adults |  | Children |  |
| :--- | ---: | ---: | ---: | ---: |
| Fronted order finites | 5 | $2.49 \%$ | 17 | $14.78 \%$ |
| Normal order finites | 10 | $4.97 \%$ | 16 | $13.91 \%$ |
| Small clauses | 4 | $1.99 \%$ | 9 | $7.83 \%$ |
| Wh-clauses | 6 | $2.99 \%$ | 3 | $2.61 \%$ |
| Fragments | 121 | $60.20 \%$ | 51 | $44.35 \%$ |
| Responsives | 32 | $15.92 \%$ | 6 | $5.22 \%$ |
| Imperatives | 3 | $1.49 \%$ | 5 | $4.35 \%$ |
| Demonstrative | 0 | $0 \%$ | 1 | $0.87 \%$ |
| Extra-linguistic | 3 | $1.49 \%$ | 2 | $1.74 \%$ |
| Missing data | 17 | $8.46 \%$ | 5 | $4.35 \%$ |
|  | 201 |  | 115 |  |

Both the adults and the children use nage to respond to fragments more than to any other phrase, but especially the adults. There are more responsives to fronted order clauses by the children but this may reflect the greater use of interrogatives by adults in adult-children interactions. There are also more responses to normal-order finites by the children. This may be due to the more limited use of the echo system by the children.

### 2.2 Naddo

Naddo is used as a responsive and tag, and can be translated into English as 'no'.

### 2.2.1 Responsive

Naddo is used as a responsive to finite clauses of normal word-order which contain (i) either the past perfect tense as in (29), (ii) the present tense and the perfect aspect (indicated by wedi ( $d i$ ) in the examples here) as in (30), or (iii) phrases which lack a finite verb but which contain the perfect aspect such as in small clauses as in (31) or fragments as (32). In the case of examples which contain the present tense and perfect aspect an echo verbal responsive is also possible. We shall confine the
discussion at this point to the use of naddo. All the examples of naddo in (29-32) are produced by the adults.

29 Adult1: $e$ 'st ti $i^{\prime}$ 'r ffair? [Question to child]
go.perf.2SG you.sG to the fair
'did you go to the fair?'
Adult2: naddo?
'no?'
30 a. Adult1: ydy Mam 'di gweld hi? [Question to child]
be.Pres.3SG Mother Perf see her
'have you seen her?'
Adult2: naddo.
'no.'
b. Adult1: ti 'di bod yn nofio 'n3 ddiweddar? [Question to child] you.SG Perf be prog swim adv late 'have you been swimming lately?'
Adult2: naddo.
'no.'
31 a. Child: hwn'di torri, do?
this PERF break pOS.PERF 'this broken, yes?'
Adult: naddo, naddo, na.
NEG.PERF NEG.PERF no
'no, no, no.'
b. Child: hwnna wedi malu.
that PERF break
'that broken.'
Adult: naddo.
'no.'
32 a. Child: 'di malu.
PERF break
'broken.'
Adult: naddo.
'no.'
b. Child: wedi syrthio,, do.

PERF fall POS.PERF
'fallen, yes.'

Adult: naddo.
'no.'

We can also include here responsives to previous utterances which are solely a perfective responsive - either to naddo 'no' or to the positive version do 'yes'. The wider discourse context shows that these utterances are themselves responsives to previous perfective phrases. Examples from the Welsh of the adults are given in (33).


Child: do.
'yes.'
Adult: naddo.
'no.'
b. Adult: ti ddim 'di gweldMister+Blaidd,, naddo?
you.SG NEG PERF see Mister+Wolf NEG.PERF
'you haven't seen Mister Wolf, have you?'
Child: naddo.
'no.'
Adult:: naddo?
'no?'
c. Child: 'di malu.

PERF break
'broken.'
Adult: naddo.
'no.'
Child: do.
'yes.'
Adult: naddo.
'no.'
Child: do.
'yes.'
Adult: naddo.
'no.'

As can be seen form the example in (33c), these responses can form a long chain. It is not entirely clear whether the ultimate perfective responsive in a chain of perfective responsive refers to the immediately preceding perfective responsive or to the initiating perfective phrase. But whatever the judgement on this matter, such responsives are well-formed.

There are examples of perfective responsives in the Welsh of the adults in which the immediately preceding utterance does not meet the perfective condition. But the wider discourse shows that there is an earlier initiating perfective phrase.

```
34 a. Adult1: ti 'di cael llaeth bore 'ma?
    you.SG PERF have milk morning here
    'have you had milk this morning?'
    Child: ie.
        'yes.'
    Adult1: i' frecwast?
        for breakfast
        'for breakfast?'
    Adult2: naddo.
    'no.'
b. Adult: dw iddim 'di cuddiad eto.
    be.PRES.1SG I NEG PERF hide yet
    'I haven't hidden yet.'
Child: ie.
    'yes.'
```

Adult: naddo.
'no.'
c. Adult: ti 'di bod yn torri gwallt rhywun,, do.
you.SG PERF be prog cut hair someone neg.perf
'you've been cutting someone's hair.'
torri gwallt llew?
cut hair lion
'cutting lion's hair?'

Child: na.
'no.'
Adult: naddo?
'no.'

In (34a), the immediately preceding utterance is a fragment but frequent preceding phrases are the positive non-verbal responsive ie in (34b) and the non-preverbal particle $n a$ in (34c). There are also examples of initiating phrases by a child whose syntax does not meet the perfective condition but which are interpreted by the adult as if they do (as the transcriber's note in (35c) indicates).

35 a. Child: Ginger malu fo.
Ginger break it
'Ginger break it.'
Adult: Ginger malu fo.
Ginger break it
naddo.
'no.'
b. Child: mae malu.
be.PRES.3SG break
lit. 'is break' amounting to 'it is broken.'
Child: yli.
see.IMPV.2SG
'look.'
Adult: naddo,,,'dy 'o ddim 'di malu.
NEG.PERF be.PREs.3SG it NEG PERF break
'no, it hasn't broken.'
c. Child: <hwnna malu> [//] Anti+S---,, hwnna malu [\% meaning hwnna wedi malu].

Anti+S--- that break
'Antie S--, that break.' amounts to 'that is broken.'
Adult: naddo.
'no.

There are examples of the use of naddo in the children's Welsh which follows the usage of the adults. The perfective condition is met by the past perfect tense in (36) and the perfect aspect and present tense in (37); by the perfect aspect in the small clause in (38); to other responsives with an initiating perfective phrase in the wider discourse in (39).

36 a. Adult: wnest ti helpu Mam sychu 'o,, do?
do.PERF.2SG you.SG help Mother dry it pOS.PERF
'you helped Mum dry it, didn’t you?’ lit. ‘... , yes?'
Child: naddo.
'no.'
b. Adult: fuest ti 'n helpu Dad?
be.PERF.2SG you.SG PROG help Dad
'were you helping Dad?'
Child: naddo.
'no.'
37 a. Adult: ydy 'o wedi bod ynl y bath?
be.PRES.3SG he PERF be in the bath
'has he been in the bath?'
Child: naddo.
'no.'
b. Adult: ti 'di gorffen?
you.SG PERF finish
'have you finished?'
Child: naddo,,, dim eto.
NEG.PERF NEG yet
'no, not yet.'
38 Child: olwynion wedi torri.
wheels PERF break
'wheels broken.'
naddo,,, $x x$, naddo.
NEG.PERF XX NEG.PERF
'no, xx, no.'
39 a. Adult: ydyn' $n h w$ 'di brifo?
be.PRES.3PL they PERF hurt.'
'have they been hurt?'
Child: do.
'yes.'
Adult: do?
'yes?'
Child: naddo.
'no.'
b. Adult1: wyt ti 'di cal ffisig at yr annwyd? be.PRES.3SG you.SG PERF have medicine to the cold 'have you had medicine for the cold?'

Adult2: $n a[>]$.
'no.'
naddo.
‘no.'
Child: naddo.
'no.'

However, there are also examples of naddo in the children's Welsh where there is no target in the discourse which satisfies the perfective condition. Examples are given in (40).

40 a. Child: fi gwagio [=? cadw] nhw.
I empty keep they
'I empty (keep?) them.'
Adult: $t i \quad$ 'n mynd $i$ ' cadw nhw?
you.SG PROG go to keep they
'are you going to keep them?'
Child: naddo,,, w i gwagio nhw.
NEG.PERF be.PRES.1SG I empty they
'no, I empty them.'
b. Adult: na,,, wneith 'o aros yfanna.
no do.FUT.3SG it stay there
'no, it will stay there.'
oes 'na lori arall?
be.PRES there lorry other
'is there another lorry?'
beth am $y$ trailer crane yna?
what about the trailer crane there
'what about that trailer crane?'
Child: naddo.
'no.'
c. Adult: lle mae hon yn mynd?
where be.PRES.3SG this PROG go
'where does this go.'
Child: mewn yfanna.
in there
'in there.'
Adult: $i e$ ?
'yes?'

Child: yfama,,, naddo.
here NEG.PERF 'here, no.'

### 2.2.2 Tag

Naddo tags negative finite clauses of normal order. It is used under the perfective condition explained in section 2.2.1. All the examples in (41) and (42) are from the adults' Welsh.

41 a. a'th $e$ ddim allan,, naddo?
go.PERF.3SG he NEG out NEG.PERF
'he didn't go out, did he?'
b. naethon ni ddim gweld G---,, naddo?
do.PERF.1PL we NEG see G--- NEG.PERF
'we didn't see G---, did we?'
42 a. dan ni ddim 'di gorffen darllen y llyfr eto,, naddo.
be.PRES.1PL we NEG PERFfinish read the book yet NEG.PERF
'we haven't finished reading the book yet, have we.'
b. $t i \quad$ ' $m$ 'di dangos hwnna o+r+bla'n,, naddo?
you.SG NEG PERF show that before NEG.PERF
'you haven't shown that before, have you?'

There are examples of naddo tagging sentence fragments which do not contain the perfect aspect but the wider discourse context suggests that there is a more distant trigger for naddo.

43 a. Adult1: fuest $t i$ ' $n$ aros gyda Taid?
be.PERF.2SG you.SG PROG stay with Grandfather
'were you staying with Grandad?'
Child: ie [>].
'yes.'
Adult2: [<]<na>,,, ddim gyda Taid,, naddo?
no NEG with Grandfather NEG.PERF
'no, not with Grandad, no.'
b. Adult1: ti 'di bod ar gefn ceffyl? [Question to child]
you.SG PERF be on back horse
'have you been on a horse?'

Adult2: naddo,,, ddim eto,, naddo.
NEG.PERF NEG yet NEG.PERF
'no, not yet, no.'
c. Adult: uh be $d w \quad i$ 'di wneud?
uh what be.pres. 1 SG I PERF do
'uh what have I done?'
Child: hitio.
'hit.'
Adult: hitio,, naddo.
'hit, no.'
d. Adult: $s^{\prime} a \quad i$ wedi gweld rhein gyda neb arall.
be.PRES.NEG I PERF see these with no-one other
'I haven't seen these with anyone else.'
Child: neb?
'no-one?'
Adult: neb,, naddo.
no-one NEG.PERF
'no-one, no.'

There is one example of naddo tagging a finite clause which contains neither a perfect tense verb nor the perfect aspect.

44 dyn' nhw ddim yn mynd $i^{\prime}$ fwyta fo,, naddo.
be.PRES.3PL they NEG PROG go $t$ eat it NEG.PERF
'they're not going to eat it, are they?'
@ Bck: meaning they haven't eaten it.

The transcriber's note indicates that perfective meaning is intended but the syntax is not perfective. This could be seen as a performance error.

There are only three examples in the corpus from the Welsh of the children which have naddo in a taglike position. The tagged phrases are all fragments but none of them supply the perfective condition.

45 a. Child: olwynion wedi torri.
wheels PERF break 'wheels broken.'
naddo,,, xx,, naddo.
NEG.PERF xx NEG.PERF
'no, xx, no.'
b. Child: oh hwnna cau,, naddo.
oh that close neg.perf
'oh that close, no.'
\%com: maybe saying that this doesn't close but the use of naddo is a bit odd.
c. Child: xxx colli olwynion,, naddo[/] naddo.
xxx lose wheels NEG.PERF
'xxx lose wheels, no.'
Adult: naddo [\% although not understanding].
'no.'

