The Welsh impersonal construction

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ABSTRACT

In this thesis I will explore the impersonal constructions in Modern Welsh. In doing so, I will follow the approach of the previous literature in comparing this construction with the analytic Welsh passive. The general linguistic literature on passivization assumes that both constructions involve passivization and despite some studies of Welsh concluding that the impersonal construction is not a passive, this thesis cannot support or deny this claim.

I show that it is the definition of passive that obstructs a conclusive analysis for the Welsh impersonal morphology's syntactic and semantic effects, ultimately. Using the data described in detail throughout the thesis, I conclude with an assessment of the scope of our current theories of passive – be they typological or theoretical – that reveals problematic areas. Typological, prototypical and canonical approaches to the passive of course fail to include enough nuance to identify the relevant structural components of the Welsh impersonal, whilst theoretical approaches cannot account for the restrictions found on intransitive impersonals. LFG's mapping theory has the potential to accommodate the Welsh data according to current proposals and as such is examined in more depth.

I have given an emphasis to using naturally occurring data whenever possible and this has led to a data-rich, descriptive work, in an attempt to expand the breadth of examples of Welsh found in discussions of linguistic theory. Additionally, this approach provide the basis for future work on Welsh verb classes by describing the behaviour of verbs in several constructions relevant to the work at hand.

Along with a general synthesis of the previous literature on impersonals and analytic passives in chapter 2, I include an elaborated analysis of Welsh analytic passives and some problematic new impersonal data. The novel data on verb classes begins in chapter 3 with a study of verbs of psychological state. The lack of restriction on the impersonal contrasts with the analytic GET-passive's failure in a subset of these transitive verbs previously unobserved. In chapter 4, I investigate the availability of unaccusativity diagnostics in Welsh, in an attempt to prove that unaccusative verbs do indeed impersonalize, as suggested by previous literature. Chapter 5 then uses the diagnostic, amongst others to track down further restrictions on the impersonal and I show that whilst unaccusativity cannot be excluded as a potential restriction to impersonal morphology, the semantic restrictions are as plausible an account. This chapter uses different structural and semantic verbs and predicates and finds that animacy in intransitives is the only restriction needed to describe impersonals. In the following chapter (6) I examine this restriction in more detail and summarize the data on the impersonal in order to then probe the current linguistic theories in chapter 7.

DECLARATION

I declare that no portion of this work referred to in this thesis has been submitted in support of an application for another degree or qualification of this or any other university or other institute of learning.

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NOMENCLATURE

1	first person
2	second person
3	third person
ABST	abstract noun
ADJ	adjective
AG	deverbalizing nominal agent morpheme
ART	article
COND	conditional
DAT	dative
DEM	demonstrative
F	feminine
F\	feminine mutation
FUT	future
GEN	genitive
HUM	human
IMPF	imperfective
IMPS	impersonalizer
INF	infinitive
INTENT	intentional aspect
M	masculine
M\	masculine mutation
MUT\	mutation (morphosyntactically conditioned)
NEG	negative
NMLZ	nominalizer
PERF	perfect marker or verb
PL	plural
POSS	possessive
PRED	predicative
PRET	preterite
PROG	progressive or continuous
PROS	prospective aspect
PROX	proximal
PRS	present
PRT	particle
PST	past

PTCP	participle
REL	relative
SG	singular
SUBJ	subjunctive
SUP	superlative
VRB	verbalizer

Acronyms

CEG – Corpws Electroneg y Gymraeg 'Electronic Corpus of Welsh' (Ellis, O'Dochartaigh, Hicks, Morgan & Laporte 2001)
GPC – Geiriadur Prifysgol Cymru, *A Dictionary of the Welsh Language. The standard historical Welsh dictionary*. Cardiff. 1950-2015

CHAPTER

ONE

INTRODUCTION

The Welsh impersonal construction has been used and discussed by linguists since an early syntactic study made by Awbery (1976) first provided an account which contrasted the impersonal's use with the analytic passive in Welsh. Both forms were found to be passivization strategies, based on variety of constructions in novel data. Whether impersonals – a morphological phenomenon – and analytic passives are both processes of passivization, and whether two passivization strategies can exist in one language has been a long standing question due, in part, to this well-known Welsh data. Welsh impersonal morphology has been compared with both morphological passives and impersonal pronominal passives found in other languages (Siewierska 1984) due to its ability to apply to intransitive verbs, as well as transitives which are the more familiar domain for passivization.

Whilst this thesis does not attempt to label the impersonal construction 'passive' or 'not passive', it is clear that there are structural differences between the impersonal and analytic passive constructions which remain unaccounted for. Little is known about the grammatical semantics of the impersonal morphology due to the focus on passivization taken by previous attempts to encapsulate its functions. In turn, passivization is considered to be diagnostic of other phenomena, such as transitivity and unaccusativity. Without a clear idea of the impersonal morphology's effect, a block remains to our understanding of other Welsh phenomena. By providing a better description of the so-called Welsh passives, a better understanding of interrelated phenomena is inevitable.

Providing a more nuanced account of the Welsh data also has consequences for linguistic theory. This work seeks to provide an account of the impersonal construction that might inform approaches to passivization in current linguistic frameworks. In assuming that the label 'passive' applies broadly to all constructions which resemble each other, the ability to compare them structurally is lost and no meaningful account of the process can be built. Considering both the impersonal and analytic passive construction to involve the same underlying process is shown here to overlook some of the features of each that need to be incorporated into any structural account of their place in the

grammar.

This thesis uses structural and semantic diagnostics to describe the impersonal construction more precisely, so that future studies of passivization or of Welsh might be more informed than speculative. In expanding on the data currently available, this also provides the groundwork for a better understanding of Welsh verb classes. This secondary goal relies heavily (though not exclusively) on work done by Levin (1993) for English verb classes and succeeds in revealing previously un-noted verb classes and alternations for Welsh.

The first chapter following this general introduction explains the form of the impersonal morphology and reviews the current literature on both Welsh impersonals and analytic passives, drawing heavily on data from Awbery (1976), Fife (1985, 1992) and other, more general works on Welsh syntax. These works have all attempted to classify both the impersonal and the analytic passive according to their functions, but have failed to outline the analytic passive clearly as discussed in section 2.2.2. Section 2.2.3 attempts a description of it that might be used throughout the rest of this work and finds the core elements of this analytic passive to present in both to the GET-passive which is used in the general linguistic literature to exemplify Welsh, but also a GET-less analytic passive that is discussed in the linguistic literature on Welsh syntax. The remainder of the chapter outlines the functions of the impersonal which are restricted in the analytic passive and described by previous literature, but also introduces new, problematic data in section 2.4.1.

Chapter 3 compares the use of the impersonal and the analytic passive with transitive verbs by using a dataset of verbs of psychological state, proposed by Belletti & Rizzi (1988) to reveal structural differences in Italian verbs. Whilst little is revealed about the impersonal construction in this chapter, a small set of verbs is found not to GET-passivize. This data is then used for comparison with unaccusative verbs in the following chapter. As a result of using verbs of psychological state as a dataset, another form of psych predicate is described in section 3.3. Whilst these prepositional constructions have been described in previous work on Welsh syntax (Borsley et al. 2007) and have been widely acknowledged in pedagogical grammars for decades, section 3.3 is a first effort to explore the semantic fields covered by these constructions, which are used more widely than previously described in psych-predicates as well as other property concepts.

Although Welsh unaccusative and unergative intransitives are used in the previous literature to diagnose the structure of the impersonal, no study has established which verbs have an unaccusative structure in Welsh. Chapter 4 proposes that a diagnostic proposed by Levin & Rappaport Hovav (1995) is diagnostic of unaccusativity in Welsh intransitives too and as mentioned, the data from chapter 3 is used to compare the status of derived subjects in both transitives and intransitives.

Returning to the structure of the impersonal construction, chapter 5 uses structurally different verb classes to diagnose restrictions on it. Whilst successful in finding just

one semantic verb class which fails to impersonalize – the inchoative counterparts of alternating change-of-state verbs – this chapter also reveals exceptions and anomalies in other sets of verbs studied. These restrictions on the impersonal all revolve around the intransitive verbs having inanimate subjects. This is the topic of investigation in the next chapter, chapter 6, which summarizes the results and anomalies of the thesis and the previous literature on the impersonal and continues to question the validity of the 'inanimate intransitive' restriction of the previous chapter. Using observations made by Siewierska (1984) and Blevins (2003) on restrictions to impersonalization, 6 produces predictions to test and finds that generalizations made about the suppressed arguments of intransitive impersonals being interpretable as unspecified human subjects to be the most accurate. In section 6.6, most of the problematic data remaining from the previous chapters are resolved. However, the structure of the impersonal that restricts any arguments other than unspecified or generic human subjects in intransitives does not apply to transitive verbs, as summarized in this same section, and the role of *by*-phrases in identifying the semantics of the suppressed argument is unclear. The latter issue is left for future research, whilst the former is incorporated into the data considered in chapter 7.

The penultimate chapter incorporates the new data on the Welsh impersonal morphology's effects and attempts to apply it into different theoretical approaches to the passive. Whilst placing the impersonal construction within typological and prototypical studies provides very little insight into either in section 7.1, it serves to highlight the benefit of more broadly descriptive studies. Sections 7.2 and 7.3 explore how the GET-passive and impersonal might be structured according to a non-generative and generative framework respectively, with Role and Reference Grammar failing to provide identify a differentiating factor in the two constructions used in 7.2. Lexical Functional Grammar has the potential to accommodate the Welsh data, according to the analysis in 7.3, if the appropriate changes to its Mapping Theory (Kibort 2014) are adopted.

The data used throughout the thesis come from four different sources. The first is previous literature describing Welsh, which in turn comes either from introspection of native speakers (like (Awbery 1976)) or from a combination of written sources such as newspapers and novels and consultation with non-linguist native speakers. Examples taken from previous work are marked as such, but use my own glossing, unless otherwise acknowledged. The second source is also marked on the example, which are examples found through simple text searches (usually online) and web crawling on the select Welsh-language websites or blogs. URLs and links to these sources are provided, when appropriate, under the examples. A new resource for Welsh researchers is the CEG, or Electronic Welsh Corpus (Ellis et al. 2001) and examples taken from this corpus are again acknowledged as such and hyperlinked, where possible. The fourth source is introspection, though this is combined with adapting examples from text searches when needed. As a native speaker of a north-western variety of Welsh (Bangor area, Gwynedd), the

examples I produce will inevitably have some preference for my own dialect. When examples are clearly dialectal, this is marked with the example's translation. As the impersonal is very rarely a spoken construction, dialect is unlikely to have a profound impact on its grammaticality and as such is not controlled for in this study. The use of the impersonal is common in formal Modern Welsh, either spoken or written, but is most frequently found in writing. Its infrequency in the spoken language is commonly noted in the linguistic literature on Welsh syntax, but its frequency in everyday life is not often acknowledged. Unfortunately, a study of its genres will not be presented in this thesis, other than to note its use in written and spoken news articles and programmes, spoken narratives (as recorded by Dr I. Rees, p.c.), instructional texts and legal texts.

Owing to this infrequency in the spoken language and to other structural factors in modern Welsh, the most common forms of the impersonal morphology in written texts appear *-wyd* and *-ir*, the simple past and present/future impersonal forms respectively, and these two forms are used almost exclusively in this thesis, with the full paradigms of impersonals being described only in chapter 2.

CHAPTER

TWO

TWO WELSH PASSIVES

2.1 Background

The Welsh 'impersonal' inflectional paradigm, as illustrated in (1), is well-known in pedagogical grammars and linguistic analyses alike because of its functional similarity to passives of other well-studied European languages, as well as the functional overlap of the impersonal construction with the analytic passive construction (2) which is also found in Welsh.

(1) Impersonal inflectional paradigm exemplified by the verb *gweld* 'see':
gwelwyd preterite perfective tense *-wyd*
gwelir future/present *-ir*
gweler subjunctive *-er*
gwelid conditional *-id*
gwelasid pluperfect *-asid*

(2) Caf-odd X ei weld
get-PRET.3SG X POSS.3SG M\see
'X was seen' Analytic GET-passive

So far, the concern of linguists has been to explain that two passives might exist in one language or even simply to describe their functional differences (Awbery 1976; Sadler 1988; Fife 1985). Many working on Welsh have concluded that the synthetic passive of example (1) is no longer relevant to synchronic analysis owing to its infrequency in the spoken language (Awbery 1976; Jones & Thomas 1977; Hewitt 2002; Borsley, Tallerman & Willis 2007). A common assumption stemming from this reported infrequency is that the coexistence of these forms indicates a diachronic shift in the assignment of a passive function and that one construction is giving way to the other. This assessment has not gone unchallenged, however. The opposing view and an important argument from any theoretical standpoint is that the impersonal-passive is not a passive at all and merely overlaps in a few functional areas with the passive found in other languages (Fife

1985, 1992; King 1993; Blevins 2003; Borsley, Tallerman & Willis 2007).