Example (45a) contains both a responsive (before ,,, and a tag (after ,,) but the tagged phrase is missing data represented by $x x$. In this example, the wider discourse context provides a trigger for naddo. The transcribers observation in (45b) points to a use of naddo which is not triggered by anything in the clause or the discourse. Example (45c) also contains missing data in the tagged phrase, which makes it impossible to determine whether the perfective condition applies.

### 2.2.3 Frequencies

Table 5.10 gives the frequencies for naddo as a responsive or as a tag for both the adults and the children.

Table 5.10. Frequencies for naddo as responsive or tag in the adults' and the children's Welsh

|  | Adults | Children |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Responsive | 54 | $69.23 \%$ | 23 | $88.46 \%$ |
| Tag | 24 | $30.77 \%$ | 3 | $11.54 \%$ |

The frequencies show that the adults use naddo more as a responsive than as a tag. This is also the case in the children's Welsh but they have a far greater use of naddo as a responsive and a much smaller use of naddo as a tag.

Table 5.11 gives the details of the extent to which the use of naddo meets the perfective condition in responsives in the Welsh of the adults and the children.

Table 5.11. The perfective condition in responsives in the adults' and the children's Welsh

|  |  |  | dults |  | hildren |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Immediate Perfective | past tense | 1 |  | 2 |  |
|  | present and perfect | 8 |  | 11 |  |
|  | small clause | 2 |  | 1 |  |
|  | fragment | 4 |  | 0 |  |
|  | responsive | 14 |  | 4 |  |
|  |  | 29 | 53.70\% | 18 | 78.26\% |
| Distant perfective | present tense | 0 |  | 1 |  |
|  | small clause | 2 |  | 0 |  |
|  | fragment | 3 |  | 0 |  |
|  | wh-clause | 1 |  | 0 |  |
|  | extra-linguistic | 2 |  | 0 |  |
|  | imperative | 1 |  | 0 |  |
|  | responsive | 16 | 46.30\% | 0 | 4.35\% |
|  |  | 25 |  | 1 |  |
| Non-perfective | present tense | 0 |  | 1 |  |
|  | small clause | 0 |  | 0 |  |
|  | fragment | 0 |  | 0 |  |
|  | wh-clause | 0 |  | 1 |  |
|  | extra-linguistic | 0 |  | 1 |  |
|  | imperative | 0 |  | 0 |  |
|  | responsive | 0 |  | 1 |  |
|  |  | 0 | 0\% | 4 17.39\% |  |
| Grand totals |  | 54 |  | 23 |  |

The adults follow the perfective condition, which is either triggered in the immediately preceding utterance or is provided by a more distant utterance in the discourse or is assumed by the adults. The children, too, generally operate the perfective condition but there are examples of the use of naddo for which there is no obvious perfective trigger.

The frequencies of the use of naddo in tag positions are given in table 5.12.

Table 5.12. Naddo in tag position in the Welsh of the adults and the children

|  | Adults |  | Children |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Negative, perfect tense | 5 | $20.83 \%$ | 0 | $0 \%$ |  |
| Negative, present tense, perfect aspect | 13 | $54.17 \%$ | 0 | $0 \%$ |  |
| Negative, present tense, non-perfect | 1 | $4.17 \%$ | 0 | $0 \%$ |  |
| Negative fragment non-perfect | 3 | $12.5 \%$ | 0 | $0 \%$ |  |
| Positive fragment non-perfect | 2 | $8.33 \%$ | 3 | $100 \%$ |  |
|  | 24 |  | 3 |  |  |

The Welsh of the adults mainly follows the conditions for the use of naddo from the properties of the tagged clause or, in the case of fragments, from a more distant clause in the discourse. Given the very low frequencies of naddo as a tag in the children's Welsh, there is very little evidence to suggest that they have acquired this use of naddo. This acquisition demands an understanding of clausal syntax in terms of tense, aspect and polarity. However, there is evidence from their use of naddo as a responsive that they are aware of the perfective condition.

## 3 Negative pronouns

The negative pronouns in the adults' Welsh are dim byd (also 'm+byd) 'nothing', neb 'no one' and nunlle 'nowhere'. Their frequencies are given in table 5.13.

Table 5.13. Frequencies of the negative pronouns in the adults' and children's Welsh

|  | Adults |  | Children |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Dim byd | 55 | $71.43 \%$ |  | 18 | $72.00 \%$ |
| Neb | 19 | $24.67 \%$ |  | 7 | $28.00 \%$ |
| Nunlle | 3 | $3.90 \%$ | 0 | $0.00 \%$ |  |
|  |  | 77 |  | 25 |  |

There are fewer instances of negative pronouns in the children's Welsh but the percentages indicate that the usage is broadly similar: dim byd 'nothing' is the most frequent by far, followed by neb with nunlle very infrequent, amounting to zero in the Welsh of the children.

Negative pronouns occur in four clausal contexts in the language of the adults. First, dim byd and neb occur as indefinite subjects in finite clauses with either a finite lexical verb or the copula.

46 a. 's dim+byd ynl y bocs.
be.PRES nothing in the box
'there's nothing in the box.'
b. eith neb $i$ ' $r$ Spar.
go.FUT.3SG no one to the Spar
'no one will go to the Spar.'
c. o'dd dim neb yna,, nag o'dd e?
be.PRES.3SG NEG no one there NEG be.PRES.3SG he
'there was no one there, was there?'

Example (46c) shows that neb can be precede by quantifier dim, which as we have seen in chapter 3 precedes indefinite nominal phrases. We can also include, as subjects, phrases which follow existential yna 'there' in copular clauses as shown in (47), transposed subjects in possessive clauses as illustrated in (48), and subjects in small clauses as shown in (49).

47 a.d oes 'na ddim+byd yna.
NEG be.pres there nothing there
'there's nothing there.'
b. $d$ oes 'na neb yn'o fo,, na?

NEG be.PRES there no one in.3SG.m it no
'there's no one in it, no.'
neg be.Pres with I nothing other K--'I haven't got anything else, K---.'

49 a. dim+byd ynl y bocs.
nothing in the box
'nothing in the box.'
b. neb yn dreifio 'r ceir.
no one PROG drive the cars
'no one driving the cars.'

Second, negative pronouns can occur as objects to finite verbs, although there are only two examples of dim byd in the Welsh of the adults.

50 a. chei di 'm+byd wedyn.
have.Fut.2sG you.SG nothing afterwards
'you'll get nothing after.'

## b. gei di ddim+byd. <br> have.FUT.2sG you.SG nothing <br> 'you'll get nothing.'

Third, negative pronouns also occur in other positions in finite clauses. When outside the positions of subject or object, the clause is a negative one, as the examples in (51) show. In this respect, they are like phrases which are formed by dependent quantifier $\operatorname{dim}$ (as outlined in section 2.4 in chapter 3 ).

51 a. $d$ Norman 'im yn gallu gweld dim+byd nawr. neg be.pres.3sg Norman neg prog can see nothing now
'Norman can't see anything now.'
b. oh s'o ti 'n mynd $i^{\prime}$ bag neb,, na.
oh be.neg.PRES you.SG PROG go to bag no one no
'oh you don't go into bag anyone, no.'
c. $d w \quad i d d i m$ mn myd $i^{\prime}$ nunlle.
be.pres.1sG I neg prog go to nowhere
'I'm not going anywhere.'

Fourthly, they occur as one-word fragments (which may include modification as in (52a)).

52 a. neb arall.
no one other
'no one else.'
b. dim+byd.
'nothing.'

Example (50a) shows that the finite verb is aspirate mutated. This can be interpreted as an indication of clausal negation. But aspirate mutation does not always occur as example (50b) shows, in which the verb is soft-mutated - which is canonical in declarative clauses. There are only four examples in the corpus which would allow aspirate mutation and only two show the aspirate mutation.

The frequencies for the negative pronouns in these contexts are given in table 5.14.

Table 5.14. Frequencies of negative pronouns in the adults' Welsh

|  | dim byd | neb | nunlle | totals |
| :--- | ---: | ---: | ---: | ---: |
| Subject | 28 | 13 | 0 | 41 |
| Object | 4 | 0 | 0 | 4 |
| Other positions | 4 | 2 | 3 | 9 |
| One-word fragment | 19 | 4 | 0 | 23 |
|  | 55 | 19 | 3 | 77 |

There are only three examples of nunlle 'no where' and its semantics make it more common for it to occur in an adjunct position. Subject position overall is the most common position and dim byd 'nothing' is the most common negative pronoun.

Examples of negative pronouns in the children's Welsh are given in (53-56). Subject position (in a small clause) is shown in (53), another clausal position is illustrated in (54), one-word fragments in (55), and missing data, represented by $x x$, prevents a clear account of the examples in (56). Example (54) follows the rule that a negative pronoun outside a subject or object position occurs in a negative phrase, in this case indicated by dim.

53 a. dim+byd ar y fideo.
nothing on the video
'nothing on the video.'
b. dim neb yna.

NEG no-one there
'no-one there.'
54 dim $y n$ cael ddim+byd $i+f y n y$ \&fan $+\ldots$
NEG PROG have nothing up
'not having anything up (there [unfinished]) ....'
55 a. dim+byd.
'nothing.'
b. neb.
'no-one.'
56
$x x$ dim+byd yfanna 'te.
xx nothing there then
'xx nothing there then.'

Quantifier dim occurs with neb in (53b).

The frequencies for the negative pronouns in the children's Welsh in the various contexts are given in table 5.15.

Table 5.15. Frequencies of negative pronouns in the children's Welsh

|  | dim byd | neb | nunlle | totals |
| :--- | ---: | ---: | ---: | ---: |
| Subject | 4 | 2 | 0 | 6 |
| Object | 0 | 0 | 0 | 0 |
| Other positions | 1 | 0 | 0 | 1 |
| One-word fragment | 12 | 5 | 0 | 17 |
| Missing data | 1 | 0 | 0 | 1 |
|  | 18 | 7 | 0 | 25 |

There are no examples of a negative pronoun in an object position and only one example of a negative pronoun, namely, dim byd 'nothing', in a position other than subject or object, given in (54). The children mainly use dim byd 'nothing' and fragments are the main phrases in which both dim byd 'nothing' and neb 'no one' occur.

Negative pronouns are indefinite nominal phrases and they share the distribution of quantifier dim, which is outlined in chapter 3. (We see in examples (46c) and (53b) that quantifier dim can occur (optionally) before neb 'no one'.). Examples of negative indefinite nominal phrases are given in chapters 3 and 4 but examples are provided here for convenience.

57 a. a fydd dim dwr yna wedyn $i^{\prime}$ ti gal bath. and be.fut.3SG NEG water there afterwards for you.SG have bath 'and there will be no water afterwards for you to have a bath.'
b. gei di ddim toys gin mam ... have.fUT.2SG you.SG NEG toys with mother 'you won't get any toys off mum ...'
c. ne'st ti ddim byta dim cinio?
do.PERF.2SG you.SG NEG eat NEG dinner 'didn't you eat any dinner.'
d. na,,, dim babi.
no NEG baby
'no, no baby / not a baby.'

Examples from the children's Welsh are given in (58).

58 a. dim eliffant yna.
NEG elephant there
'no elephant there.'
b. na,,, dim blocs.
neg neg blocks
'no, no blocks.'

Table 5.16. gives the frequencies of negative pronouns and negative indefinite nominal phrases in the Welsh of the adults and the children.

Table 5.16. Negative pronouns and negative indefinite noun phrases in the adults' and children's
Welsh

Adults
Children
Pronouns Noun Phrases Pronouns Noun phrases

| Subject | 41 | 162 | 6 | 7 |
| :--- | ---: | ---: | ---: | ---: |
| Object | 4 | 4 | 0 | 0 |
| Other positions | 9 | 3 | 1 | 0 |
| One-word fragment | 23 | 111 | 17 | 20 |
| Focus phrase | 0 | 86 | 0 | 10 |
| Missing data | 0 | 0 | 1 | 2 |
| ???? | 0 | 7 | 0 | 4 |
|  | 77 | 373 | 25 | 68 |

Given the total of all negative nominal phrases in the adults Welsh (450), negative pronouns amount to $17.11 \%$ while in the children's Welsh they amount to $26.88 \%$ (based on total of 93 ). Proportionally, the children make more use of negative pronouns than the adults.

## 4 Heb

In the adults' Welsh, heb 'without' occurs as a preposition before a nominal phrase (including pronouns) or before an infinitive. It negates the phrase. Before a personal pronoun, it inflects for person, number and, in the case of the third person singular, gender - as (59b) shows, which is singular, third and masculine. Heb is also a trigger for the soft mutation as (59a) and (59b) show.

59 a. wneith 'o 'm dod off heb ddw:r.
do.fut.3SG it neg come off without water
'it won't come off without water.'
b. alli di fyw hebddo fe,,'te.
can.PRES.2SG you.SG live without.3sG.m it then
'you can live without it, then.'
c. dyn' nhwddim yn mynd i+lawr heb gau drws.
be.PRES.3PL they NEG PROG go down without close door
'they cannot go down without closing the door.'
$H e b$ also occurs as a perfect aspect marker.

60 a. $d w$ heb weld $L---o+r+b l a e n$.
be.PRES.1SG I without see L--- before
'I haven't seen L--- before.'
b. ti heb cael cinio heddiw, naddo, M---?
you.SG without have dinner today, no, M---
'you haven't had dinner today, no M---?'

As a perfect aspect marker it negates the clause, as the negative tag in example (60b) indicates. That is, heb is equivalent to adverbial dim and the perfect aspect marker wedi, which is illustrated by the examples in (61).

61 a. $d w \quad i d d i m$ wedi gweld $y$ mwnci $o+r+$ blaen. be.PRES.1SG I NEG PERF see the monkey before
'I haven't seen the monkey before.'
b. $i e$, ,, $d$ hwnna ddim wedi cal pynctiwr,, nag yw e? yes neg be.pres.3sG that neg perf have puncture neg be.pres.3sG it 'yes, that hasn't had a puncture before, has it?'

The adverbial and the perfect aspect are more frequent than heb 'without'. There are 87 examples of the adverbial ddim co-occurring with the perfect aspect marker wedi in the Welsh of the adults compared with five examples of heb as a perfect aspect marker.

The frequencies for these occurrences of heb are given in table 5.17.

Table 5.17. The frequencies of heb 'without' in the adults' Welsh

| Before nominal phrase | 13 |
| :--- | ---: |
| Before infinitive | 3 |
| Aspect marker | 5 |
|  | 21 |

There are no examples of heb 'without' in the Welsh of the children and there are only two examples of adverbial $d d i m$ and the perfect aspect marker wedi in their Welsh.

62 a. dim wedi torri,, na?
neg perf break neg
'not broken, no?'
b. na,,, fi ddim wedi blino.

NEG I NEG PERF tire 'no, I'm not tired.'

## 5 Negative adverbs

There are two words in Welsh which can occur as negative adverbs, namely erioed '(n)ever' and byth '(n)ever'. In brief, erioed occurs with past time reference and byth occurs with non-past reference but byth has another use, as we shall see. Chart 5.1 shows that there are only a small number of examples in the corpus, namely seven examples of erioed and three examples of byth. There are no examples of either in the children's Welsh.

### 5.1 Erioed

In a copular clause which contains the perfect aspect (and typically the present tense or past imperfect tense) erioed can occur in post-subject position and negates the clause as in (63a-d), similar to adverbial dim. That the clause is negative is shown by the occurrence of negative tags as in ( $63 \mathrm{a}, \mathrm{b}, \mathrm{d}$ ).

```
63 a. ti erioed 'di bod ar awyren,, naddo.
    you.2SG never PERF be on aeroplane NEG.PERF
    'you've never been on an aeroplane, have you?'
    b. ti erioed 'di bod yn fflio mewn awyren,, naddo?
    you.SG never PERF be PROG fly in aeroplane NEG.PERF
    'you have never been flying in an aeroplane, have you?'
```

c. dan ni erioed 'di gweld Bill <ar teli>[<].
be.PRES.1PL we never PERF see Bill on tele
d. $d w \quad i$ erioed 'di wneud,, $S--$.
be.PRES.1sG I never PERF do S---
'I have never done (that), S---.'
e. $t i$ erioed yn mynd $i$ ' isda ynl coets bach,,na 'dy.
you.sG never PROG go to sit in pram little neg be.Pres.3SG
'you are never going to sit in the little pram, are you.'

The example in (63e) is a non-perfect example and erioed is unexpected. It is an example which expresses surprise (also common in English) and byth could be used for this purpose, too.

Erioed is also used as a positive adverb, 'ever', in clause-final position. There is only one example in the Welsh of the adults.

```
64 dim y playdough gorau dw i di wneud erioed.
    NEG the playdough best be.PRES.1SG I PERFmake ever
    'it's not the best playdough that I have ever made.'
```

Some speakers can also use erioed as a positive adverb in post-subject position. This gives rise to possible ambiguity which is seen in the exchange in the example in (65).

65 Child: tre:nchw@ochw+chw@o.
'train choo-choo.'
tre:n 'dy hwn, tre:n [=! chw chw].
train be.PRES.3sG this train
'this is a train, this.' lit. 'train is this, train.'
Adult: chw@o.
ti erioed 'di bod ar tre:n?
you.SG ( n )ever PERF be on train
'have you (n)ever been on a train?'

This example can be translated as 'have you never been on a train?' or 'have you ever been on a train?'. A comparison of (63b) and (65) is instructive. Both are questions but the tag in (63b) indicates that the clause is negative.

There are no example of erioed in the children's Welsh.

### 5.2 Byth

There is only one example of byth as a negative adverb and that occurs as a one-word phrase as response to previous dialogue, as the exchange in (66) shows.

```
6 6 ~ A d u l t : ~ t i ~ ' n ~ m y n d ~ i ' ~ s i o p a ~ e f o ~ M a m ~ w e i t h i a u .
    you.SG PROG go to shop with Mother sometimes
    'you go to shop with Mum sometimes.'
```

Child: na dw.
NEG be.PRES.1SG
'no.'
Adult: na,,, byth.
'no, never.'

But it is also used as an intensifier which modifies an adjective as the examples in (67) show.

67 a. o's saws siocled ar 'i ben $e$ ?
be.PRES sauce chocolate on CL.3SG.M head it
'is there chocolate sauce on it?'
oh gwell fyth.
oh better ever
'oh better still.'
b. hei wnaeth un yna yn mynd yn3 bellach byth,, do. hey do.PERV.3SG one there PROG go ADV further still, yes 'hey that one went further still, didn't it.'

The occurrence of byth as an intensifier in (67b) is well-formed but the occurrence of the progressive marker is erroneous and can be viewed as a performance error.

There no examples of byth in the Welsh of the children.

## 6 Negative co-ordinator na2 and chwaith

6.1 Negative co-ordinator na2

There is only a small number of the negative co-ordinator na 'nor', which is a homonym and is spelled as $n a 2$ in the corpus. It also occurs as nag before vowels in the corpus (nac is favoured in formal Welsh), spelled as nag2 in the corpus to distinguish it from other forms which occur as nag.

There are nine examples of na2 in the Welsh of the adults. Three occur in medial position in which it co-ordinates two phrases.

68 a. wneith 'o 'm isda na2 sefyll.
do.FUT.3sG it NEG sit nor stand
'it will not sit (n)or stand.'
b. $d \quad y d w \quad i \operatorname{na2}$ 'r $L---$ ddim yn gallu ffeindio hwyaden ar y tudalen yma. NEG be.PRES.1SG I nor the L--- NEG PROG can find duck on the page here 'me nor L--- can find a duck on this page.'
c. na,,, ddim fod cadw swn na2 crio.
no NEG be keep noise nor cry
'no, not supposed to make a noise (n)or cry.'

Six occur preceding a phrase, which is co-ordinated with another phrase occurring previously in the discourse. Illustrations are given in (69).

69 a. na,,, $t i \quad d d i m$ yn sgwennu yfanna chwaith.
no you.SG NEG PROG write there neither
'no, you don't write there neither.'
na2 yfanna.
'nor there.'
b. Adult1:ti 'di bod yn nofio 'n3 ddiweddar? you.SG PERF be PROG swim ADV late 'have you been swimming lately.'

Adult2: naddo.
'no.'
Adult1: na2 G---.
'nor G---
c. Adult: ond oes 'na ddim llygoden ynl ty: Marisa,, o's e? but be.PRES there NEG mouse in house M--- be.PRES it 'but there isn't a mouse in M---‘s house, is there?'

Child: na.
'no.'
Adult: nag oes. NEG be.PRES
'no.'

```
nag2 ynl ty: G-- $gobeithio$.
nor in house G--- hope
'nor in G---'s house, I hope.'
```

There are four examples in the children's Welsh and they are all produced by the same child. But there is some uncertainty as to whether the child is using the positive co-ordinator $a$ 'and' rather than the negative co-ordinator na2. The comment in the following example illustrates this.

```
70 Child: na a 'sanne [% she's trying to say nor socks either].
    no and socks
    'no and socks.'
    Adult: na2 'sanne,,na.
    nor socks no
    'nor socks, no.'
```

They all co-ordinate with a previous phrase in the discourse, as illustrated in (71).

71 a. Adult: s'a $i$ ' $n$ licio llygoden.
be.nEG I PROG like mouse
'I don't like a mouse.'
wyt $\quad t i$ ?
be.PRES.2SG you.sg
'do you?'
Child: 'a2 $M---$
'nor M---.'
Adult: na.
'no.'
Child: 'a2 D--- 'a2 mam.
'nor D--- nor mum.'
b. Adult: 'im $i$ ' fod cadw swn.

NEG to be keep noise
'not supposed to make a noise.'
Child: 'a2 crio.
'nor cry.'

In these examples $n a 2$ is transcribed as ' $a 2$. The context suggests that $n a 2$ is appropriate. But ' $a 2$ is a homonym with the positive co-ordinator $a$ 'and' and it is not clear whether the child has fully acquired
$n a 2$ 'nor' or whether the child is using $a$ 'and'. The very small number of examples and their use by only one child indicate that na2 has not been fully acquired.

### 6.2 Chwaith

The adverb chwaith translates into English as '(n)either'. It is an adverb which co-ordinates negative phrases in the discourse. It occurs in phrase-final position. Its positive equivalent is hefyd 'also'. There are 48 examples in the Welsh of the adults, all occurring in phrases which contain a negative element. The most frequent negative element by far is the adverbial negator dim .

72 a. Adult: na,,,ti ddim isio mochyn yna.
no you.SG NEG want pig there
'no, you don't want that pig.'
beth am [\% show her another animal]?
'what about?'
Child: na.
'no.'
Adult: ti ddim isio hwn chwaith?
you.sG NEG want this neither
'you don't want this either.'
b. Child: <'im liciome:me:@c>[/] 'im licio me:me:@c [\%handing back the sheep].
neg like me-me
'not like me-me.'
Adult: ti ddim yn licio me:me:@c chwaith?
you.SG NEG Prog like me-me neither
'you don't like me-me either'
c. Adult: ti erioed 'di bod yn fflio mewn awyren,, naddo?
you never PERF be prog fly in plane NEG.PERF
'you've never been flying in an aeroplane, have you?'
$n a,,{ }^{d} \quad y d w \quad i d d i m$ chwaith.
no neg be.pres.1sG I neg neither
'no, I haven't either.'

Chwaith also occurs in final position in a phrase which contains na2 'nor'.

73 a. Adult: $a$ ti $m$ yn lico pan ma' hi 'n2 dywyll dywyll. and you.SG NEG PROG like when be.PRES.3SG it PRED dark dark 'and you don't like it when it's dark.'
$n a$.
'no.'
'na2 G--- chwaith.
'nor G--- either.'
b. Adult: $t i \quad$ ' $m$ yn licio $n h w$ ?
you.SG NEG PROG like they
'you don't like them?'
Child: na.
'no.'
Adult: [=!whispers] na2 G--- chwaith.
nor G--- neither
'nor G--- either.'

There are only five examples in the Welsh of the children, all given in (74).

74 a. <hwnna ffitio> [/] hwnna x ffitio gwaith1 [= @c chwaith].
that x fit never
'that x fit neither.'
b. hwn yn ffitio hefyd [/] \# hefyd.
this PROG fit also
'this fitting also.'
hwn'im yn ffitio chwaith.
this NEG PROG fit neither
'this not fitting either.'
c. Adult: mae 'o 'n2 neis [\% misunderstanding]?
be.PRES.3SG it PRED nice
'it's nice.'
Child: na 'dy,,, dim yn ffitio chwaith.
NEG be.PRES.3SG NEG PROG fit neither no, not fitting either.'