The question which arises form this debate is evident from these conflicting stances – should the impersonal construction be analysed as passive? Chapter 7 addresses this question, amongst others, whilst this current chapter summarizes what is already established on the topic in the literature on modern Welsh.

Based on the current literature, this chapter outlines the two constructions in question in section 2.2, followed by an overview of the passive-like and less-passive functions covered by the impersonal construction according to analyses made by Fife (1985) and Awbery (1976) in sections 2.3 and 2.4. Of course, passivization is well recognized in treatments of the grammar and as such is acknowledged by any established linguistic framework and passive prototypes. As the Welsh data are well-known, several grammatical theories have taken them into account and this is addressed briefly in 2.5 (and addressed in more detail later in chapter 7). The closing remarks in section 2.6 summarize what information is gleaned from the literature's discussion of the Welsh data to date, allowing for them to be incorporated into future work on the use of the two constructions.

2.2 Impersonal and passive

2.2.1 The impersonal construction

Impersonally inflected verbs *(berfau amhersonol)* are well-known in Welsh grammatical description, although natural data on the phenomenon is scarce in linguistic analyses, with Fife (1985:114) being one of the few to draw briefly from attested examples. The basic form of the impersonal construction is a verb-stem with an inflectional suffix denoting tense/aspect and the feature 'impersonal' ('IMPS' will refer to this morphology throughout the thesis), indicating no agreement with any argument(s) present in the surface syntax. The following examples are given by Fife (1985:99):

(3) gwel-ais (i) gi neithiwr
see-PRET.1SG (1SG) MUT\dog last.night
'I saw a dog last night'.

(4) gwel-wyd ci neithiwr
see-PRET.IMPS dog last.night
'A dog was seen last night'.

The contrast in these examples is that in (3) the personal inflectional suffix agrees with one of the verb's arguments, which is realised syntactically (optionally), whereas (4) is found when one of these arguments is not realised and is left ambiguous. As the language also exhibits pro-drop, it is clear that the referent is no longer identified in (4), whereas (3) would still identify the referent as first person singular were its pronoun omitted.

Fife (1985) claims that one of the main arguments against IMPS being labelled passive is that the impersonal construction does not show normal agreement rules for a subject, indicating that the semantic patient has not been promoted to subject, in his view. However, as it is widely accepted and expected that patient subjects of passives and other constructions requiring such assignment do not necessarily perform in the way expected of agent subjects, this is not a valid argument for an active analysis. Of course, Fife details other tests to support his stance, including the selection of pronominal forms, mutation, embedding, and prepositional phrases, which are also used by Awbery (1976) and Jones & Thomas (1977) amongst others to support their analysis of impersonal as passive, conversely. These opposing analyses are synthesized in brief in what follows.

It has been established that Welsh pronouns do not vary according to nominative-accusative case or alignment but are motivated either semantically, pragmatically or phonologically.

(5) a. fe wel-ais ti fi
PRT see-PRET.2SG 2SG 1SG
'you saw me' (Fife 1985:98)

b. gwel-ais i y dyn
see-PRET.1SG 1SG ART man
'I saw the man' (Awbery 1976:149)

c. rhodd-aist ti o i mi/fi
give-PRET.2SG 2SG 3SG.M to 1SG
'you gave it to me'

The pronouns marked 1SG in examples (3)–(5c) are all regular and widely used variants of the first person singular pronoun. Awbery (1976) claims that the different pronoun forms are sensitive to information structure in the form of the referents' activation status and anchoring within the discourse, which, as highlighted by Fife (1985:97), resembles the traditional approach of pedagogical grammar and early linguistic analyses of *rhagenwau ategol ac annibynnol* 'affixed and independent pronouns'. Secondly, it is well established that pronouns do not follow the same soft mutation (usually lenition) 'rules' as nouns (Watkins 1961:162), with mutation already a difficult area for testing subjecthood (see below; for a more detailed summary of these arguments see Fife 1985). Pronoun forms are a complicated topic, especially due to their dialectal variation, and as Fife suggests (p.98) they are certainly not a sound test for subject/objecthood.

However, there is also evidence in the form of clitic pronouns which always follow the pre-verbal particle *fe/mi*.

(6) a. fe'm gwel-odd (i)
PRT'1SG see-PRET.3SG (1SG)
'he/she saw me'

b. fe'th wel-odd (di)
PRT'2SG see-PRET.3SG (2SG)
'he/she saw you'

These forms were thought to express the direct object of the verbs they precede (Williams 1959:58). Along with the ambiguity or failure of other tests, these clitics have caused Fife (1985) and Borsley, Tallerman & Willis (2007) (following Blevins 2003) to analyse the impersonal form in (7) as active.

(7) fe'm rhybuddi-wyd (i) gan y dyn
PRT'1SG warn-PRET.IMPS (1SG) by ART man
'I was warned by the man'

Whilst Sadler (1988) does not enter the debate on the impersonal's place on the voice continuum, she does agree with the analysis of object for the impersonal verb's sole argument, given this data. Awbery (1976)'s analysis of IMPS as passive draws upon her previous analysis of non-clitic personal pronouns, stating that pronoun forms differ according to activation status and not their status as subject or object, thus applying the same logic to the clitic pronouns here. Later analyses of these formerly dubbed *rhagenwau genidol mewnol* 'infixed genitive pronouns' as possessive enclitic pronouns reveal a more complicated construction (Borsley, Tallerman & Willis 2007:158). This is mentioned again in section 2.2.2.

Another traditional argument for the impersonal construction being passive is the lack of 'direct object mutation' on the NP or more broadly a complement of a verb. Initial consonant mutation occurs with a restricted set of consonants in Welsh and is glossed GENDER\part-of-speech, or NUMBER, PERSON where appropriate, where the mutation tracks a referent and otherwise MUT\ to indicate a morphophonological change.[1] These arguments stem from the mistaken view that the soft mutation marks case in some way (Zwicky 1984; Roberts 1997) and that a verb's second argument will undergo soft mutation in its canonical position (Welsh is VSO), as shown by the contrast in (3) and (4), as well as here in (8), demonstrating the lack of mutation on *ci* 'dog' as a subject.

(8) gwel-odd ci fi
see-PRET.3SG dog 1SG
'A dog saw me'

Other complements (Fife 1985:99):

(9) a. Dyl-ai (fe) fynd yn aml
should-IMPF.3SG (3SG.M) MUT\go PRED often
'he should go often'

b. Dyl-id mynd yn aml
should-IMPF.IMPS go PRED often
'one should go often'

[1] This follows the suggested convention for the glossing of mutation, tone and other morphophonological processes of the Leipzig glossing rules (https://www.eva.mpg.de/lingua/resources/glossing-rules.php, Rule 4D).

However, determining if the impersonal is passive, as opposed to active, by the presence or absence of direct object mutation is known to be flawed. More recent linguistic works note that the 'direct object mutation' is the term used by traditional grammars and language learning materials for the common mutation found in this environment, although the trigger for the mutation is not actually object-marking (Roberts 2005), case-related (Borsley & Tallerman 1996; Tallerman 2006; Borsley, Tallerman & Willis 2007) or particularly straightforward, as attested by the number of works dedicated to analysing their environments (see previous and Harlow 1989; Ball & Müller 1992; Roberts 1997 to name a few notable papers and contributions). Fife (1985) remarks that analyses of the Welsh IMPS rely too heavily on this mutation, which holds true even in recent works which recognize the flaws of the 'direct object mutation' analysis; Borsley, Tallerman & Willis (2007:231-235, 284) use the impersonal as part of their evidence that the soft mutation is not a marker of objecthood and following this analyse impersonal constructions as active.

With this general introduction to the form of the construction and the uncertainty regarding the status of the impersonal and the structural effect of IMPS, the following sections of this chapter delve into the form of the GET-passive (section 2.2.2) in order to review comparisons of the functions of the GET-passive and IMPS (sections 2.3 and 2.4).

2.2.2 Analytic passive

The analytic Welsh passive, also called periphrastic, basic, canonical, personal, common, true or spoken passive, is most commonly recognized to be formed with the verb *cael* 'get', as seen in (2) and here in (10):

(10) Cafodd afanc ei weld yn yr afon
get;PRET.3SG beaver POSS.3SG M\see in ART river
'A beaver was seen in the river'

The analytic GET-passive is therefore formed with *cael*, inflected for tense, number and person, agreeing with the first argument (here, *afanc*) or the pro-dropped argument. It is then followed by a form identical to a possessive pronoun which also agrees in number and person (and gender in the 3SG) with the same first or dropped argument, serving simply as an agreement proclitic when used in conjunction with a verbnoun (Borsley, Tallerman & Willis 2007:73,157-161). It has been argued that these 'possessive' pronouns themselves, as in (11), are agreement heads marking agreement with the possessor, rather than pronouns (Awbery 1976; Sadler 1988; Borsley, Tallerman & Willis 2007), with the true pronominal element following the noun (optionally).

(11) a. ei wallt (o)
POSS.3SG M\hair 3SG.M
'his hair'

b. ei gwallt (hi)
POSS.3SG hair 3SG.F
'her hair'

c. eu gwallt (nhw)
POSS.3PL hair (3PL)
'their hair'

The gloss used will continue to mark them as POSS in order to avoid confusion with other pronouns, as the proclitics are not traditionally expressed as being phonologically part of the non-finite verb. They have the forms *fy, dy, ei, ein, eich, eu*, for 1SG, 2SG, 3SG, 1PL, 2PL and 3PL, and their status is discussed further in section 2.2.3.

The item that follows its proclitic, when not a possessed noun, is a non-finite form of a verb referred to as a verbnoun (*berfenw*, also 'verb-noun') which undergoes initial consonant mutation[2] to agree in number, person and gender with the referent of the possessive pronoun.

Certain forms of the verb *bod* 'to be' can also be used in this construction. When the referent is a 3rd person, the form *mae* of the verb 'to be' is available and yields constructions such as (12) and (13). *Mae* has quite a broad distribution itself, one of its many functions being the existential 'be', where it agrees only in person and not in number (cf. *maent* 'they are'). It is this partially agreeing form that is employed in (12) and (13).

(12) Mae afanc wedi ei weld yn yr afon
be.3SG beaver PERF POSS.3SG M\see in ART river
'A beaver was seen/has been seen in the river'

(13) Mae afanc-od wedi eu gweld yn yr afon Ogwen
be.3SG beaver-PL PERF POSS.3PL see in ART river Ogwen
'Beavers have been seen in the Ogwen river'

These *mae* + PREP + POSS + verbnoun forms are also considered by most to be passive, by whatever definition they use, (Richards 1938; Awbery 1976; Jones & Thomas 1977; Fife 1985; Borsley, Tallerman & Willis 2007) whilst others disagree but without arguing that these examples differ from the GET-passive (Pilch 1975; Sadler 1988). Richards (1938) decides that the Welsh passive does not necessarily contain the inflecting verb of reception *cael*, but must contain an aspectual marker *wedi* 'after, past' which has the function PERFECTIVE. Section 2.2.3 discusses the possible aspect markers for the analytic passive.

When the referent is 1st or 2nd person, another form of the verb 'to be', from a different paradigm, is used in the present tense[3]:

[2]Initial consonant mutation is restricted to certain consonants only and in one case involves the deletion of a segment entirely.

[3]3rd person forms of this stem of the verb 'to be' do exist *ydyw, yw* SG and *ydynt, ŷnt* PL but the form *mae* SG from a different and very restricted paradigm is used instead, as in example (12). The PL form *maent* 'they are' is not used to agree with 3SG arguments in the main clause, as shown in (13) which is followed by a plural noun *afancod*, as agreement in Welsh does not operate between a head and a lexical NP (Borsley, Tallerman & Willis 2007:17).