Adult: dim yn ffitio chwaith.
NEG PROG fit neither
'not fitting either.'
@ Bck: she is not satisfied that this man will sit in the boat right.
d. ww coets syrthio gwaith1 [= @c chwaith].
ooh pram fall neither
'ooh pram fall neither.'
\%com: chwaith , I think , is meant here although not really appropriate as she seems to mean again.
e. hwn yn ffitio chwaith.
this prog fit neither
'this fitting neither.'
\%com: this is a negative utterance with no negative marking and chwaith used correctly- dydy hwn ddim yn ffitio chwaith. Erin cannot fit a particular person into the motor bike because the steering handle is across the sitting position.

All five examples are produced by the same child at 18,26 and 27 months. Not all these examples are negative phrases and it is clear from the transcribers' comments that the child has not fully acquired the adult use of chwaith.

## 7 Summary

Chart 5.1 and 5.2 provide the frequencies of the negative words in the Welsh of the adults and the children respectively.


The negative word peidio is the most frequent followed by nage with the remainder having much lower frequencies, some in single figures.

Chart 5.2 gives the frequencies of the negative words in the children's Welsh.


A comparison of the two charts shows that the children mainly follow the general ordering in the language of the adults in that peidio and nage are the most frequent followed by dim byd 'nothing'. There are three main differences. First, nage is the most frequent in the language of the children while peidio is the most frequent in the language of the adults. Second, some of the negative words do not occur in the Welsh of the children, which reflects their low frequencies in the input language. Third, it is not clear in some instances whether the function of a negative word is fully understood by a child.

## Chapter 6 Longitudinal Paths and Rules of Acquisition

All examples are taken from the Welsh of the adults and the children in the corpus unless otherwise indicated.

In this chapter, we shall concentrate on those negative words which occur in the language of the children and their occurrences in the language of the adults, namely, as ordered alphabetically, chwaith, dim, dim byd, na, na2, naddo, nage, neb, and peidio. Previous chapters have discussed individual words but in this chapter we shall consider groups of words, including one-member groups:

- responsives / tags, namely, na, nage, and naddo
- pronouns, namely, dim byd and neb
- co-ordination group chwaith and na2
- dim
- peidio

The individual words within the groups will also be considered. The negative preverbal particles $d / t$ also occur in the Welsh of the children and these are considered in section 3.3.2 under the account of dim.

## 1 Overview: all groups of negative words

As an initial and very general view of the systems of negation in the Welsh of the adults and the children, table 6.1 gives the overall frequencies of the groups of negative words, organized in descending order.

Table 6.1. Frequencies of groups of negative words in the adults' and children's Welsh
Adults Children

| responsives / tags | 2501 | $46.39 \%$ | 1779 | $76.48 \%$ |
| :--- | ---: | ---: | ---: | ---: |
| dim | 2427 | $45.02 \%$ | 459 | $19.73 \%$ |
| peidio | 329 | $6.10 \%$ | 54 | $2.32 \%$ |
| pronouns | 77 | $1.43 \%$ | 25 | $1.08 \%$ |
| co-ordination | 57 | $1.06 \%$ | 9 | $0.39 \%$ |
|  | 5391 |  | 2326 |  |

A graphic display of the percentages is given in chart 6.1.


In both the adults' Welsh and the children's Welsh, responsives / tags and dim are far more frequent than the other systems. But the children make far greater use of the system of responsive and tags while in the Welsh of the adults responsives / tags and dim are almost equal. That is, the adults make far greater use of dim than the children.

The longitudinal paths of the groups of negative words in the Welsh of the adults and the children are given in charts 6.2 and 6.3 , which show average frequencies over the age range of the project.



The chart for the adults shows that the dominance of dim and the responsives / tags, almost equal, is maintained over the three years of the project so that the input for the children remains constant. Matters are different in the Welsh of the children. Again dim and the responsives / tags are more frequent than the other words but the responsives / tags are the most frequent while dim is considerably less frequent over the period of the project. Further, the responsives / tags are the most frequent at the outset of the age range of the project and it is therefore reasonable to conclude that this group is well-established before all other negative words. In brief, the acquisition of the responsive / tag group is the initial stage of the acquisition of negation in Welsh. But further distinctions can be made about this group.

## 2 Responsives and tags

### 2.1 Longitudinal paths

The developmental paths of the members of the responsives / tags group are given in charts 6.4 to 6.7 in the language of the adults and the children.


A clearer picture of naddo and nage is given for the adults in chart 6.5 .


Both charts show that na, naddo and nage all occur in the Welsh of the adults over the span of the project but that $n a$ is considerably more frequent than naddo and nage.

The charts for the children's Welsh are given in 6.6 and 6.7.


The charts for the children's Welsh show that $n a$ is the earliest and the most frequent and that naddo and nage are much less frequent and emerge later in the span of the project. There are two reasons for this, which we discuss in section 2.3. But before then we shall look at the syntactic relationship, if any, between non-preverbal $n a$ and preverbal $n a$.

### 2.2 Non-preverbal $n a$ and preverbal $n a$ : constituency

The details of the longitudinal paths of non-preverbal $n a$ and preverbal $n a$ in the Welsh of the adults and the children are given in charts 6.8 and 6.9.


In the Welsh of the adults, both preverbal $n a$ and non-preverbal $n a$ occur over the period of the project but non-preverbal $n a$ is more frequent by far. This input remains constant until the last month when the frequency of preverbal na increases. The picture is different in the Welsh of the children. Non-preverbal $n a$ is well-established at the outset of the project; preverbal na emerges later and is less frequent overall although its frequency increases in the later months of the project.

In the grammar of adult Welsh, in which both preverbal and non-preverbal na consistently occur, it is reasonable to consider non-preverbal $n a$ as an ellipsed version of preverbal $n a$ by omitting the verb. This approach needs an analysis of preverbal na. One possible analysis of [na finite verb] is given in (1), which views $n a$ as a particle which combines with the finite verb in negative answers and responsives (this analysis assumes that the verb is moved from its position in the VP to T ).

1


An alternative analysis is given in (2), which analyses $n a$ as a negative complement in a complementizer phrase.

2


Both analyses can provide a source for non-preverbal $n a$ : reduced versions can be produced by omitting the verb.

3


4


There is a considerable amount of empty structure in the analyses in (11) and (12). More significantly, however, neither approach can be applied to the acquisition of $n a$. The acquisition of non-preverbal na would require an understanding of the full phrase as configured in (9) or (10). But chart 6.9 shows that non-preverbal $n a$ is well-established before preverbal $n a$ in the acquisition data, and on the basis of performance data preverbal na cannot be a source for non-preverbal na, that is, the analyses in (11) and (12) are not the source for non-preverbal $n a$. We can therefore adopt an alternative analysis, namely, that $n a$ is first acquired as an independent lexeme which can occur as a one-word phrase in negative responsives and negative tags. In a subsequent stage in acquisition, it acquires an added use as a preverbal particle to produce a negative verbal responsive or tag. We shall return to this stage in the next section.
2.3 Non-preverbal na as an option for preverbal na, naddo and nage

Chart 6.10 shows that non-preverbal na emerges well before the other responsives and tags, namely, preverbal na, naddo and nage.


There are two reasons for the early emergence of non-preverbal na. One is that the use of non-preverbal na requires no syntactic knowledge while the other responsives need syntactic knowledge. Preverbal $n a$ demands a knowledge of finite verbs to form phrases like those in (9) and (10) above. Naddo requires an understanding of the perfective condition. Nage in part needs a knowledge of word order in finite clauses. The other reason is that $n a$ is an option which can be used in place of preverbal na, naddo and nage, as discussed in the sections which follow.

### 2.3.1 Non-preverbal $n a$ and preverbal $n a$

We shall look first at non-preverbal $n a$ and preverbal $n a$. The functions which the latter fulfils in responsives and tags can be performed by non-preverbal na. This is seen in the Welsh of the adults. Examples (5) and (6) illustrate responsives.

## 5


b. Child: gaf imw@c?
have.pres.1sg I moo
'can I have a moo?'
Adult: na,,,ti ddim isio mw@c.
neg you. 2 SG NEG want moo
'no, you don't want a moo.'
6 a. Child: mae 'o 'n bwytahwnna.
be.pres.3sg he prog eat that
'he's eating that.'
Adult: $\boldsymbol{n a}$ 'dy.
neg be.pres.3sG
'no.'
b. Adult1:oh ti 'm yn lico caws?
oh you.2sG neg prog like cheese
'oh you don't like cheese.'
Adult2: na,,, dim felly.
neg neg therefore
'no, not then.'

Examples (7) and (8) illustrate tags.

7 a. wneith hi ddim disgyn allan,, na wneith. do.fut.3sG she neg fall out neg do.fUt.3sG
'she won't fall out, will she.'
b. wneith 'o 'm ffitio,, $\boldsymbol{n a}$.
do.fut.3sG it NEG fit NEG
'it won't fit, no.'
8 a. 'dy hi ddim yn dod allan,, na 'dy.
be.PRES.3SG she NEG PROG come out NEG be.PRES.3SG
'she isn't coming out, is she.'
b. oh dyn' nhw ddim yn dwad,, na.
oh be.pres.3pl they neg prog come neg
'oh they're not coming, no.'

Examples (9) to (12) show preverbal $n a$ and non-preverbal $n a$ in the Welsh of the children. Examples (9) and (10) illustrate responsives.

9 a. no equivalent example with preverbal na.
b. Adult: geith Anti+S--- wneud?
have.pres.3sG Auntie+S--- do
'can Aunie+S--- do it.'
Child: $\boldsymbol{n a}$.
'no.'
10 a. Adult: ydy hi 'n chwyrnu?
be.PRES.3SG she PROG snore
'does she snore?'
Child: na 'dy.
NEG ne.PRES.3SG
'no.'
b. Adult: $y d y$ 'o 'n mynd yfanna?
be.pres.3sg it prog go there
'does it go there?'
Child: na.
'no.'

Examples (11) and (12) illustrate tags.

11 a. no example with preverbal na
b. no example with non-preverbal $n a$

12 a. 'dy 'im yn brathu Anti+S---,, na 'dy.
be.PRES.3SG NEG PROG bite Auntie+S--- NEG be.PRES.3SG
'it's not biting Auntie+S---, is it.'

```
b. <'imisio> [//] fi [?] <'im[?] isio> [/] 'im isio,, na. [After idealization fi 'm isio,, na]
I NEG want NEG
```

'I don't want it, no.'

The frequencies for non-preverbal $n a$ and preverbal $n a$ in responsives and tags in the Welsh of the adults and the children are given in table 6.2.

Table 6.2. Non-preverbal $n a$ and preverbal $n a$ as options

|  | Responsives |  | Tags |  |
| :--- | ---: | ---: | ---: | ---: |
|  | Adults | Children | Adults | Children |
| non-preverbal $n a$ | 138 | 603 | 67 | 4 |
| preverbal $n a$ | 38 | 97 | 264 | 9 |
|  | 176 | 700 | 331 | 13 |

Chart 6.11 show the percentages, based on the frequencies in table 6.2 , for the use of preverbal $n a$ and non-preverbal $n a$ in responsives.


In the Welsh of the adults, non-preverbal $n a$ is the dominant responsive accounting for $78.41 \%$ while preverbal $n a$ accounts for a much smaller $21.59 \%$. Non-preverbal $n a$ is an even more dominant responsive in the Welsh of the children accounting for $86.14 \%$ while preverbal na accounts for only $13.86 \%$.

Matters are different in tags, as shown by chart 6.12 which gives the percentages based on the frequencies in table 6.2.


In the Welsh of the adults, it is preverbal na which is the dominant tag accounting for $79.76 \%$ while non-preverbal na accounts for only $20.24 \%$. There are much fewer examples of tags in the Welsh of the children but preverbal $n a$ is more frequent, accounting for $69.23 \%$ and non-preverbal na accounting for $30.77 \%$.

These statistics show that the use of preverbal na especially in responsives is curtailed by the availability of non-preverbal $n a$ as an option.

### 2.3.2 Non-preverbal na and nage

In the case of nage, we shall limit the comparison with $n a$ to fronted order finite clauses. Examples of nage and non-preverbal na in responsives and tags in the language of the adults are given in (13) and (14).

13 a. Child: $a[/] a$ pinc 'dy hwnna? and pink be.PRES.3SG that
'and is that pink?' lit, 'and pink is that?'
Adult: nage.
'no.'
b. Child: gafr 'dy hwn.
goat be.PRES.3SG this
'this is a goat.' lit. 'goat is this.'
Adult: oh na.
'oh no.'

14 a. dim peth cyfri 'dy hwn,, naci.
NEG thing count be.PRES.3SG this NEG
'this is not a counting thing, is it.' lit. 'not a counting thing is this.'
b. felly dim garej 'dy 'o,,na.
therefore NEG garage be.PREs.3SG it no
'therefore it's not a garage, no.' lit. 'therefore not a garage is it, no.'

Examples of responsives / tags in the language of the children are given in (15) and (16).

15 a. Adult: dim babi 'dy enw fo?
NEG baby be.PRES.3SG name it
'baby is not his name.' lit. 'not baby is his name.'
Child: naci.
'no.'
b. Adult: gwyn 'dy hwnna.
white be.PRES.3SG that
'that'swhite.' lit. 'white is that.'
Child: na,,, goch.
'no, red.'
16 a. dim gwely 'dy 'o,, naci.
NEG bed be.PRES.3SG it NEG
'it's not a bed, is it.' lit. 'not a bed is it, no.'
b. No example of $n a$ as a tag to fronted clause.

The frequencies for nage are given in table 6.3.

Table 6.3. Nage and other options in fronted finite clauses

|  | Responsives |  | Tags |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Adults | Children | Adults | Children |
| nage | 5 | 17 | 2 | 2 |
| non-preverbal $n a$ | 28 | 62 | 2 | 0 |
| preverbal $n a$ | 0 | 2 | 2 | 0 |
|  | 33 | 81 | 6 | 2 |

The table includes preverbal $n a$ as an option (which would be regarded as very erroneous in formal Welsh). Chart 6.13 gives the percentages for the responsives.


In responsives, children use non-preverbal na far more than nage with the former accounting for $76.54 \%$ and the latter $20.99 \%$ and preverbal $n a$ accounting for only $2.47 \%$. The predominant use of nonpreverbal $n a$ in responsives is not limited to the children but also occurs in the Welsh of the adults. Of the responsives, $84.85 \%$ contain non-preverbal na and only $15.15 \%$ contain nage. The numbers for tags in the Welsh of the adults and the children are very low and no chart is supplied. In the Welsh of the children, there are only two examples of tags but both contain nage. In the Welsh of the adults only one third contain nage while the remainder contains either non-preverbal $n a$ or preverbal $n a$. The responsives in particular show that the availabilty of $n a$ as an option limits the use of nage.

### 2.3.3 Non-preverbal na and naddo

It will be recalled that naddo is used (i) in finite clauses when the tense of the verb is the past perfect tense, (ii) in finite clauses when the tense of the verb is the present tense and the perfect aspect occurs and (iii) in non-finite phrases (small clauses and fragments) when the perfect aspect occurs. In all these cases na can occur in place of naddo and another option is that preverbal na [na finite verb] can be used in all cases except condition (i). Examples of all options in responsives / tags in the Welsh of the adults are given in (17) and (18).

| 17 a. Adult1: | $y d y \quad$ Mam 'di gweld hi? |  |
| :--- | :--- | :--- | :--- |
|  | be.PRES.3SG Mum PerF see | she |
|  | 'has Mum seen her?' |  |

Adult2: naddo.
'no.'
b. Adult1: ody ddi wedi llosgi to:st?
be.PRES.3SG she PERF burn toast
'has she burnt the toast?'
Adult2: nag yw.
NEG be.PRES.3SG
'no.'
c. Adullt: ydy 'o 'di sylwi?
be.PRES.3SG he PERF notice
'has he noticed?'
Adult2: $\boldsymbol{n a}$.
'no'
18 a. dan ni ddim 'di gorffen darllen y llyfr eto,, naddo. be.PRES.1PL we NEG PERF finish read the book yet NEG.PERF 'we haven't finished reading the book yet, have we.'
b. $d \quad y w$ $e \quad$ ' $m$ 'di gorffen gwaith eto,, nag $\boldsymbol{y} \boldsymbol{w}$ ?
NEG be.PRES.3SG he NEG PERF finish work yet NEG be.PRES.3SG
'he hasn't finished work yet, has he?'
c. na,,,'dy 'o ddim 'di torri,, na.

NEG be.PREs.3SG it NEG PERF break NEG
'no, it hasn't broken, has it?'

Examples of all options in responsives / tags in the Welsh of the children are given in (19) and (20).
$\begin{aligned} 19 \text { a. Adult: } & t i \quad \text { 'di bod ynl pwll nofio? } \\ & \text { you.SG PERF be in pool swim } \\ & \text { 'have you been in the swimming pool?' }\end{aligned}$
Child: naddo.
NEG.PERF
'no.'
b. Adult: mae 'r llefrith 'di mynd.
be.PRES.3SG the milk PERF go
'the milk has gone.'
Child: na 'dy.
NEG be.PRES.3SG
'no.'
c. Adult: ydy dwy 'di gorffen rwan?
be.PRES.3SG two.f PERF finish now
'have two finished now?'
Child na.
'no.'
20 a. oh hwnna cau,, naddo. [Not an example which contains the perfect aspect]
oh that close neg.PERF
'oh that close, no.'
b. [=!exclamations] hwnna 'di torri,, na 'dy?
that perf break neg be.pres.3sG
'that broken, isn't it?'
c. dim wedi torri,, na?
neg perf break neg
'not broken, no?'

In the Welsh of the children, there is no example of naddo which is a tag to a fragment which contains the perfect aspect and example (20a) is simply an example of naddo as a tag.

Table 6.4 gives the frequencies for naddo and the two other options.

Table 6.4. Naddo, preverbal na and non-preverbal na

|  | Responsive |  | Tags |  |
| :--- | ---: | ---: | ---: | ---: |
|  | adults | children | adults | children |
| naddo | 14 | 12 | 13 | 3 |
| preverbal na | 5 | 6 | 5 | 2 |
| non-preverbal na | 30 | 62 | 2 | 1 |
|  | 49 | 80 | 20 | 6 |

Chart 6.14 provides a graphic display of the percentages for responsives.


In the Welsh of the children, of the total number of responsives where all options are available (80), only $15 \%$ contain naddo while the remainder contain predominantly non-preverbal na $(77.55 \%)$ and to a much lesser extent preverbal $n a(7.5 \%)$. The use of $n a$ as an option in place of naddo is not limited to the Welsh of the children. In the Welsh of the adults, of the total number of examples of responsives where all options are available (49), $28.57 \%$ contain naddo, $61.23 \%$ contain non-preverbal na and $10.20 \%$ contain preverbal na. Although the proportion of examples of naddo is higher than in the children's Welsh, non-preverbal $n a$ is again the main choice. The numbers for the tags are much smaller in the Welsh of the adults and especially the children. Chart 6.15 supplies the percentages.


Of the total number of tags (20) in the adults' Welsh, naddo is the main choice, accounting for $65 \%$ while non-preverbal $n a$ accounts for $10 \%$ and preverbal na accounts for $25 \%$. Naddo is used
proportionally more in tags than in responsives. The numbers for the tags in the children's Welsh are very small but naddo is used in only half of them.

In responsives in particular, the use of non-preverbal na limits the use of naddo.

### 2.3.4 Stages of acquisition

Chart 6.10 and the account given above shows that there are two stages of acquisition of the forms which are used as responsives and tags.

1. the lexeme $n a$ is used in negative responsives and negative tags at a very early age
2. an awareness of syntax allows the later use of preverbal na, naddo and nage variously at 2123 months; their use is also curtailed by the availability of non-preverbal $n a$ as an alternative

We return to further consideration of the emergence of preverbal na, naddo and nage in section 7.

## 3 Dim

Chart 6.16 gives the longitudinal path of dim in the Welsh of the children. The path is not regular but the use of dim in terms of average frequencies increases over the span of the project as the trendline shows.


We have seen in chapter 3 in particular that dim occurs in different sorts of phrases, namely, finite clauses, fronted clauses, small clauses and fragments, and with different uses, namely, quantifier, adverbial, focus and argument. We shall concentrate on occurrences of dim in different phrases over longitudinal paths of development and we shall argue that it is unnecessary to consider different uses
of $\operatorname{dim}$ in the explanation of the acquisition of negation in Welsh. But before looking at these matters we shall consider the full and contracted forms of $\operatorname{dim}$ and ask the question as to whether the latter are derived from the former, that is, whether the full forms have to be acquired first thus allowing a process of contraction to produce $\quad \mathrm{im} / \mathrm{m}$.

### 3.1 The full and contracted forms of dim

Chart 6.17 provides the longitudinal paths of the forms of dim in the Welsh of the adults. This chart shows that the average frequencies of these forms are maintained over the years, with ddim consistently more frequent than either dim or the contracted forms. The sharp increase of ddim in the final month occurs with the input from one recording.


Chart 6.18 shows the longitudinal paths of these forms in the children's Welsh.


Whereas ddim is dominant in the adults' Welsh it is the least frequent in the children's Welsh. Both dim and ' $\mathrm{im} / \mathrm{\prime} m$ are present at 18 months and ddim emerges at 20 months. There are no clear grounds for claiming that a full form is acquired first and that the contracted forms are acquired as a shortening of a full form.

There is a marked hump in months 18 to 22 in the path of the contracted forms in the children's Welsh in chart 6.18. This is due to the usage of one child in the corpus, who we have referred to as A--- in section 8.1 of chapter 4 . Chart 6.19 gives the longitudinal development of the forms of dim based on the other six children, which can be compared with chart 6.18 above. The omission of A--- smooths the longitudinal path of the contracted forms and shows how A--- is mainly responsible for the contracted forms during the age 17-21 months.


It can be seen in chart 6.19 that the path of the contracted form ' $\mathrm{im} / \mathrm{m}$ largely follows that of dim . In these six children, dim is present at 18 months, ' $\mathrm{im} / \mathrm{\prime} \mathrm{~m}$ at 19 months and ddim at 21 months. There are some grounds here for claiming that a full form is acquired before the contracted forms, but the evidence that ' $\mathrm{im} /$ ' $m$ is acquired as a shortening of a full form is slender. We return to the usage of $\mathrm{A}--$ - in section 3.4.1.

### 3.2 The rules of acquisition: different phrase types and left-adjunction

In the presentation of negation in the adults' Welsh and the children's Welsh in chapters 3 and 4, we have distinguished adverbial $\operatorname{dim}$, quantifier $\operatorname{dim}$, focus $\operatorname{dim}$ and argument $\operatorname{dim}$ and we have considered criteria which allow these uses to be distinguished in fragments. But this is only possible when all clause types occur. We shall attempt to show that the essential factor in the acquisition of dim is the matter of phrase types and not different uses of dim.
3.2.1 Longitudinal paths and the predominance of sentence fragments

There is a problem with pronominal copular clauses (see section 2, chapter 4), which we can interpret as finite clauses in adult Welsh but which can be ambiguous in children's Welsh - either small clauses or finite clauses. The frequencies over the life of the project for adult Welsh are given in chart 6.20.


As can be seen from this chart, finite clauses are the most frequent in the Welsh of the adults over the span of the project. A clearer picture of the use of small clauses and fragments in relation to each other is given in chart 6.21.


This chart shows that the adults use fragments more than they use small clauses.

For the children's Welsh, different charts are given, depending on how we interpret the pronominal copular clauses.



As can be seen, re-assignments of the pronominal copulars make little difference to the overall dominance of fragments. Although children are exposed to more negative finite clauses than any other negative phrase types, fragments are the main negative type in the children's Welsh.

### 3.2.2 Sentence fragments and left-adjunction

The statistics show that fragments emerge first and are more frequent until the later stages. On this basis, it can be reasonably claimed that the children acquire dim through its use in fragments before its use in finite clauses and small clauses. In other terms, finiteness is irrelevant to the early acquisition of $\operatorname{dim}$. For this, we can say that the children have a general $\operatorname{dim}$ and are not yet aware of adverbial dim, quantifier $\operatorname{dim}$ and focus dim. The only rule of syntax that they need is one which places dim in the
initial position in a fragment. We shall say that they use a rule of adjunction which left-adjoins dim to a fragment, as represented in (21), in which XP stands for any phrase which is a fragment.