(14) yr wyt wedi dy ddal
PRT be.PRS.2SG PERF POSS.2SG 2SG\hold
'you are caught/you have been caught'

(15) yr wyf wedi fy nal
PRT be.PRS.1SG PERF POSS.1SG 1SG\hold
'I am caught/I have been caught'

Fife (1985:115) therefore considers the nucleus of a Welsh passive to be the "anaphoric pronoun in a genitive relation with a verbal noun", including in this analysis the *cael* and/or *wedi* forms as well as any other (possessive) pronoun + verbnoun following an aspect marker. The status of these aspect markers, clearly derived from prepositions, is under debate in contemporary works although they are usually analysed as having a predicative or adverbializing function (Gensler 2002; Borsley, Tallerman & Willis 2007).

In all of the examples given where an aspect marker in a passive construction has been shown to occur without the verb *cael*, it can also occur with the verb *cael*:

(16) Mae afanc wedi *cael* ei weld yn yr afon
be.3SG beaver PERF get POSS.3SG M\see in ART river
'A beaver was seen/has been seen in the river'

(17) yr oeddwn wedi cael fy nal
PRT be.PST.1SG PERF get POSS.1PL 1SGMUT\hold
'I was caught/I had been caught'

(18) Mae afanc-od i gael eu gweld yn yr afon Ogwen
be.3SG beaver-PL to MUT\get POSS.3PL see in ART river Ogwen
'Beavers can be seen in the Ogwen river / Beavers are to be seen/are going to be seen in the Ogwen river'

Borsley, Tallerman & Willis (2007) recognize the *cael* element of the passive to be optional where *wedi* is present, although they claim that such constructions are then ambiguously either passive or active, with the presence or absence of an optional pronoun after the non-finite verb disambiguating the two forms. Sadler (1988:80) also observes that an overt pronoun may not occur in GET-passives, "the object head may not be doubled by an overt pronoun in post-head position".

(19) mae afanc wedi ei weld
be.3SG beaver PERF POSS.3SG M\see
'A beaver has been seen' or 'A beaver has seen him/it'

(20) mae afanc wedi ei weld **o**
be.3SG beaver PERF POSS.3SG M\see 3SG.M
'A beaver has seen him/it'

However the ambiguity only arises when there are two referents in the same person (here 3SG), which will be less ambiguous contextually and this does not rule the construction out as passives. This will be revisited in section 2.3.

The fact that *cael* is not required to derive a passive-like construction (one in which a transitive verb's arguments are reduced by suppressing an agent whilst the patient argument is expressed as subject has been the working assumption, so far), as explored in 2.2.2, suggests that a similar ambiguity to the one created by the third person possessive pronouns might affect the *cael* 'get' auxiliary. The examples (19) and (20) demonstrate this ambiguity in the *mae* + ASPECT + POSS passives and as the auxiliaries show the same kind of agreement – person and number in both *cael* and *bod* 'be' – it is reasonable to assume that a clause with *cael* might produce the same result. Sadler's (1988) observation that a Welsh GET-passive cannot be followed by an overt pronoun holds true, with the example in (21) demonstrating that both a passive and non-passive reading of the GET construction is possible.

(21) cafodd ei rhydd-hau
get;PST.3SG POSS.3SG free-VRB
'she[4] was freed' or 'he/she was allowed to free her'

(22) cafodd ei rhydd-hau hi
get;PST.3SG POSS.3SG free-VRB 3SG.F
'he/she was allowed to free her'

In (22), the semantics of the verb GET play a greater role than in a GET-passive. Here, rather than being used as a full lexical verb, it is seen to act as an auxiliary still, in its function as a modal, meaning 'allow, permit, let'.

Awbery (1976) and Jones & Thomas (1977) consider the *wedi*-type passives without *cael* to be optional forms where *cael* has been deleted from the surface structure according to their formalist analyses. In addition, Jones & Thomas (1977:272) observe that this deletion often occurs with change of state verbs, giving the effect of "concentrating upon the state of the patient after the change has occured", hinting at the stative/dynamic contrast seen in other European languages *the door was open/the door was opened.* This analysis seems quite valid with certain verbs ('to be caught' in (14), (15) and (17)) in but more dubious with others such as *gweld* 'see', which emphasizes the importance of investigating argument structure and verb classes when considering grammaticality and restrictions on the passive, as is attempted in this thesis for the impersonal morpheme.

Another expression overlooked by most analyses is the combination of these possessive pronouns, which seem to be at the root of the analytic passive if Fife (1985) is correct, with the impersonal inflection as illustrated by (7). In her analysis Sadler (1988) uses the clitic pronouns mentioned above in section 2.2.1 to prove that the impersonal's surface argument behaves more like an object, but if this pronoun in a genitive relation with a verbnoun alone would form a passive, its function in (24) is unclear.

(23) Achub-wyd y ferch
save-PRET.IMPS ART F\girl

[4]The lack of mutation on the verbnoun indicates no agreement with a masculine referent, therefore the referent must be feminine as the possessive pronoun is in the third person singular form.

'the girl was saved / they saved the girl'

(24) Fe 'i hachub-wyd
PRT 'POSS.3SG F\save-PRET.IMPS
'she was saved / they saved her' (Sadler 1988)

Therefore, the data of this section suggest that the possessive pronoun in (24) functions simply as a pronoun, as in (20), whereas an ambiguous phrase like (19) can see the possessive pronoun in different functions. This is explored in section 2.2.3.

2.2.3 The passive core

It is possible that the agreement proclitic – glossed as its possessive pronominal form – at some point underwent reanalysis as part of a passive core – or 'nucleus' as Fife (1985) phrases it – to mark person, number and, in the third person, gender on the non-finite verb. This reanalysis, of course, would have to coexist with the full pronoun status of the possessive pronoun in (20), (22) and (24) of 2.2.2 and the non-passive readings of (19) and (21).

The reanalysis of the proclitic as a passive marker becomes unnecessary, however, as the following sections show that Welsh analytic passives involve the marking of the clause's surface argument as object whilst it occupies a position associated with subject and triggers inflection on the auxiliary verb (section 2.2.3.1), and encode the object's result state 2.2.3.2.

2.2.3.1 *ei* + verbnoun

Firstly, in order to identify the elements of a clause that cause a passive reading, it is necessary to have a working definition of 'passive'. The assumption made for these purposes, in this section, is that passivization involves the promotion of an argument that would be a verb phrase's transitive object, so that the equivalent resulting clause retains just one argument identifiable as its subject, assumed to be semantically identical to the transitive object.

The structure POSS + verbnoun occurs frequently in periphrastic transitive clauses in Welsh, and can appear with or without the argument it agrees with, as demonstrated in (25) and (26).

(25) dwi'n eu diawlio
be.PRS.1SG'PROG POSS.3PL devil:VRB
'I curse them'

https://t.co/yT0PpNUWkw – [Status update retrieved 02/02/2015]

(26) dwi'n dy fethu di
be.PRS.1SG'PROG POSS.2SG MUT\miss 2SG
'I miss you'

https://t.co/Ts0xSzupOq – [Status update retrieved 02/02/2015]

It is also worth noting that neither *ei* or its equivalent forms can occur with an object that is expressed as a full NP following the verbnoun (Borsley, Tallerman & Willis 2007:17,160,202) – see (27) – as "all agreement in Welsh occurs only when a head agrees with a pronoun, rather than a non-pronominal noun phrase" (Borsley, Tallerman & Willis 2007:202).

(27) dwi'n methu Brothers & Sisters hefyd.
be.PRS.1SG'PROG MUT\miss Brothers & Sisters also
'I miss Brothers & Sisters too.'
https://www.facebook.com/BrothersandSisters/posts/467603476612251 – [Status update retrieved 02/02/2015]

The proclitic does not occur with fully inflected lexical verbs, where the inflection agrees with the subject – whether expressed (28a) or unexpressed (28b).

(28) a. llyfodd y ci ei llaw
lick:PST.3SG ART dog POSS.3SG hand
'the dog licked her hand'
https://t.co/hCl8slmlrN – [Status update retrieved 02/02/2015]

b. llyfodd law y capten
lick:PST.3SG MUT\hand ART captain
'it (/he/she) licked the captain's hand'
http://www.bbc.co.uk/cymru/urdd04/cefndir/cidewr.shtml

c. *ei llyf-odd y ci 'r llaw
POSS.3SG lick-PST.3SG ART dog ART hand
Intended: the dog licked the hand

d. *ei llyf-odd y ci
POSS.3SG lick-PST.3SG ART dog
Intended: it licked the hand or it licked her

The analytic passives seen in 2.2.2 all blocked the appearance of an object pronoun after the verbnoun, of the type seen in the active transitive in (26).

A clitic pronoun being reanalysed as part of a verb stem would not be an unusual path of syntactic change, and there is precedent for the marking of person, number and gender on non-finite verbs, as is the case in European Portuguese (Raposo 1987). Welsh provides no counter evidence in the form of separability of the possessive pronoun from the verbnoun: no material can appear between the two. Indeed, similar arguments have been made to support the possessive pronoun's status as an agreement proclitic with verbnouns (Awbery 1976; Sadler 1988; Borsley, Tallerman & Willis 2007). The assumption that this new stem forms a passive is too great of a generalization, however. As Borsley, Tallerman & Willis (2007:110-111,277) point out, this same phrase is found in object *wh*-questions in periphrastic clauses:

(29) Beth ydych chi 'n (ei) fwyta?
what be.PRS.2PL you PROG POSS.3SG M\eat

'What are you eating?' (Borsley, Tallerman & Willis 2007)

(30) *Beth ydych chi 'n ei fwyta e?
what be.PRS.2PL you PROG POSS.3SG M\eat 3SG.M
('What are you eating?'[intended]) (Borsley, Tallerman & Willis 2007)

As the brackets around the possessive proclitic *ei* suggest, it is optional, but only in informal registers. (Borsley, Tallerman & Willis 2007:111) exemplify a continuum of forms from most formal to most informal variations on (29), the most colloquial being a version which includes neither *ei* nor the following mutation which agrees with the proclitic. This suggests that the POSS + verbnoun form has been reduced to the point where it is reanalysed as a plain aspectual clause which has the form PREPOSITION + verbnoun – a prevalent structure in Modern Welsh – as depicted in (31a)[5]. The words *beth* 'what' and *bwyta* 'eat' are reduced in their written forms as is the standard in representing colloquial and dialectal forms.

(31) a. Mae hi 'n byta
be.3SG 3SG.F PROG eat
'She's eating / She eats / She does eat' intransitive

b. Be' mae hi 'n byta?
what be.3SG 3SG.F PROG eat
'what is she eating?' or 'what does she eat?'

c. Drych be mae o'n byta AM CHANGE!!!!
look what be.3SG 3SG.M'PROG eat for change
'Look what he's eating FOR A CHANGE!!!!'
https://t.co/g1fsI1xslq – [Status update retrieved 17/08/2015]

In transitive aspectual clauses, however, the mutation caused by the proclitic does not, at first, seem to be optional in the same way as seen in (29) and (30) due to the assumed sociolectal variation in *wh*-clauses. Rather, whilst the proclitic is still optional, its mutation environment cannot occur without it.

(32) a. Mae hi 'n ei fwyta (o)
be.3SG 3SG.F PROG POSS.3SG M\eat (3SG.M)
'she's eating it/him' or 'she eats…' etc.

b. y tro hwn dwi'n ei feddwl o
ART turn PROX.M be.1SG'PROG POSS.3SG M\think (3SG.M)
'This time, I mean it' (# I mean this time)
http://bacpacio.blogspot.co.uk/2010_06_01_archive.html Informal, northern

c. Mae hi 'n (ei) byta fo
be.3SG 3SG.F PROG POSS.3SG eat 3SG.M
'she's eating it/him' or 'she eats…' etc. Colloquial variants

(33) a. *Mae hi 'n fyta.
be.3SG 3SG.F'PROG M\eat

[5]As suggested by the translation of (31a), the gloss PROG is a little too generalized for the distribution of *yn* in aspectual clauses. Its distribution in general is described in more detail in Gensler (2002).

Intended: She's eating it/him (Colloquial)

b. *Mae hi 'n fyta o.
be.3SG 3SG.F'PROG M\eat 3SG.M
Intended: She's eating it/him. (Colloquial)

Unlike as suggested by the *wh*-question in (29) (Borsley, Tallerman & Willis 2007:110-111), a mutation environment does not occur without the proclitic, unless there is a fronted object, either pronominal or otherwise.