21

dim yn yr ardd 'in the garden' $y$ tractor 'the tractor' yn gweithio 'working' tywod 'sand'

This approach does not maintain the distinctions between adverbial, focus and quantifier uses of dim. In particular, an example like dim tywod does not distinguish between focus 'not sand' and quantifier 'no sand'. For the child there is a general negator which can be used before all phrases which are fragments.

The semantics of negative fragments can be influenced by contextual effects which include the intention of an utterance. They can be used to deter an action and can acquire imperative force.

### 3.2.3 More details about sentence fragments

The preceding section, 3.2.2, provides sufficient data to give an analysis of the early acquisition of dim. But, to provide a fuller descriptive account, further details can be added about the sorts of phrases which occur in negative fragments and, more challenging, the uses of dim in fragments from the viewpoint of the taxonomy which is available in Borsley and Jones (2005).

The types of phrases which occur in sentence fragments, in descending order of frequencies, are:

- eisiau phrases (158)
- noun phrases (38)
- verb phrases (33)
- adverbials (27)
- aspect phrases (27)
- predicatival phrases (3)
- i fod 'to (supposed) to be' (1)

The label adverbials is used to cover locative and prepositional phrases. Examples of all these phrases in fragments are given in section 6 of chapter 4. Their longitudinal paths are given in chart 6.25 .


The eisiau phrases in negative fragments emerge at 18 months and are mainly dominant over the period of the project. A clearer picture of the remaining phrases is given in chart 6.26 , which omits the eisiau phrases.


The verb phrases in negative fragments also emerge early at 18 months. The adverbial phrases and the noun phrases emerge at 20 months, followed by aspect phrases at 21 months. Predicatival phrases emerge at 25 months and the solitary example of an $i$ fod phrase occurs at 29 months.

Further descriptive details can also be added about the possible uses of dim, using the disambiguation techniques which are discussed in section 7.7 of chapter 3 . Chart 6.27 gives the longitudinal paths of the main uses of dim in fragments in the children's Welsh.


The three-way ambiguity arises when dim precedes eisiau phrases (as discussed in chapter 3). The paths of emergence are: (i) adverbial dim and the ambiguous eisiau phrases emerge at 18 months; (ii) focus dim emerges at 20 months; and (iii) quantifier dim emerges at 24 months. The hump in the use of negative eisiau phrases is discussed in section 8.2 of chapter 4 and is also returned to in section 3.4 below. If an attempt is made to disambiguate the negative eisiau fragments, longitudinal paths arise as shown in chart 6.28.


The main increase occurs with the adverbial use although its time of emergence remains the same at 18 months. The focus use remains at 20 months, but the quantifier use now emerges earlier at 21 months. The remaining ambiguous examples emerge at 22 months. This chart should be viewed with care as disambiguating negative eisiau fragments in the performance data is a challenge. The main clues are supplied in the input of the adults especially a response, which - if it is a finite clause with adverbial dim - has be taken to indicate an adverbial use by the child in the fragment. But not all eisiau fragments are preceded or followed by an adult's phrase which helps to disambiguate. We can again emphasise that it is not essential to identify the uses of $\operatorname{dim}$ as, for the children, initial dim in a fragment can be seen as a general negator which is inserted through left-adjunction.

### 3.2.4 Small clauses, finite clauses and left-adjunction

Finite clauses and small clauses emerge eventually and, given that dim occurs in post-subject position in these clauses, adjunction to an initial position is not an option. There are two ways of explaining this stage in acquisition. One analysis is to say that the children have become aware of post-subject position and they place dim in that position. But it is not clear what that position would be in a phrase structure analysis. There is an alternative analysis which has the effect of achieving post-subject position. This alternative explanation is that the children have become aware of the sorts of phrases which can occur as fragments and recognize them when they occur as predicate phrases in finite and small clauses. On these grounds we can say that they continue to use left-adjunction but to a predicate phrase in a subjectpredicate structure, either small clauses or finite clauses. For small clauses this would be as in (22), and for finites this would be as in (23).

22


23


The configurations in (22) and (23) introduce a second stage which involves left-adjunction to predicate phrases in small clauses and finite clauses. There is no need to distinguish between these two types of phrases as left-adjunction in the predicate accounts for both. As can be seen from the configurations, left-adjunction to the predicate phrase places $\operatorname{dim}$ in post-subject position. Again, we can say that finiteness plays no part in the early acquisition of dim.

It will be recalled that there is only one example of quantifier dim in a finite clause (a possessive one) and we can claim that clausal negation with quantifier dim has not been fully acquired. However, there are examples of what could be seen as quantifier dim in small clauses such as dim glud yma 'no glue there'. But it is problematic as to how the children achieve the structure of this type of clause. In (24a), dim is left-adjoined to the nominal phrase while in (24b) it is adjoined to the whole phrase, XP.

b. XP



The analysis in (24a) captures the use of dim as a quantifier ('no glue here') while the analysis in (24b) does not. The latter analysis is more in accord with the view that children at an early stage of acquisition have a general $\operatorname{dim}$ which occurs initially before the whole phrase ('not glue here').

In summary so far, the performance data in the corpus provides grounds for claiming that the children pass through two stages in the acquisition of dim:
1 left-adjunction in fragments
ddim yn aros
'not waiting'

2 left-adjunction in predicate phrases

| small clauses | Mam ddim yn aros | 'Mum not waiting' |
| :--- | :--- | :--- |
|  | dim gludyma | 'no/not glue here' |
| finite clauses | oedd Mam ddim yn aros | 'Mum was not waiting' |

The rule of left-adjunction in predicate phrases applies to both finites and small clauses and there is no need to distinguish between the two. To repeat, finiteness plays no role in the acquisition of dim.

### 3.2.5 Focussed phrases in fronted clauses and left-adjunction

Fronted clauses which have an initial focus phrase have not been considered so far. There is a small total of 17 in the children's Welsh. Their developmental path is given in chart 6.29.


Compared with previous charts, it can be seen that fronted clauses emerge later than other clause types and are infrequent. By this stage, the children are well aware of left-adjunction. We shall claim that they apply left-adjunction in the focussed phrase.

25


We shall not go into the details of the syntax of the body of a fronted clause in Welsh, which demands detailed analysis (see Jones B.M. 2018 for discussion). We shall claim that the children eventually become aware of a focussed phrase and use left-adjunction to negate the phrase (and not all of the clause). Such a process demands an understanding of clausal syntax and it is not surprising that such clauses are infrequent and are late to emerge. This gives a third stage in the acquisition of dim.

1 left-adjunction in fragments ddim yn aros 'not waiting'
2 left-adjunction in predicate phrases,

| small clauses | Mam ddim yn aros | 'Mam not waiting' |
| :---: | :--- | :--- |
|  | dim glud yma | 'no/not glue here' |
| finite clauses | oedd Mam ddim yn aros | 'Mam was not waiting' |
| focussed phrases | dim Penny ydy hwnna. | lit. 'not Penny is that' |

3 left-adjunction in focussed phrases dim Penny ydy hwnna. lit. 'not Penny is that'

### 3.3 Other matters: forms of the copula and preverbal particles

We can now consider whether the account which has been given so far is affected by other matters relating to negation in Welsh, namely, forms of the copula and preverbal particles. They occur only in finite clauses and do not influence the account of the early stage of the acquisition of negation in fragments.

### 3.3.1 The $y$ - and $o$ - forms of the copula

We have seen in section 2.5 .1 of chapter 3 that, in adult Welsh, when the clause is negative and the verb is one of the third person forms of the present tense of the copula, either a $y$-form occurs when the subject is definite or an o-form occurs when the subject is indefinite.

However, for two reasons, these copular forms do not have a particular role in the licensing of dim in the children's Welsh. One is, as we have seen, that dim emerges in fragments much earlier than in finite clauses. The other is that $y$ - and $o$-forms are not unique to negative clauses. They occur in four other contexts in informal adult Welsh - in interrogatives as in (26), in an os 'if' clause which can be conditional as in (27a) or embedded interrogative as in (27b) ( $a$ 'whether' would be used in formal

Welsh rather than os 'if'), in copular clauses in which a nominal phrase or adjectival phrase is fronted as in (28a) and (28b), and in positive responsives as in (29). (A fuller discussion of these copular forms is offered in Jones B.M. 2018: 352-362). Negative examples are provided in (30) to complete the array of occurrences of $y$ - or $o$-forms which is presented here. All these examples are from the adults' Welsh.

26
a. ydy 'o 'n agor rwan?
be.PRES.3SG it PROG open now
'is it opening now?'
b. oes 'na gylch yfanna?
be.PRES there circle there
'is there a circle there?'
27 a. os 'dy 'r bobl isio mynd i+fyny 'r grisiau ti 'n rhoi grisiau yfanna. if be.PRES.3SG the people want go up the stairs you.SG PROG put stairs there 'if the people want to go upstairs you put (the) stairs there.'
b. gawn ni weld os oes gynnon ni Action+Man heddiw.
have.FUT.1PL we see if be.PRES with.1PL we Action Man today
'let's see if / whether we have Action Man today.'
28 a. naci,,, draig ydy hwnna.
no dragon be.PRES.3SG that
'no, that's a dragon.' lit. 'a dragon is that.'
b. coch 'dy hwn.
red be.PRES.3SG this
'this is red.' lit. 'red is this.'
29 a. $\boldsymbol{y} d y$.
be.PRES.3SG
'yes.'
b. oes.
be.PRES.3SG
'yes.'
30 a. dyn' nhw ddim yn2 ddigon hir.
be.PRES.3PL they NEG PRED enough long
'they're not long enough.'
b. d oes 'na ddim coes.

NEG be.PRES.3pl there NEG leg
'there's no leg.'

The definiteness of the subject also determines the selection of either $y$ - or $o$ - but in the children's Welsh no indefinite subjects occur in finite clauses. Only $y$-forms occur but we cannot say that they are uniquely negative forms of the copula.

Further, we have also seen that in the children's Welsh $m$-forms are more frequent than $y$-forms: chart 4.1 in chapter 4 shows that 13 out of 22 third person forms of the present tense are $m$-forms. Chart 6.30. gives their longitudinal paths.


As can be seen, the data are sparse. But this chart shows that $y$-forms emerge before $m$-forms: there are two examples of $y$-forms at 20 and 21 months (one each from two different children) and no more examples until 26 months. But even when $y$-forms occur, we can argue that the occurrence of the $y$ forms of the copula are licensed by features of the clause, including negation. Essentially, this approach, which is based on the performance data in the corpus, claims that the $y$-forms in negative clauses do not license dim but that they are themselves licensed by the latter. The matter of the forms of the copula does not affect the analysis which has been given so far. They represent an addition to that analysis, and an addition which is not always followed by the children. $M$-forms do not emerge in negatives until 27 months, after which they predominate. There are grounds here for claiming that the children are generalizing $m$-forms as the norm for $3^{\text {rd }}$ person present tense forms in negatives and that $y$-forms are losing their association with negative clauses.

### 3.3.2 The preverbal particles $d / t$

We have seen that the preverbal particles $d / t$ are optional. Chart 6.31 gives their longitudinal occurrences in the Welsh of the adults and chart 6.32 gives their longitudinal development in the Welsh of the children.


The Welsh of the adults provides a consistent input over the period of the project and one which shows that the unprefixed copula forms are more frequent than the prefixed forms. In the Welsh of the children shown in chart 6.32 , there are only four months in which a prefixed verb occurs and all four involve very low frequencies. There are more examples of unprefixed forms in the children's Welsh but with average frequencies at their highest barely exceeding 0.25 . Clearly, there is no well-established usage of negative preverbal patricles in the Welsh of the children. This makes little difference to the acquisition of negation as prefixed forms are optional and unprefixed forms are well-formed in informal Welsh. The analysis given so far is not substantially affected by the occurrence or otherwise of preverbal particles.

### 3.4 More matters relating to child-specific issues

At various places in previous chapters we have raised issues relating to negative patterns which are specific to the children. We shall consider here whether they have implications for the acquisition of dim.

### 3.4.1 Holophrastic ‘ $m$ isio

In section 8.1 of chapter 4, it was pointed out that dim is frequently followed by the lexeme eisiau 'want, need' and that there is a possibility that the sequence ' $m$ isio may be holophrastic. If so, the early examples of 'im/'m may not be forms of the negator dim but may be part of the form isio. Chart 6.33 gives the longitudinal paths of dim followed by eisiau and other words in the children's Welsh.


Chart 6.33 shows that matters change after 23 months - before 23 months, eisiau is the word which most frequently follows ' $m$ but after this point eisiau loses its dominance. It was also pointed out in chapter 4 that one of the children in particular - represented as A--- - used 'm isio more frequently than any of the other children. Charts 6.34 and 6.35 provide a comparison of the usage of A--- with all the other children together (chart 6.34 gives frequencies for the early months only, in which A---was in the project).


It can be seen that A--- uses dim with eisiau much more than other words. The charts show that it is child A--- who is responsible for the more frequent occurrences of ' $m$ isio in the early months. If ' $m$ isio is holophrastic, these frequencies and longitudinal paths provide grounds for the view that the negator dim does not emerge as frequently in the early months as other charts suggest. Charts 6.34 and 6.35 are also relevant to the discussion of the emergence of contracted forms given in section 3.1, as 'm before eisiau occurs in the early months ' $m$ may not be a contracted form but, again, may be part of eisiau.

However, the claim that ' m isio is holophrastic is only justifiable if it does not co-exist with $\mathrm{dim} / \mathrm{ddim}$ isio. If the children are using both at the same time then there are grounds for arguing that they are aware that the contracted form is a word which is an alternative for the full forms. Charts 6.32 to 6.34
provide longitudinal paths which help to decide whether ' $m$ isio is one negative word or whether it is two words.




Chart 6.36, for all the children, shows that the contracted forms and the full forms co-exist in all months of the of the project and suggests that ' $m$ isio is not holophrastic. Charts 6.37 and 6.38 give finer details, distinguishing A-from the other six children. Crucially, chart 6.37 , for A--, who proportionally uses ' $m$ isio more than any other speaker, also shows that the contracted forms and the full forms co-exist. On the basis of these charts, it can be reasonably concluded that there is no firm evidence that ' $m$ isio is holophrastic. It so happens that A--- makes more use of ' $m$ isio than any other child but that can be attributed to individual communicative strategies.

### 3.4.2 The child specific pattern $\operatorname{dim}+\mathrm{NP}_{\text {def }}+\mathrm{XP}$

We have seen in section 7 of chapter 4 that initial dim negates a sequence $\mathrm{NP}_{\text {def }}+\mathrm{XP}$. This latter sequence can be a small clause. But dim occurs in post-subject position in small clauses which contain a definite subject and not in initial position. So, if this child-specific pattern is a small clause, dim is out of position. But if the child is still using left-adjunction in initial position, then this accounts for the initial dim. Example (23a) from section 7 in chapter 4, dim hwnna yn ffitio 'not that fitting', will serve as an illustration.

31


If the analysis in (31) can be maintained, then it can be claimed that left-adjunction to initial position — which is apparent in fragments - is being applied to small clauses. This gives another stage in the acquisition of negation:

1 left-adjunction in fragments
2 left-adjunction in small clauses
3 left-adjunction in predicate phrases,

| small clauses | Mam ddim yn aros | 'Mam not waiting' |
| :---: | :--- | :--- |
|  | dim glud yma | 'no/not glue here' |
| finite clauses | oedd Mam ddim yn aros | 'Mam was not waiting' |
| cussed phrases | dim Penny ydy hwnna. | lit. 'not Penny is that' |

Stages 1 and 2 can be seen as external negation and stage 3 can be seen as internal negation - a distinction which is found in analyses of the acquisition of negation in English and German (see Dimroth 2010 for an informative survey). There is a challenge in explaining how external negation in stages 1 and 2 moves to internal pre-predicate adjunction in 3. However, we shall not accept that examples of the pattern $\operatorname{dim}+\mathrm{NP}_{\text {def }}+\mathrm{XP}$ are examples of the external negation of small clauses. The pattern $d i m+\mathrm{NP}_{\text {def }}+\mathrm{XP}$ is infrequent (there is a total of 13 ) and chart 6.39 (when compared with other charts) shows that they emerge later than other phrase types. In addition, chart 6.40 shows that their developmental path is similar to that of fronted clauses (see chart 6.29).



In the light of chart 6.40 especially, we can make an alternative claim, discussed in section 7 of chapter 4, that the linear sequence $\operatorname{dim}+\mathrm{NP}_{\text {def }}+\mathrm{XP}$ is an attempt to produce a focussed phrase. The childspecific pattern is not a negative small clause, as in (31) but it is a phrase which has a negative focus phrase as in (32).

32


The version in (32) is the child's attempt to produce a structure which has an initial focus phrase, namely, dim hwnna sy'n ffitio 'it is not that which fits'. The stages of acquisition can include the dim + $\mathrm{NP}_{\text {def }}+\mathrm{XP}$ pattern.

| 1 | left-adjunction in | fragments | ddim yn aros |
| :--- | :--- | :--- | :--- |$\quad$| 'not waiting' |
| :--- |
| 2 |$\quad$| small clauses | Mam ddim yn aros | 'Mam not waiting' |
| :--- | :--- | :--- |
|  |  | dim glud yma | | 'no/not glue here' |
| :--- |

This pattern falls away when fronted clauses become more established in the later months of the project as chart 6.40 shows.

### 3.4.3 Phrasal na

We considered a tentative suggestion in section 2.3 of chapter 2 that a use of $n a$ in the children's Welsh, which we labelled as phrasal na, may be a precursor of $\operatorname{dim}$ in clausal negation. The longitudinal paths of both are given in chart 6.41.


This chart compares phrasal na with all occurrences of dim and also more specifically with adverbial dim. The comparison of phrasal na with all occurrences of dim suggests that phrasal na is not its precursor. Both emerge in the performance data at 18 months but all uses of dim are much more frequent than phrasal na. Likewise the chart also shows that adverbial dim also emerges at the same time as phrasal $n a$ and thate the frequencies of the former are overall greater than the frequencies of phrsal na. There is no clear indication that phrasal na occurs as a precursor of clausal negation. It will also be recalled that there was uncertainty about the data for phrasal $n a$ as to whether it is phrasal na or anaphoric na, which is used in responses. Further, of the total number of occurrences of phrasal na (62), 33 are produced by one child accounting for $53.23 \%$ of all occurrences. This child's use of phrasal na has a monthly average of 3.3 . The other children have individual produce totals ranging from 1 to 9 , together accounting for the remaining 29 occurrences, which is $46.27 \%$ of all occurrences. They have monthly averages ranging from 0.2 to 0.9 . In view of the developmental paths, the transcriptional uncertainty and the statistics about the numbers of speakers, there are no clear grounds for claiming that $n a$ is used in the initial stage of phrasal negation as a precursor of dim. An alternative analysis is that phrasal $n a$ is con-current with dim and that it is responsive $n a$, whose semantics can have the effect of negating a phase.

### 3.5 Conclusions and a wider perspective

Dimroth's (2010) survey of negation shows that some research work (but not all) on negation in English and German favours a developmental path which begins with external negation (Neg + XP) and develops into internal negation ( XP + Neg + XP). This does not happen in Welsh. The development of the acquisition of clausal negation in Welsh, which is given in above, is relatively seamless. This seamlessness is due to the use of left-adjunction which applies first to phrases in fragments and then to those phrases when they occur in small clauses and finite clauses. It subsequently applies to focus phrases which occur in fronted clauses. Dimroth (2010) also considers the phonetics of the lexemes which are chosen as the negator in clausal negation. She shows, citing numerous sources, that there is considerable discussion in the literature on the use of no in English as a precursor of the use of not. Dimroth also shows, citing sources, that the evidence for nein as a precursor of nicht in German is less convincing, and Dimroth records that non in French does not occur in place of pas. On this scale of the responsive-negator relationship, Welsh is like French. Like French, and unlike English in particular, there is no phonetic similarity between the responsive and the clausal negator. Welsh makes a clear phonetic difference between a lexeme $n a$ which can be used in responsives and the forms of a lexeme $\operatorname{dim}$ which is used in clausal negation. This difference between responsive and clausal negator is also reinforced by the use of $n a$ as a preverbal particle in echo responsives. And, again unlike English, the acquisition of dim does not rely upon verb types (the copula and auxiliary verbs in English). The development of clausal negation in Welsh does not have to rely upon the prior or con-current development of finiteness. The development of negation in Welsh is different to the development of negation in English and German.

The children rely upon the input data to work out the rules of Welsh, and a wider perspective of the acquisition of negation can be achieved by considering the frequencies of the occurrences of dim against the frequencies of positive clauses in the Welsh of the adults. The details are given in table 6.5.

Table 6.5. Negative phrases and totals of all phrases in the speech of the adults (the totals include positive and negative clauses; and the bases for the percentages are the total of each type of clause, e.g., 21850 in the case of finite clauses)

|  | Totals | Negatives |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Finite clauses | 21850 |  | 1799 | $8.23 \%$ |
| Small clauses | 2685 |  | 52 | $1.94 \%$ |
|  | 24535 |  | 1851 | $7.54 \%$ |
| Fronted clauses | 2465 | 142 | $5.76 \%$ |  |
| Fragments | 19588 |  | 395 | $2.02 \%$ |
| Totals | 46588 |  | 2388 | $5.13 \%$ |

The statistics of the negation of finite clauses and small clauses by quantifier dim and adverbial dim are brought together. This also applies to small clauses. Focus dim occurs in fronted clauses and also piau 'own' clauses. Quantifier dim, adverbial dim and focus dim are also all brought together in fragments.

As can be seen, in all instances negative versions account for small percentages of the totals. Overall, negative clauses and phrases account for only $5.13 \%$ of the grand total of 46,588 . Negative small clauses have the lowest percentage of all types of clauses. Negative finite clauses have the highest percentage of all types. Clearly, the input language is overwhelmingly made up of positive clauses and phrases. In contrast, the data for the acquisition of negation is sparse. In summary, table 3.9 in chapter 3 shows that the children are exposed mainly to negative finite clauses and table 6.5 here shows that they are a very small percentage of all finite clauses in the input data.

Chart 6.42 gives a comparison of the average frequencies over the period of the project of negative phrases which contain adverbial dim and equivalent positive phrases in the adult's speech.


Chart 6.42 cclearly shows that the input exposes the children to far more positive patterns than negative ones.

## 4 Peidio

The longitudinal paths of peidio in the Welsh of the adults and the children are given in chart 6.43. This chart shows that the use of peidio does not emerge in the children's Welsh until the $20^{\text {th }}$ month and that it is infrequent afterwards. The emergence of peidio at 20 months approximately coincides with other negative words which have syntactic properties.


In chart 6.43 there are noticeable increases of frequencies at different months. In the case of the adults this occurs at 22-25 months and at 28 months. And in the case of the children, this occurs at 22 months
and 28 months. These increases are due to the interactions in the files of child \#3 (see tables 0.1 and 0.2 in Preliminaries), which see increased usage by the child and by the adults who interacted with child \#3. The details are given in charts 6.44 and 6.45 .


It can be seen that the spikes in the longitudinal paths in charts 6.44 and 6.45 coincide with the spikes in chart 6.43.

Imperatives provide an obvious way in which adults can seek to manage the behaviour of children and negative imperatives in particular provide a way of inhibiting undesired behaviour. It is the case that child \#3 in some of the recordings needed more management than the other children. It may also be the case that child \#3 may have been resistant to what the adults wanted to occur and attempted to constrain
their behaviour. The use of peidio in negative provides a good example of how the behaviour of an individual child can be markedly different to other children.

It cannot be assumed that the children acquire peidio as the basis of a negative imperative and understand that paid is one of its inflected forms. An alternative view is that paid is acquired as an independent form which is used to stop or prevent the occurrence of an event. There are two observations in the discussion of peidio in chapter 5 which support the view that paid is not an inflected form of peidio in the children's Welsh. First table 5.6 in chapter 5 shows that 51 out of 52 examples contain paid and only one example contains a form of the plural peidiwch. The same table also shows that $94.04 \%$ of the input language uses paid and not peidiwch. There are grounds here for claiming that the children's Welsh is based on paid. Second, table 5.4 in chapter 5 shows that no overt subject occurs in the Welsh of the children. The norm in spontaneous Welsh is that inflected verbs have overt subjects and that pro-drop is rare. On this basis it is reasonable to claim that the children do not see paid as a verb with pro-drop but again use it as a simple a form which conveys a negative command. Only a more wide-ranging study of positive imperatives and non-imperative finite verbs could rigorously assess the view that paid is a simple form with negative imperative meaning but such a study of inflected verbs in general is not undertaken here.