(34) [y]r hyn y mae o'n ei fwyta
PRT DEM.SG.M PRT be.3SG 3SG.M'PROG POSS.3SG M\eat
'what he eats' or 'the things he eats'
http://news.bbc.co.uk/hi/english/newyddion/newsid_1015000/1015842.stm

(35) a. brithyll mae hi 'n (ei) fwyta
trout be.3SG 3SG.F PROG POSS.3SG M\eat
'she's eating trout' or 'It's (a) trout that she's eating'.

b. *brithyll mae hi 'n ei fwyta o
trout be.3SG 3SG.F PROG POSS.3SG M\eat 3SG.M
Intended: she's eating trout, or, it's (a) trout that she's eating

c. *mae hi 'n ei fwyta brithyll
be.3SG 3SG.F PROG POSS.3SG M\eat trout
Intended: she's eating trout, or, it's (a) trout that she's eating[6]

This proclitic agreement with objects fronted, in any way, seems to be consistent with the agreement found in passive constructions; the object, promoted to the subject position, can be null, pronominal, or a full NP, but still the proclitics (*ei/eu* etc.) agree with that object. Borsley, Tallerman & Willis (2007:207-208) acknowledge this exception to their generalization, stated above – that *ei* agrees only with pronouns, and view fronted objects and passive NPs as cases of 'special agreement'.[7] However, if the POSS proclitic is viewed as object agreement, the 'special agreement' may be an unnecessary stipulation.

Under this view of proclitic agreement, the POSS + MUT\verbnoun structure is identical in passives and *wh*-clauses. Borsley, Tallerman & Willis (2007:277) argue that they differ as the mutation can occur without its proclitic (the proclitic which causes the mutation environment) in *wh*-questions (a similar argument is made in Tallerman (1991)), but not in passives:

[6]Although, of course, right dislocation is possible whilst omitting the object pronoun, rendering an almost identical construction:

(36) mae hi 'n ei fwyta, brithyll
be.3SG 3SG.F PROG POSS.3SG M\eat, trout
'she eats it, trout' or 'she does eat it, trout'

[7]They also treat inflected prepositions as special agreement, although not relevant to the discussion here.

(37) cafodd Emrys daro
get;PST.3SG Emrys MUT\hit
'Emrys got to hit' but # 'Emrys was hit'.

They mark the following example as grammatical, although it would be 'ungrammatical' in written Welsh:

(38) *Pwy mae Emrys wedi daro?
who be.PRS.3SG Emrys PERF M\hit
'Who has Emrys hit?'

This kind of mutation on *taro* 'hit' would certainly occur in speech, due to the phonological reduction of the proclitic, but elsewhere it is impossible as *wedi* does not trigger mutation. Therefore, the status of POSS + MUT\verbnoun is equal in passives and *wh*-questions and the ungrammaticality of (38) is more an issue of orthographic representation. In (39), *wedi tharo* would be phonologically identical in both examples, regardless of the register used.

(39) a. Pwy mae Emrys wedi'i tharo?
who be.PRS.3SG Emrys PERF'POSS.3SG F\hit
'Who (female) did Emrys hit' or 'Who is the female…'

b. mae Einir wedi'i tharo
be.PRS.3SG Einir PERF'POSS.3SG F\hit
'Einir is hit / has been hit' (or 'Einir has hit her')

What affects the absence of the proclitic is the aspect marker, as exemplified earlier in (29). The aspect markers will be examined further in section 2.2.3.2. As stated previously, *wh*-clauses do not require POSS + MUT\verbnoun in colloquial Welsh, whereas passives still do require it.

(40) a. Pwy mae Emrys wedi taro?
who be.PRS.3SG Emrys PERF hit
'Who has Emrys hit?'

b. mae Einir wedi taro (yn barod)
be.PRS.3SG Einir PERF hit (PRED ready)
'Einir has (already) hit' but #Einir was already hit

If the proclitic agreement found in passives, *wh*-clauses and periphrastic transitives lacking full NP objects in the post-verbnoun position is a unified phenomenon, it is not without conditions. This object agreement would have to be conditional, as the examples in (27) and (28) provide examples of when the agreement proclitic cannot occur, despite the presence of an object and thus the potential for agreement.

The restriction on the presence of personal pronouns following the verbnoun with passives, fronted objects and *wh*-clauses suggests that an overt object (in the form of a personal pronoun or full NP) can only appear once per verb phrase, or not at all, as periphrastic transitives illustrate (25). With this generalization, the restriction on full

NPs following a verbnoun in periphrastic constructions becomes exceptional. A plausible suggestion is that the proclitic is discourse-activated and tracks agreement with a previously activated referent, in a similar way to Welsh personal pronouns, as suggested by Awbery (1976) (see section 2.2.2). Whilst this condition makes assumptions about the role of information structure in the grammar, it has no clear exceptions in the data provided. It does not account for the final restriction to the proclitics, however, which is on their use with simple verbs, as object fronting can also occur with full lexical verbs:

(41) y llaw llyf-odd y ci
ART hand lick-PST.3SG ART dog
'the hand the dog licked' or 'it was the hand the dog licked' Object focus

The POSS proclitics' exclusion does not follow the generalizations above. A second condition, then, is that subject agreement blocks the clitic from the inflected verb. Typologically, there is no reason why this should be the case. In section 2.4, examples (6a)-(24), an enclitic of the type in (42) was introduced which seems to perform the function of fronting the object in such instances. The object enclitics on these particles are, however, not of the same paradigm as the possessive-type proclitics.

(42) fe'th gar-af di
PRT'2SG MUT\love-PRS.1SG 2SG
'I will love you' (cf. possessive 2SG *dy*)

Interestingly, they also seem to be restricted when a full NP object follows the inflected verb, much like the possessive-type proclitics and their verbnouns:

(43) *fe'i lyf-odd y llaw
PRT'3SG M\lick-PST.3SG ART hand
Intended: he/it licked the hand

Fronting subjects[8], whether pronoun or full NP, can trigger proclitic agreement for some it seems:

(44) fi dy wel-odd di
1SG POSS.2SG MUT\see-3SG 2SG
'It was me who saw you / *I* saw you'. Bangor dialect (C. H. Thomas 1982:36)

This use of the proclitic may be limited by dialect, as C. H. Thomas (1982)'s notes would suggest and may not cover all persons. In fact, the paradigms of the two clitic forms are largely merged in 3SG and all plural forms when in context due to phonological motivations.

(45) fi'i gwelodd hi
1SG'POSS.3SG F\see-3SG 3SG.F
'It was me who saw her / *I* saw her' Colloquial

[8]Note that with fronted subjects the verb no longer inflects to agree with the subject. Borsley, Tallerman & Willis (2007:125-126) discuss this further.

The gloss of example (45) highlights the merger of the clitic paradigms as the enclitic *'i* /i/ is identical to the form of the possessive *ei* /ei/ in an environment where *ei* immediately follows a vowel, producing the form *'i* /i/. This contrasts with the 2SG forms in (42) and (44), which are distinguishably enclitic and possessive proclitic respectively.

Returning to the issue of the blocked possessive-type proclitics with full lexical verb – in standard Welsh at least, it may be that verbs inflected for agreement with a subject cannot take object agreement in addition[9].

Finally, the possessive-type proclitics must agree with an object, therefore all intransitives exclude their use. It must be assumed, then, that 'object' cannot equate to 'internal argument' of the VP, otherwise unaccusative intransitives might allow proclitic agreement as observed by Borsley et al. (2007:277-278) and explored further in chapter 4.

(46) a. mae Lliwedd am syrthio
be.PRS.3SG Lliwedd about fall.VRB
'Lliwedd will fall' or 'is about to fall' (or 'wants to fall'?)

b. ?mae Lliwedd am ei syrthio
be.PRS.3SG Lliwedd about POSS.3SG fall.VRB
Intended: Lliwedd will fall (etc.).
Possible interpretation: ?she wants (or seems to want) someone else to cause her to fall, or, Lliwedd is about to cause someone / something else to fall.

c. ?mae Lliwedd wedi ei syrthio
be.PRS.3SG Lliwedd about POSS.3SG fall.VRB
Intended: Lliwedd fell.
Possible interpretation: ?someone else made her fall (in battle).

The difficulty, then, lies in distinguishing the promoted object of a passive from the surface subject of an unaccusative verb (intransitive). As suggested by the possible interpretations of examples in (46b) and (46c), the introduction of the POSS proclitic forces a transitive reading, even if a transitive interpretation of the verb in question is obscure, as is the case for *syrthio* 'fall'. Perhaps a better generalization for the agreement marked by POSS is 'object of transitive'. This would be problematic for some theories of grammar as it assumes either that the proclitic agreement only takes place after an object is moved, 'promoted' or realized pronominally, or that verb is associated with a particular number of arguments before undergoing any operation.

The most fitting generalization for the agreement marked by the possessive-pronoun-type proclitics of this section is agreement with an object previously active in the discourse which is blocked from verbs which already inflect to agree with the subject. In passives, discourse-activated may not apply as the full NP or pronominal object may

[9]Conveniently, this generalization will also hold for examples (44) and (45), in which the inflection of *gwelodd* does not agree with the 1SG subject. However, this is more likely attributed to general agreement rules of Welsh, which default to 3SG under several conditions, including subject fronting and relative clauses

occur immediately before the agreement proclitic, which weakens the tracking proposal as the agreement is compulsory in these cases. However, the promoted object is also marked by the inflection on the auxiliary verb of passives – as clarified by 2SG marking in example (47) – usually associated with subjects.

(47) gest ti dy greu […]
MUT\get-PST.2SG 2SG POSS.2SG MUT\create […]
'you were created […]' Colloquial

https://t.co/bRPV6TFVwx – retrieved 21/08/2015

Therefore, the POSS proclitic might still be said to track the object, as it is in the position usually occupied by a subject.

2.2.3.2 The role of aspect

If the possessive-type proclitics agree with a verbnoun's object as demonstrated in section 2.2.3.1, the question of what forms a passive must extend beyond object marking.

The last example in section 2.2.3.1 suggests that marking agreement with the passive subject (the assumed promoted object) on both the auxiliary verb (inflection) and the verbnoun (proclitic) may be an element unique to passives. This is true in all persons but the third person plural which use the from *mae* 'be.PRS.3SG', which is again commonplace in Welsh agreement rules and has been illustrated previously – see (13), (45). However, both feature arguments which appear in the position associated with the subject of a periphrastic transitive which trigger proclitic agreement, and so both structures can be considered passive with or without inflection on the auxiliary to agree with the subject.

As demonstrated in the previous section (2.2.3.1), not all *mae* + POSS verbnoun constructions allow a passive reading – see examples (32)-(35). As was mentioned, the aspect marker (for which, historically prepositional forms take on the function of aspect markers[10]) used in these constructions determine whether or not a passive interpretation is available in the third person.

(48) a. mae o wedi ei ysgrifennu
be.PRS.3SG 3SG.M PERF POSS.3SG write
'he has written it/him' or 'it/he is written/has been written' passive?

b. Mae o wedi ei sgwennu'n dda
be.PRS.3SG 3SG.M PERF POSS.3SG write'PRED MUT\good
'it is well written' passive (in context)

Context: A book written by a female author

https://gwanas.wordpress.com/2014/06/12/cawl-bys-sian-lewis/

c. mae o 'n ei ryddhau
be.PRS.3SG 3SG.M 'PROG POSS.3SG M\free:VRB
'he/it releases him/it' unambiguously active

[10] Glossed here with an approximation of their prepositional meanings, as they have not all been mapped onto appropriate aspectual classes yet. A future project perhaps.

https://cy.wikipedia.org/wiki/Trydan

In (48a), the ambiguity – as to whether the sentence should be interpreted as passive – arises due to all the conditions for the passive as defined in section 2.2.3 so far being present. The proclitic agrees in person and number with the surface subject and no NP precedes the auxiliary or personal pronoun follows the verbnoun to mark this as non-passive[11]. All these conditions are matched in (48c), but fail to give rise to the same ambiguity. The sole differentiating factor in (48c) is the aspect marker *yn*. This leads to the conclusion that aspect is an integral part of the passive. This is no original conclusion, of course: Keenan & Dryer (2007:340) generalize that "If a language has any passives it has ones which can be used to cover the perfective range of meaning". This suggests that the auxiliary *cael* has 'perfective' or the implication of some result state in its semantics (when not used as a modal), as the passive can be formed without *wedi* PERF when *cael* is used (see (10),(17),(47), etc.). Again, this is no new conclusion for the auxiliary GET with numerous analyses treating English *get* as a 'resulting verb' (Quirk et al. 1972; Haegeman 1985) and discussing the status of causation and BECOME in the semantic composition of GET (Dowty 1979; Rappaport Hovav & Levin 2001). Other analyses for the English GET-passive from the perspective of its event structure find it to be an aspectual verb lacking temporal extent (Fox & Grodzinsky 1998; Orfitelli 2011; Alexiadou 2012):

(49) the table got wiped *for an hour

But this analysis does not hold of the Welsh GET as shown in (50) where the prepositional phrase *for an hour* is grammatical with the GET-passive.