## 5 Pronouns

Table 6.1 in section 1 shows that negative pronouns are low frequency items in the Welsh of the adults. Chart 6.46 gives the longitudinal paths of the use of pronouns in the Welsh of the adults and the children.


The average frequency of the pronouns in the Welsh of the adults ranges from zero at 17 months to one at 30 months. The input does not provide the children with a constant and frequent source of data. The children's use of Welsh reflects the low frequency occurrences of pronouns in the Welsh of the adults. The acquisition of pronouns provides a good example of the acquisition of low frequency items.

Chart 6.47 compares the average frequencies of negative pronouns and negative indefinite nominal phrases in the adults' Welsh. The chart shows that the relative average frequencies of the input data are consistent over the months of the project.


Chart 6.48 compares the longitudinal paths of the negative pronouns and negative indefinite noun phrases in the children's Welsh.


The average frequencies are low but the chart shows that negative pronouns emerge at 19 months before negative indefinite noun phrases at 20 months in the Welsh of the children and are slightly more frequent than indefinite negative phrases until 23 months when the negative nominal phrases become more frequent. It is difficult to explain why negative pronouns emerge before negative quantifier phrases. Charts 6.22-6.24 show that a form of dim has emerged in fragments at 18 months which precedes the emergence of negative pronouns. But dim in indefinite nominal phrases does not emerge until 20 months.

There are grounds for claiming that negative pronouns are acquired by the children as negative words without any need for syntactic knowledge. First, table 5.15 in chapter 5 shows that $68 \%$ of the examples of negative pronouns occur in fragments, and mainly one-word fragments. This is a holophrastic context. Second, chart 6.48 in this chapter shows that in the early stages negative pronouns are more frequent than negative nominal phrases. This supports the view that a knowledge of pronominalization is not necessarily needed by the children. Claiming that negative pronouns are acquired as negative words which are used in a holophrastic context is reasonable but such a claim does not exaplain how the children come to understand their negative meaning.

## 6 Co-ordination group

Chart 6.49 gives the longitudinal paths of the co-ordination group in the Welsh of the adults and the Welsh of the children.


The co-ordination group in the Welsh of the adults is present in the input data over the span of the project. But the average frequencies for this group are low and it is predominantly made up of chwaith,
which occurs 48 times while na2 occurs only five times. This group in the children's Welsh does not emerge until 25 months and is very infrequent afterwards.

## 7 An overall view: order of emergence

In sections 2 and 3.2 we have distinguished different stages of acquisition for the responsives and tags and for dim. In this section we shall attempt to determine whether it is possible to provide a general chronology of the emergence of all the negative words. We shall do this be examining the longitudinal paths of each item. We shall present the longitudinal paths in two ways. One way gives the average frequencies for each month in the project. The other gives the number of speakers who use a negative word at each month. The total numbers of speakers varies in different months (see Preliminaries) and they are represented in the graphs as proportions on a scale from 0 to 1 in which 0 indicates no speakers and 1 indicates all speakers out of the total for each month.

Chart 6.50 clearly shows that non-preverbal $n a$ is the first negative word and is present by 17 months of age.



It occurs frequently over the period of the project and the counts at the very early stages of the project indicate that it has merged earlier than 17 months. By 17 months, na is well-established. There is a spike in the use of non-preverbal $n a$ at 22 months. There is no obvious reason why this should be the case. Negative meaning is first acquired in relationships of disagreement and agreement with previous utterances in the discourse. Non-preverbal $n a$ can also acquire imperative force through contextual effects. Chart 6.51 shows that all speakers in each month have acquired $n a$ and confirms that it is the earliest indication of negation.

Chart 6.52 (which is a copy of chart 6.16 provided here for convenience) shows that dim is the next to emerge in the performance data at 18 months.



Given that na is well-established by 18 months, there are grounds for claiming that dim emerges a while after $n a$. We have seen, however, that there are no firm grounds to claim that na is a precursor of dim. However, although emerging after $n a$, the trendline in chart 6.52 shows that it gains in frequency over the span of the project, while the trendline for non-preverbal $n a$ in chart 6.50 indicates a gradual decline. Chart 6.53 shows that not all the children acquire dim at the same time but that there is a clear path such that all speakers acquire it by 23-24 months.

The first of the remaining negative words to emerge in the performance data are the pronouns, given in chart 6.54 . But their frequencies over the months of the project are low.



The trendline indicates a decline in usage. But it is counter-intuitive to suggest that the children are losing control over negative pronouns and it is more reasonable to suggest that this is a product of low frequency items. Chart 6.55 shows that no more than half of the children have used negative pronouns over the period of the project.

Chart 6.56 gives the longitudinal path of peidio. It is more frequent than the class of negative pronouns but it emerges in performance after the pronouns.



The trendline in 6.57 shows that peidio is gradually used by more speakers but it is not used by all the children until 28 months. We can bear in mind that non-preverbal na can also be used with imperative force and, although no statistics have been gathered for this use of $n a$, it can be considered that na can be an early alternative for peidio. In chart 6.57 the trendline shows a gradual increase in the number of children who use peidio.

The longitudinal paths of the other items in the responsive / tag system are given in charts 6.58 to 6.63 . Preverbal na emerges at 21 months.



Nage emerges at 22 months.



And naddo emerges at 23 months.



The charts for all these responsives show that the numbers of speakers grow along with the frequencies. They emerge with a few speakers around about 22-23 months and achieve full participation by about 28 months with the exception of naddo.

Finally, charts 6.64 to 6.67 give the longitudinal paths of the members of the co-ordination system. Chwaith emerges at 25 months.


$N a 2$ emerges at 27 months.



Charts 6.64 to 6.67 show that the negative co-ordinators are late to emerge. They are very infrequent and are used by very few speakers.

Bringing all these observations together we have the following order of emergence in the performance data:

1. non-preverbal na pre-17 months
2. $\operatorname{dim} 18$ months
3. negative pronouns 19 months
4. peidio 20 months
5. preverbal na 21 months
6. nage 22 months
7. naddo 23 months
8. chwaith 25 months
9. na2 27 months

Non-preverbal $n a$ is the earliest to emerge at pre-17 months. It is holophrastic and requires no syntactic knowledge. The remaining negative items emerge between 18 to 23 months.

Table 6.6 is an attempt to provide not only an overall view of the emergence of negative verbs but also the strength of the usage of these words at the point of emergence and their subsequent development. It gives:

- the number of children who use a negative word at the first month of emergence of a negative word; for example, dim emerges in the Welsh of two children at 18 months.
- the number of new users who use the same negative word at later months; for example, one new child uses $\operatorname{dim}$ for the first time at 20 months and another new child at 21 months, and so forth.
- after the first month of emergence the details about subsequent new speakers also record the total number of speakers in that month (new and existing users); for example, for dim at 20 months one new speaker occurs in a total of three speakers at that month.
- the number of children who were in the recordings for every month (in the bottom line of the table); for example, in the case of dim, at its emergence, there were a total of four speakers but only two used dim for the first time - at the next month which saw a new speaker using dim (20 months), there were a total of six speakers in the recordings but only three were using dim and only one of them was a new user of $d$ dim.

The gaps in the table for each negative word after its first emergence do not indicate that there were no users but only indicate that there were no new users. In the case of dim it is first used by two speakers at 18 months but a month goes by before another new user emerges.

Table 6.6. Numbers of children who use a negative word for the first time (along with total users after first month of emergence e.g. $3 / 4$ indicates three new users out of a total of four users)


All this is an attempt to convey the strength of the emergence and development of a negative word which can be considered in conjunction with the graphs of the longitudinal paths which have already been given. The strongest development is with non-preverbal $n a$ which emerges earliest and is used by all available speakers in all months. In the case of dim, it first emerges at 20 months but it is not until 23 months that it is being used by all the children and that the addition of new users is gradual. Preverbal $n a$ is interesting in that it emerges four months after non-preverbal na and only gradually acquires speakers but is used by all speakers by 27 months. The negative pronouns emerge early but only in the Welsh of one child out of a total of five in that month, and only four out of the total of six speakers use negative pronouns by the end of the project. The weakest are chwaith and na2: the former does not
emerge until 23 months and the latter does not emerge until 27 months. Both are used by only one child out of six and no new speakers emerge over the remaining span of the project. It should be added that only one child was in the project at 17 months.

## 8 General observations

The previous sections have described the emergence in performance data of negative words in Welsh and their development over the span of the project. This concluding section makes more general remarks.

Frequency in the input data can be correlated with the acquisition of negative words. The two most frequent words in the language of the adults are non-preverbal na and dim. This is also the case in the language of the children. Those words which are infrequent in the Welsh of the adults are also infrequent in the Welsh of the children and some do not occur at all in the children's language (the preverbal particle na5 in complement clauses), byth '(n)ever', erioed '(n)ever', heb 'without', the pseudoquantifier mo, and nunlle / nunman 'nowhere').

Frequency in the input data alone does not promote acquisition. Chart 6.2 shows that dim and $n a$ (in the responsive and tag group) have almost equal frequency in the Welsh of the adults overt the span of the project but chart 6.3 shows that na emerges before dim and is more frequent in the Welsh of the children. We can offer an explanation in terms of functionality. All the negative words are functional words in that they lack lexical content. However, we can distinguish between degrees of functionality. Nonpreverbal $n a$ is acquired as a lexeme whose use depends upon understanding anaphoric relationships in discourse and which requires no knowledge of syntax. The acquisition of adverbial dim requires a knowledge of syntax, in particular left-adjunction. Non-preverbal $n a$ as a responsive and tag is simpler than the other responsives - naddo and nage - which require a knowledge of word-order (nage) and the perfective condition (naddo).

The points in the previous paragraph provide clear indications of differences in the temporal paths of acquisition and there are grounds here for the support of a maturational basis for the acquisition of language (as in Radford 1990). That is, children are able to analyse the more complex functions of negative words as they get older. The simplest, $n a$, is acquired by all children at very young ages but another responsive naddo, which depends upon the acquisition of tense and aspect, is not acquired until much later and is not acquired by all children until later still. It is a matter of controversy as to whether this maturational development is based on general intelligence or whether intelligence is modularised and whether a module such as universal grammar determines the paths of emergence.

There are individual differences amongst the children. This is seen in the emergence of negative words in the performance data: some children use a negative word earlier than other children. This is an expected and common matter. But there are other more specific instances. We have seen that one child's usage accounts for the use of dim, especially its contracted form, with eisiau 'want, need' - and especially in fragments. Another child is associated with a more frequent use of peidio. Phrasal na is used more by one child than by others.

The developmental paths are not always regular so that there are highs and lows within the paths. This may be due to individual behaviour, as already mentioned. But it can also indicate that interactions in discourse can make different demands on both the Welsh of the adults and the children. It does not indicate a stall in development. Inserting a trendline in the graphs indicates the general development of acquisition.

The acquisition of negation is subject to dialect differences. Southern dialects use the interrogative particle efe and in those dialects it can be preceded by negative word na as in nag efe. Southern dialects use the negative forms of the copula. In northern dialects, gwybod can be inflected for the present tense and it occurs frequently with the negative preverbal prefix $d / t$ and the contracted form ' $m$, as in $d w n i$ ' $m$ 'I don't know'. Southern dialects have the option of omitting the preposition $\hat{a}$ 'with' after a finite form of peidio.

The design of the project is not perfect in terms of the numbers of children in each month. It is not easy to find children of the right age and families who are willing to take part in research. Nor can it be guaranteed that regular visits to homes can take place. It is fitting that as this work comes to a close we repeat the gratitude given in the Acknowledgements to those families and adults who, along with the children (all now adults), made this research possible.

At this point this work comes to a stop rather that to a completion. It does not claim to be the final word on the acquisition of negation in Welsh and it is hoped that there is enough empirical and interpretive data in this account for the work of other researchers both descriptively and theoretically.

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[^0]:    ${ }^{1}$ The expression nominal phrase is used widely to include not only phrases which are headed by nouns but also those which are headed by pronouns or quantifiers. More precise labelling is used when the account needs to distinguish different heads.