(50) cafodd y bwrdd ei sychu â chadach am awr
get;PST.3SG ART table POSS.3SG dry;VRB with MUT\cloth for hour
'the table was wiped (with a cloth) for an hour'

Indeed, *cael* can be used in conjunction with the aspect marker *yn* to produce a passive, which, as demonstrated in (48c), fail to produce a passive reading otherwise.

(51) Mae'r swm [...] yn cael ei gyfrifo
be.PRS.3SG'ART sum [...] PROG get POSS.3SG M\calculate
'The amount is calculated'

https://www.denbighshire.gov.uk/cy/eich-cyngor/ynglyn-ar-cyngor/sut-maer-cyngor-yn-cael-ei-ariannu.aspx

The remainder of this section will be dedicated to establishing other aspect markers which form passives, in order to verify the claim that the Welsh analytic passive must contain a perfective element. The second person singular is used to minimize the ambiguity associated with the GET-passive, as discussed above.

[11]The mutation environment following the proclitic also agrees in gender with the subject, although here it is a lack of mutation which marks MASCULINE, whereas a feminine mutation would produce the form *hysgrifennu* – in some varieties of Welsh at least.

(52) *wedi*, PERF 'after, past'

rwyt wedi dy adael
PRT.be.PRS.2SG PERF POSS.2SG MUT\leave
'you have been left' or '(?)you have left yourself'

(53) *yn* PROG 'in'

? rwyt yn dy adael
PRT.be.PRS.2SG PROG POSS.2SG MUT\leave
(?) you are leaving you[rself] but #you are being left

(54) *wrthi* 'near,to,at.F.SG' + *yn* (dialectal)

a. Roedd hi wrthi'n rhannu'r cawl
PRT.be.PST.3SG 3SG.F at.it'PROG share'ART soup
'she was dishing out the soup/broth'

(p. 37) Manon Steffan Ros (2014) *Llanw* [Novel]. Y Lolfa: Talybont

b. ??(wt) ti wrthi'n dy adael
(be.PST.2SG) 2SG at.it'PROG POSS.2SG MUT\leave
??you are leaving you[rself] but #you are being left Colloquial

(55) *am* (PROSPECTIVE? aspect here), but also INTENT 'around, for, towards'

rwyt am dy adael
PRT.be.PRS.2SG around POSS.2SG MUT\leave
'you want to be left / you are determined to be left' or 'you are to be left' Formal

(56) *ar* PROS? here, also INTENT 'on, by'

rwyt ar dy adael
PRT.be.PRS.2SG on POSS.2SG MUT\leave
'you are about to leave' or '(?)you are set on being left' Possibly dialectal

(57) *ar fin* (PROS?) 'on the brink'

a. ?rwyt ar fin dy adael
PRT.be.PRS.2SG on brink POSS.2SG MUT\leave
'(?)you are about to leave you[rself]' or '(?)you are set on being left' (or 'determined to be left') Possibly dialectal

b. roeddwn ar fin fy niflasu
PRT.be.PST.1SG on brink POSS.2SG MUT\bored
'I was about to be bored' or 'I was about to become bored'

(58) rwyt heb dy adael
PRT.be.PRS.2SG without POSS.2SG MUT\leave
'you have not been left'

As noted by others, the VPs of aspectual clauses may also be preceded by *newydd* 'new' (identical to the adjectival form).

(59) rwyt newydd dy adael
PRT.be.PRS.2SG new POSS.2SG MUT\leave
'you have just been left'

In all of the aspectual clauses above (52)-(59), two readings are to be expected as all have transitive counterparts, as exemplified for *yn* and *wedi* previously. In some cases, the transitive reading is more obscure due to the lexical meaning of the verbnoun and the preference of Welsh to use full reflexive NPs for identical referents of transitives. However, the impossibility of the passive interpretation in (53) and (54) demonstrate the contrast. Whereas a simple transitive reading might be possible, depending on the verb, a suppressed agent is impossible with these two aspect markers, *yn* PROG 'in' and *wrthi'n*, which is composed using *yn*. Therefore they are the only two aspect markers tested which do not contribute to the semantics of a passivized clause.

This section has established the form of the analytic passive in Welsh, which consists of:

1. an object, or most patient-like argument of a transitive verb, behaving as the subject – by appearing in the subject position and triggering inflection on the auxiliary verb (or just the latter, in case of fronting)

2. the presence of proclitic object agreement which also marks the same argument

3. the patient-like argument being understood as having a resulting state

These points are all consistent with cross-linguistic observations on passives, which will be explored more in chapter 7.

Throughout this thesis, the passive construction used for comparison with the impersonal construction will be GET-passive, but it is assumed that any other analytic passive will yield the same result with the predicates tested.

2.3 Traditionally passive functions

Awbery (1976) and Fife (1985) acknowledge that almost all previous works that consider the impersonal constructions to be passive label them to be 'variants of' the *get* passives and consider the impersonal construction 'stylistically superior' versions of the analytic passive. Later works challenge this view (Fife 1985, 1992; Sadler 1988; Blevins 2003), though it is also noteworthy that Pilch (1975) and Griffen (1980) do not consider the *cael* passives to be true passives at all. The confusion stems from either a lack of consensus on what 'passive' or 'passive voice' is, or on the differing criteria for the analysis passives according to different frameworks.

Whilst familiar to all those who study language, the passive has a long history in linguistic analyses and its form and function have been widely debated. The most basic passive, according to Keenan & Dryer (2007:328-329), should describe an action which takes an agent subject and patient object, should be derived from a transitive verb and should appear without an agent phrase. They also state that "the subject of a passive VP is always understood to be as affected by the action as when it is presented as the

object of an active transitive verb" (p.341). Whilst all these observations prove to be true, they do not distinguish the analytic passives and 'impersonal passives' in Welsh, other than to suggest that the impersonal morphology produces the more 'basic type' of passive due to its morphological form and inability to take a by-phrase in some cases (see 2.4). Other widely-used accounts of passivization have it as separate processes, in which verbs normally requiring two or more arguments undergo either object promotion or agent suppression/deletion, or a combination of both (Chomsky 1957; Perlmutter 1978, 1980; Siewierska 1984; Keenan & Dryer 2007). Although problematic, these criteria for passive have – most often – been used in analysing the proposed Welsh passive constructions. The similarities of the two constructions that have caused them both to be considered passive are illustrated in this section, restating the relevant properties of each from sections 2.2.1 and 2.2.2.

Both the impersonal and the analytic passive can be interpreted as valency changing operations on verbs (examples from Awbery 1976):

(60) rhybuddi-odd y dyn y plant
warn-PST.3SG ART man ART children
'the man warned the children'

(61) rhybuddi-wyd y plant (gan y dyn)
warn-PST.IMPS ART children (by ART man)
'the children were warned (by the man)'

(62) caf-odd y plant eu rhybudd-io (gan y dyn)
get-PST.3SG ART children POSS.3PL warn-VRB (by ART man)
'the children were warned (by the man)'

In (60), a transitive verb is shown with two arguments, one in an agentive role and the other in the affected role. This same verb is shown in two different constructions in (61) and (62) to yield two very similar outputs. The verb has one argument less and in both examples no longer requires its agent argument. Either object promotion or agent suppression/deletion or a combination of both could be interpreted in both (61) and (62). The agent argument is identically expressible as a case-marked adjunct. If in both cases the first NP following the inflected verb is to be interpreted as subject, then (61) and (62) both fit Keenan & Dryer's description of a passive as the subject of the VP is understood to be as affected by the action as when it is presented as the object of an active transitive verb. However, this is one of the main points of argument for those who analyse IMPS as active, as seen in section 2.2.1, due to the apparent ambiguity in (61) of the NP *y plant* being neither clearly marked as object or subject in comparison with their positions in (60). Then again, subjecthood and objecthood are known to be vague categories and, as noted by many others, are possibly not useful concepts in the attempt to characterize the passive voice.

The other proposed passives of the construction 'aspectual preposition + possessive pronoun + non-finite verb', seen previously in (14),(15) and (19), also exhibit the same

properties as (61) and (62).

(63) mae'r plant wedi eu rhybuddio ?(gan y dyn)
be.3SG'ART children PERF POSS.3PL warn-VRB ?(by ART man)
'the children have been warned ?(by the man)'

(64) mae afanc wedi ei weld gan drigolion Llŷn
be.3SG beaver PERF POSS.3SG M\see by resident;PL Lleyn
'A beaver has been seen/was seen by Lleyn residents'

In (63) the same verb as used in previous examples, *rhybuddio* 'warn', has only one of its potential arguments realised and this one is the patient (also, the object in (60)), with the only difference from (62) being the potential unacceptability of the agentive adjunct. The lack of agent phrase does not disqualify a construction from being considered passive according to the vast majority of frameworks, rather it is the presence of an obligatory agent phrase that is questioned with regards to passive membership. The agent phrase in (64) shows that it is not the construction itself that dis-prefers the agentive adjunct, indicating that there may be other semantic or pragmatic factors to consider, such as verb class or aspect, which have been under-research so far. These *wedi*-type constructions themselves have been overlooked more often than not, although it has been shown in section 2.2.2 that any discussion of the Welsh passive/impersonal categorization must also include these forms.

2.4 Functions of the impersonal

There are well-established data showing why the IMPS does not fit the traditional view of the passive as put forward in 2.3. The first detailed study of the impersonal and passive, and of Welsh syntax, was made by Awbery (1976) and later revisited by Fife (1985).

As already noted in section 2.1, most works on the impersonal construction have sought to describe how the impersonal can differ from the analytic passive, whilst assuming that both are structurally related due to their shared passive function. According to Fife, if the two constructions in question are variants of the passive, they should not have different syntactic properties. This raises the question of whether the passive voice can be said to have 'variants', and if 'variants' is to be interpreted as 'more than one construction to fulfil the same valency-changing function'. Then, whether or not two constructions considered passive have different syntactic properties will depend on how broadly defined the term 'passive' is. The definition of 'passive' will be a concern for a later chapter (7). In this current section looking at previous analyses of Welsh, the two recurring issues are the passive form in Welsh and whether this form is subject to the same restrictions as passives of other languages.

Fife (1985) argues that both the analytic *get* passive and the impersonal differ on most syntactic restrictions, primarily the ones discussed below, therefore they cannot

be variants of the same construction. Fife (1985:105) also dismisses some of the tests on syntactic restrictions used by Awbery as the restrictions in question are determined by the verbs according to the kind of agents they can take.

2.4.1 Syntactic restrictions on the *cael*-passive and IMPS

Awbery (1976) shows that IMPS allows embedded patients, whereas Fife (1985) contrasts this with the ungrammatical analytic passive with an embedded patient (under *bod* 'to be'):

(65) Cyhoedd-wyd ganddo fod y cyngerdd wedi dechrau
announce-PST.IMPS by.3SG.M MUT\be ART concert PERF start
'It was announced by him that the concert had started' (Awbery 1976:160)

(66) *Caf-odd ei chyhoeddi gan Ifor fod pawb yno
get-PRET.3SG POSS.3SG F\announce by Ifor MUT\be everyone there
'It was announced by Ifor that everyone was there' (Fife 1985:109)

Jones & Thomas (1977:277-8) agree that sentences of the type (66) are ungrammatical, but add that a periphrastic form makes the embedded clause grammatical:

(67) mae'n cael ei ddweud bod y llywodraeth yn mynd i
be.3SG'PROG get POSS.3SG M\say be ART government PROG go to
gau'r ffatri
close.VRB'ART factory
'it is said that the government is going to close the factory'

Fife (1985) highlights a discrepancy in Awbery's (1976) analysis in which Awbery reports the restrictions as being identical for both constructions, but then demonstrates a difference in the grammaticality of using direct quotation, resulting in additional possible environments of impersonals:

(68) *caf-odd 'mae pawb yn dod' ei chyhoeddi gan Emyr
get-PST.3SG 'be.3SG everyone PROG come' POSS.3SG F\announce by Emyr
*"Everyone is coming" was announced by Emyr' (Awbery 1976:129)

(69) ?dywed-wyd gan Ifor 'mae Wyn yno'
say-PRET.IMPS by Ifor 'be.3SG Wyn there'
? 'It was said by Ifor "Wyn is there" (Awbery 1976:160)

(70) dywed-wyd 'mae Wyn yno'
say-PRET.IMPS 'be.3SG Wyn there'
'They said/one said "Wyn is there" (Fife 1985:108)

The *cael* passives seem ungrammatical with direct quotes, but testing any of these different restrictions will properly require a sizeable corpus study of attested examples.

A similar disagreement occurs between Awbery (1976); Jones & Thomas (1977); Fife (1985), on the grammaticality of prepositional phrases with *cael* analytic passives.

(71) eistedd-wyd ar y gadair
sit-PRET.IMPS on ART chair
'one sat on the chair / the chair was sat on' (Fife 1985:110)

(72) ?caf-odd y gadair ei heistedd arni
get-PRET.3SG ART F\chair POSS.3SG F\sit on.F
'the chair got sat on' (Fife 1985:110)

They are deemed acceptable with IMPS but less acceptable with the analytic passive, although there are a few exceptions and speakers' judgements on the matter are said to vary. These restrictions remain to be investigated in any extensive or consistent way.

Three further syntactic divergences are noted by A.R. Thomas (1967): only a periphrastic *cael* passive can take a by-phrase (there are plenty of counterexamples to this point); the two forms take different negation constructions, although this seems expected if more than one method of negation is available, and; only the *cael* passive can be formed periphrastically with 'do' - the IMPS cannot be embedded.

Another claim made by Awbery (1976:164-6) is that because the two constructions (the impersonal and the GET-passive) do not co-occur within the same clause, they must be the same transformation.

(73) *cafwyd ei rybudd-io Ifor gan Wyn
get;PRET.IMPS POSS.3SG M\warn-VRB Ifor by Wyn
'*one got warned Ifor by Wyn'

Defective verbs is a term applied to verbs which appear with a restricted number of tense and person inflections. *Meddai* 'said' and *dylai* 'ought' are two such verbs and cannot occur with *cael* passives, but are found frequently in impersonals (Fife 1985).

(74) Dyl-id rhoi blaenoriaeth i ddarlledu ar yr oriau brig...
ought-IMPF.IMPS give precedence to broadcast-VRB on ART hours prime...
'One should give precedence to broadcasting during prime time' (Fife 1985:114)

Modifying Fife's (1985) claim, it is possible to form an analytic passive with *dylai* and *cael* 'get', as long as *dylai* is used as the modal auxiliary.

(75) Dylai blaenoriaeth i ddatblygiad sgiliau [...] cael ei rhoi.
ought priority to MUT\development skill:PL [...] get POSS.3SG give
'Priority to skill development [...] should be given'
http://training.pembrokeshire.gov.uk/content.asp?nav=101,558&parent_directory_id=646&id=6881&textonly=false&language=CYM

Fife (1985:105) explains that Awbery (1976)'s ungrammatical examples do not prove that the forms cannot co-occur, simply that there are two possessors of the same verb-noun, which is a general restriction in the language. Nor does he argue against co-occurrence, only that transformations are unnecessary to relate the IMPS to passivization. A quick text search reveals that such forms do occur:

(76) a dyna cafwyd ei wneud
and then.that get;PRET.IMPS POSS.3SG M\do
'and that's what was done'
http://www.myspace.com/golaola

(77) ceir ei ddisgrifio fel man "anial a di-groeso"
get;PRS.IMPS POSS.3SG M\describe as place "desolate and without-welcome"
'it is described as a "desolate and unwelcoming" place'
http://www.bbc.co.uk/cymru/cylchgrawn/theatr/adolygiadau/povey-tyner-02.shtml

Any analysis of the impersonal morphology will also have to account for these data.

2.4.2 General use of IMPS

The range of applications of the impersonal inflection is nearly unrestricted in Welsh. This section serves to illustrate some non-canonically-passive uses of the impersonal morphology, expanding where necessary on examples presented in previous literature.

Awbery (1976) and Fife (1985) note that a striking characteristic of the impersonal construction is that it can be applied to intransitive verbs.

(78) rhed-ir yno
run-PRS.IMPS there
'people run there / you run there' (Fife 1985:112)

The impersonal inflection is also available to unaccusative instransitives:

(79) a. dioddef-ir yn ofnadwy mewn rhyfel-oedd
suffer-PRS.IMPS PRED terrible in war-PL
'people suffer terribly during wars / there is terrible suffering in wars'

b. cwymp-ir yn aml yma
fall-PRS.IMPS PRED often here
'people often trip (and fall) here'

(80) *cafodd ei gwympo'n aml yma
get;PRET.3SG POSS.3SG M\fall'PRED often here
Intended: people often fall here

Example (80) is ungrammatical as unaccusative intransitives cannot occur in *cael*-passive. Unergative verbs may appear to passivize with *cael* 'get' due to a cognate object effect or if the referent of POSS.3SG is previously activated in the discourse, therefore they can still be considered to be transitive.

(81) caiff ei redeg unwaith y flwyddyn
get.PRS.3SG POSS.3SG M\run one.time ART F\year
'it is run once a year' (the race)

Of course, the intransitive verbs used here *dioddef* 'suffer' and *cwympo* 'fall' are assumed to be unaccusative due, in part, to the unavailability of a cognate object or the forced

transitive reading. Chapter 4 investigates the identifiability of unaccusatives in Welsh – a largely unresearched area for Welsh syntax.

Awbery (1976:134-5, 165) claims that reflexive verbs cannot be passivized using *cael*, but can be with IMPS, although both examples she cites seem grammatical and are presented as such here.

(82) mae hi'n cael ei hymolchi
be.PRS.3SG 3SG.F'PROG get POSS.3SG F\wash.body
'she is being washed'

(83) ymolch-wyd
wash.body-PST.IMPS
'people washed'

As understood from the gloss, these verbs are not reflexive, but bear a prefix *ym-* which often gives an 'internalized' interpretation of some sort. This morpheme may be mistaken to have reflexive semantics, but in reality has slightly different interpretations with each verb it combines with, e.g. *golchi* 'wash', *ymolchi* 'wash the body', *gweld* 'see', but *ymweld* 'visit'. This will be revisited in section 4.5 of chapter 4. The true reflexive in Welsh is composed of the possessive pronoun + *hun* or *hunain* 'self'.

Both Awbery (1976) and Fife (1985) show that stative verbs, such as *credu* 'believe' and *bod* 'be', can be used with IMPS but not in passives in general.

(84) cred-ir i'r lleidr adael
believe-PRS.IMPS to'ART thief leave
'we believe the thief to have left / the thief is believed to have left'

(85) *caiff ei gredu i'r lleidr adael
get.PRS.3SG POSS.3SG M\believe to'ART thief leave
Intended: the thief is believed to have left

(86) gwyddys yr ateb
know.PRS.IMPS ART answer
'the answer is known / they know the answer'[12] (Fife 1985:113)

(87) *cafodd yr ateb ei wybod
get;PST.3SG ART answer POSS.3SG M\know
Intended: the answer is known

Fife demonstrates that *bod* 'be' can be used in with impersonal morphology. The usages he lists are archaic-sounding (1985:113), as is (86) above, but there are contemporary examples of this kind to be found.

(88) lle buwyd yn cyfarfod
place be.PRET.IMPS PROG meet
'where [the people in question] met'

[12]This example is somewhat archaic.

http://cyngortrefpwllheli.org/eglwysi-methodistiaid.html

The final category of verb that can be used with IMPS but not GET-passive are modals, according to Awbery (1976) and Fife (1985).

(89) gell-id gweld y tŷ
can-COND.IMPS see ART house
'you could see the house'

(90) *caf-odd y tŷ allu ei weld
get-PRET.3SG ART house MUT\can POSS.3SG M\see
Intended: the house could be seen

However, a modal can be built into an analytic passive using GET, with *dylai* acting as the auxiliary and *cael*, as shown above in (75) of section 2.4.1.

One plausible restriction to impersonalization may be the status of the subject. Blevins (2003) observes that impersonalization tends to apply to subjects which he characterizes as being 'indefinite' and 'human', based on a dataset which included Celtic and Balto-Slavic languages. Siewierska (1984) shows that 'natural forces', such as weather phenomena, can be interpreted as the suppressed subject of an impersonal (passive) in both Welsh and Latvian. These observations are found to be relevant and are investigated further in chapter 5 which finds the observation to apply to intransitive impersonals and chapter 6 which explores the animacy effect in more detail.

Wherever in the literature the impersonal morphology is discussed with these verb categories, the pool of data drawn on is as small as two or three examples (Awbery 1976; Jones & Thomas 1977; Fife 1985; Sadler 1988). This section has also shown that the grammaticality of many of the examples is not accepted with consistency between speakers. In addition, most works that have attempted to investigate these categories have done so inconsistently, with the reasons for ungrammatical examples being general restrictions in the language other than those in question, and the impersonal being compared with different analytic passives such as those outlined in 2.2.2. A thorough study of the impersonal will gather naturally occurring data in order to determine what functions IMPS actually has and whether the restrictions seen here truly correlate to the use of the impersonal inflection.

The verb categories in this section are ones that are not normally associated with the passive voice, or are ones that have caused the definition of passive to be revised. The impersonal's use with these verbs proves very little without a solid definition of passive which either accounts for or excludes this behaviour.

2.5 IMPS in earlier frameworks

The approach taken by those investigating the impersonal construction has been to compare these constructions with the analytic passives, most often the *cael*-passives.

This approach is quite flawed because it assumes that one construction is a canonical passive while the other is less canonical when the canonical passive has not been outlined.

Whilst Awbery (1976) is working within Transformational Grammar, she begins by assuming that the impersonal is a variant of the passive and attempts to justify its behaviour, with discrepancies even then, as noted in section 2.4. Fife (1985, 1992) on the other hand analyses the two constructions according to several different frameworks including Chomsky (1957), the higher-BE analysis (Langacker & Munro 1975), Relational Grammar and Cognitive Grammar. His final analysis is that the impersonal is not passive and he finds it to be 'autonomous' within the terminology of the Cognitive Grammar framework. Though, his analyses according to the other frameworks – which would have him exclude the impersonal from their categorization of passive – ultimately do not hold because of his disagreement with the fundamentals of that framework, rather than the data presented. His reliance on the analysis of an impersonal constructions's surface NP as object (which is tentative, based on the data he uses (see 2.2.1)) and his underlying view that passive membership is not incremental are what determine the impersonal's status for Fife.

A solid account of the phenomenon is necessary in order to determine the processes or operations it involves. It is especially necessary to understand what is meant by the term 'passive' in any given framework, in order to ensure that different grammatical frameworks are indeed trying to account for the same phenomenon. Some well-known works have attempted to do just that in prototype and typological studies (Siewierska 1984; Shibatani 1985; Keenan & Dryer 2007) with large language samples and a broad range of data. It is worth noting that the Welsh IMPS and their distribution were well known to these studies, thanks to Awbery's (1976) seminal work. As such, the two Welsh constructions have always formed part of this 'passive canon'. This means that only a circular argument can emerge from using these prototypes to attempt to differentiate between the analytic passives and the impersonal in Welsh. Clearly, this approach cannot account for data like (76), which seems to combine the impersonal morphology with an analytic passive structure.

2.6 Summary

This chapter has shown the general forms that the passive voice may (potentially) employ in Welsh, based on earlier studies by those wishing to differentiate two of the passive candidates. As well as providing an overview of the phenomena under investigation, difficulties in their analysis have also been identified. In addition, some problems caused by the theoretical assumptions of previous analyses have been brought to light. The main setback in the literature in identifying a passive in its data is the lack of consensus on what defines a passive to begin with as, on the whole, there is agreement in the

Welsh literature on the verb categories affected by IMPS and GET-passives and therefore the functions they can fulfil.

One of the problems of the analysis of the passive voice is that it is often decided pre-theoretically which forms are passive, in order to include or exclude them from the pool of data. This results in a description of the constructions selected, which in most cases include the Welsh data. This issue will be the concern of chapter 7, whilst the intervening chapters are dedicated to understanding the restrictions on the impersonal morphology.

CHAPTER

THREE

PASSIVIZATION OF TRANSITIVES

3.1 Current issues

This chapter addresses the GET-passive and impersonal construction's similarities in their ability to apply to transitive verbs and the implications this has for the structures associated with their respective operations or processes. Using a large set of Welsh verbs of psychological state reveals that very few two-argument predicates fail to passivize under the GET-passive, but that these few serve to separate it from the impersonal construction which has no restriction in the application of IMPS to the predicates involved.

The similarities observed in the previous literature between Welsh passives and the impersonal characterize both constructions as having reduced a predicate's valency. In chapter 2, the verb *rhybuddio* 'warn' is shown to have semantically similar (if not identical) outputs in the two different constructions in (2-61) and (2-62), replicated for convenience here with a different verb (for variety):

(1) a. Llenwodd Jane lyfrau braslunio
fill;PST.3SG Jane MUT\book;PL rough:picture;VRB
'Jane filled the sketchbooks'
http://www.cymraeg.missiongallery.co.uk/y-lle/live-out-loud/

b. llenwyd y ffynnon hynafol gan yr awdurdodau
fill;PST.IMPS ART well ancient;ADJ by ART authority;PL
'the old well was filled-in by the authorities' impersonal
https://cy.wikipedia.org/wiki/Llaneilian-yn-Rhos

c. Cafodd y cyntaf ei lenwi [...] gan Ysgol Gynradd [...]
get;PST.3SG ART first POSS.3PL M\fill [...] by School Primary [...]
'The first was filled by [a] Primary School' GET-passive
http://www.newydd.co.uk/cy/newyddion/lansio-ger-y-mor

In both (1b) and (1c), an analysis of either object promotion or agent suppression/deletion or a combination of both is plausible in accounting for their relation to (1a). The agent argument is identically expressible as a *by*-marked adjunct. With transitive verbs, the

processes involved seem identical.

Attributing one construction to one particular category, passive or not passive, canonical or non-canonical, has previously been decided on the status of the post-verbal argument as subject or object, with those arguing for an object analysis of (2-61) or (1b) labelling the construction 'not passive' (Fife 1985; Borsley, Tallerman & Willis 2007), whatever their framework's terminology, and those favouring a subject analysis finding the IMPS to be 'passive' (Awbery 1976; Jones & Thomas 1977). It is not apparent in either (2-61) or (1c) that the post-verbal NP is marked as object or subject in comparison with their usual VSO order. Then again, the categories 'subject' and 'object' are known to be difficult to diagnose (if it is even possible at all to do so definitively) and, as noted by many others, are probably not useful concepts in the attempt to diagnose the passive voice, at least for Welsh (as stated in chapter 2).

Even without the ambiguity relating to the status of the first argument in (2-61) as subject or object, there are very few theoretical frameworks which differentiate the constructions within their definition of passive. Previous analyses of the passive voice either label both of these constructions as passive and fail to differentiate between them – other than to dismiss them as stylistic and/or historical variants – or have labelled them as different operations on the verbs whilst failing to account for functional similarities and overlap in usage, as summarized in chapter 2.

In an attempt to differentiate the analytic passives from the impersonal where overlap is found, this chapter turns to underlying structures which are unable to passivize, at least in some languages. Belletti & Rizzi's (1988) study of Italian verbs of psychological state (or 'psych-verbs') suggests that this set of verbs consists of multiple verb classes which vary structurally – demonstrably so in Italian. Following Burzio (1981, 1986), they use passivization as a diagnostic for these differing structures of transitive verbs. Section 3.2.4 below demonstrates that, unlike Italian, the Welsh analytic passive is perhaps not diagnostic of the same phenomenon, but yields some interesting data, nonetheless. The data provide some insight into structural verb classes within the set of so-called psych-verbs (section 3.2.4), which, interestingly, sees the GET-passive's applicability diverge once more from that of the impersonal morphology for a very small number of verbs. This small set of verbs will be investigated further in chapter 4, in order to determine whether they provide insight on the syntactic and semantic effects of IMPS.

3.2 Internal and external arguments

Passivization, if it is to be considered a unified phenomenon, may consist of two different processes or a process which applies in two different parts – subject suppression or deletion and object promotion. This section proposes that Belletti & Rizzi's (1988) notion of derived subjects might be of use in differentiating Welsh passives from impersonals, with the assumption that passivization cannot affect a verb's subject if that subject is

derived and not a true subject. In other words, they propose that certain surface subjects have themselves undergone promotion. Such a difference between the structure of psych-VPs should reveal the relevant structural differences between the GET-passive and impersonal construction (or syntactic properties associated with IMPS). Indeed, this is what is found, although the Welsh data does not correspond to Belletti & Rizzi's (1988) findings for Italian verb classes.

In their paper, Belletti & Rizzi use Government-Binding theory (GB) to account for the assignment of seemingly varied semantic roles to the pre-verbal position and of case marking in a semantically similar set of Italian verbs. In this framework, a verb's representation contains at least two levels of structure, in the form of a θ-grid and a Case-grid. The θ-grid identifies whether a θ-role is generated in a position external to the VP: the "V is a structural Case assigner **iff** it has an external argument" (Belletti & Rizzi 1988:344). The verbs they used to differentiate between structurally internal to the VP and structurally external arguments were verbs of psychological state which seem to assign different Case. This is striking as all of these verbs have one argument which is similarly and involuntarily affected by a source or an agent. To illustrate, in the case of *temere* 'fear', the experiencer is selected as taking the external θ-role and thus has no Case assigned to it; that is to say, it is morphologically a subject and behaves as any other subject in the language. On the other hand, the experiencer arguments of the verbs *preoccupare* and *piacere*, 'worry' and 'please' respectively, are linked to an inherent case associated with the verb. As these experiencers are assigned accusative and dative case, they cannot behave as a 'normal' Italian subject, even though the role of experiencer is thought to be 'higher' than the role theme of the other argument in the VP.

Generally, the thematically 'higher' argument of a transitive verb – in terms of thematic roles – is treated consistently by any given language. In the case of Italian, the language treats the thematically higher argument of a transitive verb as its subject most commonly. This generalization will be discussed further in chapter 7 with regards to the thematic hierarchy's reliability (albeit within a different framework). Belletti & Rizzi (1988) conclude that the experiencers of *piacere* and *temere* (their thematically highest arguments) must form part of the VP, and cannot, therefore, be considered to be external arguments (also the thematically highest arguments of their VPs).

If a verb lacks an external argument, then the demotion of the surface subject should not be possible (even when it is thematically the highest argument of the VP) and thus we would not expect a passive to be grammatical with this verb or predicate, if 'passive' involves the demotion of an external argument, as argued by Belletti & Rizzi. The similarity of this proposed structure of passivized transitives to unaccusative intransitive verbs is discussed in chapter 4. This chapter is concerned with differentiating the GET-passive from the impersonal in transitives by replicating their study which conversely used passivization as a diagnostic for external or derived arguments. If there is a difference between the set of verbs or predicates which GET-passivize and the set of those

which take IMPS, the hypothesis is that impersonalization cannot involve demotion of an external argument but must operate on a different level of representation. However, as stated above, whilst the results of testing Welsh psych-verbs produce a broader set of verbs which impersonalize than GET-passivize, the set of those additional verbs is very restricted.

In order to determine which subject might be considered external, tests based on those used by Belletti & Rizzi were adapted for Welsh and are explained below.

3.2.1 Italian psych-verbs and θ-theory

Belletti & Rizzi's (1988) theory of Case-grids is rooted in the relation between morphosyntactic marking of Italian subjects and the assignment of θ-roles, based on the syntactic structure of the verbs in question. They showed that there were three different morphosyntactic configurations, in their verbs of psychological state[1]:

(2) Gianni teme questo.
Gianni fears this
'Gianni fears this' — Experiencer subjects

(3) Questo preoccupa Gianni.
this worries Gianni
'this worries Gianni' — Experiencer objects

(4) a. A Gianni piace questo.
to Gianni pleases this
'this pleases Gianni'

b. Questo piace a Gianni.
this pleases to Gianni
'this pleases Gianni' — Case-marked experiencers

Belletti & Rizzi find three different Case-grids assigning θ-roles in their psych-verb data. The *temere*-type verb has an external argument to which 'experiencer' is assigned and behaves as other two-place predicates, but in contrast, no external argument is found in *piacere* and *preoccupare*. Belletti & Rizzi's conclusion was that V does not assign structural case to these two verb types.

3.2.2 Diagnostics

The three diagnostics used by Belletti & Rizzi (1988) which might plausibly be applied to Welsh are as follows.

Their use of causativization as a diagnostic of derived subjects relies on Burzio's (1986) analysis of the causative construction in Italian. The Italian causative construction template consists of the verb *fare* 'make, do' with an embedded clause, where the causative verb controls the external argument of the embedded clause. This Italian

[1]Belletti & Rizzi's (1988) gloss and translation here in section 3.2.1 and 3.2.2 for the Italian data.

causative construction may optionally mark the affected argument, controlled by the argument of the main clause, with a dative preposition *a*, as exemplified in (5). Burzio (1986) shows a VP to be extracted from an embedded clause at some level of representation, such that the clause containing the VP will be left with a true, structural subject, but sees a clause constructed of a derived subject and VP (no longer containing its original argument) produce an ungrammatical sentence due to the original internal argument being 'unbound' by its antecedent. Belletti & Rizzi (1988) provide the structures in (5) in explanation:

(5) a. Gianni ha fatto telefonare (a) Mario.
Gianni ha fatto [$_{\text{VP}}$ telefonare] [Mario VP]
'Gianni made [Mario call]'

b. *Gianni ha fatto essere licenziato (a) Mario.
Gianni ha fatto [$_{\text{VP}}$ essere licenziato e_i] [Mario$_i$ VP]
'Gianni made Mario be fired' Italian - causative diagnostic

The causative selects only verbs with an external argument or 'true subject' in Italian. A similar diagnostic may hold for Welsh, but to date, no analysis of the argument structure of the Welsh causative construction exists. A similar proposal is made by Levin & Rappaport Hovav (1995:145) – their *immediate cause linking rule* states that the verb's external argument must be the immediate cause of the event named by the verb and their *directed change linking rule* states that the undergoer of a verb of this type will be an internal argument. They predict, due to this rule, that languages that only have causative morphemes will allow unergative verbs (which have external subjects – discussed further in chapter 4) to causativize (presumably implying that no language with causative morphemes will allow unaccusatives but not unergatives to causativize under this morpheme).

According to most definitions of the passive, the subject of the predicate is demoted or suppressed (Perlmutter 1978; Siewierska 1984; Kiparsky 2013). It follows that a predicate without an external agent should not be able to passivize, if we assume that the argument structure associated with a certain predicate is formed before passivization is possible, and this is indeed what is proposed as an analysis for Italian.

The Italian reflexive clitic *si* was also used as a diagnostic for derived subjects and whilst there is no reflexive clitic in Welsh as there is in Italian, French and Russian, reflexivization is widely used as a diagnostic for a lack of external arguments in other European languages. Similarly to the passive, the assumption is that the agent of a reflexive should be an external argument, in order to act on itself as an explicit causer (as stated by the *immediate cause linking rule*).

3.2.3 Applying three diagnostics to Welsh transitives

Verbs which causativize should therefore have an external argument and the prediction is that they should both GET-passivize and form an impersonal construction,

whereas verbs which fail to causativize should also fail to take the GET-passive. Those latter verbs may still take the impersonal inflection, but as the impersonal's restrictions are fewer and more elusive than the GET-passive, its grammaticality with these verbs cannot be predicted based on its presumed structure. A grammatical causative should identify the presence of an external argument, according to Burzio (1986), as a derived subject cannot be controlled by a causative construction (in Italian).

The Welsh causative is formed using a causative verb *gwneud* 'make/do' and the dative preposition *i*, 'to, for':

(6) a. gwneud i rywun wneud rhywbeth
do to MUT\someone MUT\do something
'make someone do something'

b. gwneud i rywun disian
do to MUT\something MUT\sneeze
'make someone sneeze'

Semantically similar verbs, such as *achosi* 'cause' and *gorfodi* 'force', can replace *gwneud* 'make/do' and the preposition *i* is often deleted or elided in speech and colloquial varieties. However, the causative construction selected to exemplify this diagnostic throughout the thesis is as above, for simplicity and clarity. The structure of example (6a) includes the verb *gwneud* 'do' in the second clause in addition to the causative 'do', but this is incidental as the example uses 'do something' as a predicate in place of a specific example verb such as in (6b) which will more closely resemble the causativized transitive psych-verbs in section 3.2.4.

Additionally, in the causative construction, *i* can be shown to be identical to the inflectional preposition *i*, *iddo* DAT.M 'to him', *iddi* DAT.F 'to her', rather than to the complementizer *i* (Borsley, Tallerman & Willis 2007:94-96):

(7) gwneud iddi wyllt-io
do DAT.F MUT\wild-VRB
'make her become angry'

Although Belletti & Rizzi test Italian using clitic pronouns, in principle only an external argument should be able to affect itself and so a reflexive test might be applied to Welsh. The Welsh reflexive is a nominal adjunct reflexive, using the noun *hun*, 'self' or *hunain*, 'selves' and the possessive pronouns *fy, dy, ei, ein, eich, eu*, for 1SG, 2SG, 3SG, 1PL, 2PL and 3PL, as exemplified and discussed in chapter 2 with regards to the structure of analytic passives (section 2.2.2).

(8) gwelais fy hun
see-PRET.1SG POSS.1SG self
'I saw myself'

The prefix *ym-* has often been considered a reflexive affix in Welsh (Awbery 1976) although it has no regular semantic effect of a reflexive nature and is probably derived

from the preposition *am*, 'around, about' historically. The investigation of the effects of this morpheme is left for the next chapter (section 4.5) as it is not relevant to differentiating the passive and impersonal.

3.2.4 Psych-verbs studied

Table 3.1 shows the results of the tests outlined above on a sample of 47 psych-predicates in Welsh. Some predicates are completely grammatical in all constructions, whilst other verbs seem plausible in the right context but are unattested in any text searches. Relying on introspection makes it difficult to comment on these verbs conclusively (as Type V predicate results suggest), but the trends in the table below might be attributed to the effect of an internal/external argument distinction, based on Belletti & Rizzi (1988)'s tests. The distinction does not seem to be marked morphologically or syntactically in Welsh as they postulate for Italian, or at least the correlation in grammaticality of the GET-passive with the syntactic assignment of arguments does not hold as do the Italian verbs.

The results of the diagnostics tabulated are presented by the broad 'types' found, from I-V and are exemplified in the remainder of this section. The sample includes the results for certain verbs twice where the verb takes a preposition to form a predicate and this predicate differs in its results from the plain verb. Where the preposition introducing the second argument of a predicate does not affect the results of the diagnostics the preposition is provided in parentheses.

The predicates themselves were selected by translating verbs used by Belletti & Rizzi and others studying psych-verbs where a translation in the form of a simple verb is possible. This should not be taken to mean that this is the only way to encode these psychological states as Welsh also commonly uses a prepositional construction to encode some property concepts, which is detailed in section 3.3.

The table is divided into a row for each predicate and a column for each 'diagnostic', with an additional column to denote the position of the experiencer as either first or second argument. If the experiencer is the subject – as is the case for most of the predicates described – the column is marked with a check-mark (✓). If the column is left blank, this indicates an experiencer as the second argument. Similarly, a ✓in the diagnostic columns indicate grammaticality, a blank ungrammaticality, whilst a question mark (?) denotes an uncertain judgement. The uncertain judgements indicate that the forms may be grammatical in the construction, although a context is difficult to construct and no positive evidence in the form of text examples has been found so far.

Verb	Trans	Type	Preposition	Exp. subject	Causative	Reflexive	GET-passive	Impersonal
ofni	‘fear’	I		✓	✓	✓	✓	✓
hoffi	‘like’	I		✓	✓	✓	✓	✓
edmygu	‘admire’	I		✓	✓	✓	✓	✓
casáu	‘hate’	I		✓	✓	✓	✓	✓
amau	‘suspect, doubt’	I		✓	✓	✓	✓	✓
meddwl	‘think’	I		✓	✓	✓	✓	✓
llonni	‘make happier’	I		✓	✓	✓	✓	✓
sirioli	‘make happier’	I		✓	✓	✓	✓	✓
meddwl	‘think’	I	am	✓	✓	✓	✓	✓
gofidio	‘grieve, upset, regret’	I	am	✓	✓	✓	✓	✓
ofni	‘fear for, worry about’	I	am	✓	✓	✓	✓	✓
dychryn	‘frighten’	I	am	✓	✓	✓	✓	✓
gwefreiddio	‘excite, thrill’	I	am	✓	✓	✓	✓	✓
diflasu	‘get bored of’	I	ar	✓	✓	✓	✓	✓
blino	‘tire’	I	ar	✓	✓	✓	✓	✓
petruso	‘worry, doubt’	I	am	✓	✓	✓	✓	✓
poeni	‘worry (concern), worry (bother)’	I	am	✓	✓	✓	✓	✓
poenydio	‘worry over’	I	am	✓	✓	✓	✓	✓
cynddeiriogi	‘enrage’	I	am	✓	✓	✓	✓	✓
llawenhau	‘rejoice, become happy’	I	am	✓	✓	✓	✓	✓
tristáu	‘sadden’	I	am	✓	✓	✓	✓	✓
pendroni	‘puzzle over, contemplate’	I	am, dros	✓	✓	✓	✓	✓

Verb	Trans	Type	Preposition	Exp. subject	Causative	Reflexive	GET-passive	Impersonal
dychryn	‘frighten’	II			✓	✓	✓	✓
gwefreiddio	‘excite, thrill’	II			✓	✓	✓	✓
diflasu	‘get bored of’	II			✓	✓	✓	✓
blino	‘tire’	II			✓	✓	✓	✓
petruso	‘worry, doubt’	II			✓	✓	✓	✓
poeni	‘worry (concern), worry (bother)’	II			✓	✓	✓	✓
poenydio	‘torment’	II			✓	✓	✓	✓
cynddeiriogi	‘enrage’	II			✓	✓	✓	✓
llawenhau	‘rejoice, make happy’	II			✓	✓	✓	✓
tristáu	‘sadden’	II			✓	✓	✓	✓
llonni	‘make happier’	II			✓	✓	✓	✓
plesio	‘please’	III			?	✓	✓	✓
boddhau	‘please, satisfy’	III			?	✓	✓	✓
bodloni	‘please, content’	III			?	✓	✓	✓
syfrdanu	‘shock’	III			?	✓	✓	✓
synnu	‘shock, surprise’	III			?	✓	✓	✓
gwybod	‘know’	IV	(am)	✓				✓
ymddigrifo	‘find entertainment/happiness in’	IV	yn, mewn	✓				✓
gallu	‘be able to’	IV		✓				✓
medru	‘be able to’	IV		✓				✓

Verb	Trans	Type	Preposition	Exp. subject	Causative	Reflexive	GET-passive	Impersonal
rhyfeddu	'wonder'	V	at, ar	✓	?	✓	?	?
malio	'worry, care'	V	am	✓	✓	✓	?	?
galaru	'grieve, mourn'	V	am	✓	?	?		✓
laru	'to have enough of'	V	ar	✓	?	?		✓
hyfrydu	'delight'	V	(yn/mewn?)	✓	?	?	?	✓

Table 3.1: Transitive psych-predicates with the diagnostics outlined

The data in Table 3.1 currently show four discernible differences in the diagnostics and surface structure in Welsh psych-predicates, although this is not immediately clear from their surface forms:

(9) a. ofn-ai Siôn hyn
fear-IMPF.3SG Siôn this.ABST
'Siôn feared this' Type I - experiencer subject

b. poen-ai Iorweth Gwen
worry-IMPF.3SG Iorweth Gwen
'Iorweth worried/bothered Gwen' Type II - no experiencer subject

c. plesi-ai arian Elin
please-IMPF.3SG money Elin
'Money pleases Elin' Type III - no experiencer subject

d. gwydd-ai Cadi hyn
know-IMPF.3SG Cadi this.ABST
'Cadi feared this' Type IV - experiencer subject

In addition to these four types, type V has been assigned to predicates which pose problems, either in terms of their infrequency of use or available data in cases of dialectal verbs. All five types will be exemplified with their diagnostics and explained in sections 3.2.4.1 to data 3.2.4.5.

3.2.4.1 Type I

Type I verbs all have an experiencer subject and can appear in all of the constructions tested (the causative, reflexive, GET-passive and impersonal). Some of these verbs, like *hoffi* exemplified below, can only occur with two arguments, but ones that can occur with only one argument still have the experiencer as subject/sole argument.

(10) *hoffi* 'like'

a. mae Annwen yn hoffi hufen iâ
be.3SG Annwen PROG like.VRB cream ice
'Annwen likes icecream'

b. hoff-ai Annwen hufen iâ
like-IMPF.3SG A cream ice
'Annwen likes ice cream'

c. *hoff-ai Annwen
like-IMPF.3SG Annwen
*Annwen likes

Example (10) first shows the verb in question *hoffi* 'like' in a periphrastic construction which is the most frequent verbal structure in colloquial Welsh and is commonplace in standard Welsh. This is simply to demonstrate that *hoffi* behaves as a standard Welsh verb and can appear in both periphrastic and synthetic, full lexical verb constructions. In (10b), the latter type is shown to be grammatical with both a subject experiencer and an object, whereas the last example of (10) gives an ungrammatical intransitive *hoffi*,

which does not reflect the behaviour of all verbs of type I.

The following four examples demonstrate that *hoffi* is grammatical in causative, reflexive, GET-passive and impersonal constructions respectively.

(11) mae rhywbeth yn gwneud i Annwen hoffi hufen iâ
be.3SG something PROG make to Annwen like.VRB cream ice
'something makes Annwen like ice cream' Causative

(12) [...] oherwydd nad oedd yn hoffi ei hun
[...] because NEG be.PRET.3SG PROG like POSS.3SG self
'...because he/she didn't like himself/herself' Reflexive
http://news.bbc.co.uk/welsh/hi/newsid_8970000/newsid_8979500/8979573.stm

(13) bysai Lindsay yn cael ei hoffi'n fawr iawn
be.FUT.COND.3SG L PROG get POSS.3SG like'PRED MUT\big very
'Lindsay would be very well liked' GET-passive
http://www.golwg360.com/newyddion/cymru/44620-ieuan-wyn-cyhoeddiad-cyn-bo-hir

(14) hoff-ir hufen iâ
like-IMPS cream ice
'People like ice cream/Ice cream is liked' Impersonal

The same is true for all other verbs which fall under type I:

(15) *ofni* 'fear, be afraid'

a. 'roedd Siôn yn ofni hyn
'PRT.be.PST.3SG Siôn PROG fear.VRB this.ABST
'Siôn was afraid of this'

b. ofn-ai Siôn hyn
fear-IMPF.3SG Siôn this.ABST
'Siôn feared this'

(16) gwneud i bobl ofni trais corfforol
do to people fear.VRB violation bodily
'make people fear/afraid of bodily harm' Causative
http://www.cliconline.co.uk/cym/gwybodaeth/amgylchedd/pobl/hawliau-dynol/

(17) ofn-ai Siôn ei hun
fear-IMPF.3SG Siôn POSS.3SG self
'Siôn feared himself' Reflexive

(18) 'roedd Aleister Crowley yn cael ei ofni a'i
'PRT.be.PST.3SG Aleister Crowley PROG get POSS.3SG fear.VRB and'POSS.3SG
barchu i'r un graddau
M\respect.VRB to'ART one degree.PL
'Aleister Crowley was feared and respected to the same degree' GET-passive
http://www.filmagencywales.com/cy/AbertoirHorrorFestivalscheduleannounced

(19) Ofnir bydd llywodraeth Irac yn anfon y ffoaduriaid yn ol
fear-IMPS be.FUT.3SG government Iraq PROG send ART refugee.PL in behind
i Iran
to Iran
'It is feared that the Iraqi government will send the refugees back to Iran'
http://cy.wikipedia.org/wiki/Dinas_Ashraf Impersonal

Some verbs, like *ofni* of type I, can take a second argument with a preposition, which alters the meaning of the predicate rather than being optional or an alternation:

(20) a. ofn-ai Siôn am hyn
fear-IMPF.3SG Siôn about this.ABST
'Siôn was afraid of this'

b. ofnodd ei gyfeillion amdano
fear;PRET.3SG POSS.3SG M\friends about.M.SG
'His friends feared for him'
http://www.llgc.org.uk/ymgyrchu/Iaith/TyngedIaith/tynged.htm

Whereas some prepositional verbs have the same configuration of arguments as their bare stems, such as *ofni am* and *ofni*, others differ, as seen in the type I predicate *poeni am* 'worry about' which contrasts with its type II counterpart *poeni* 'worry, bother' in (21) of section 3.2.4.2.

(21) verb + preposition

a. poen-ai Llio am Rhys
worry-IMPF.3SG Ll about Rh
'Llio worried about Rhys' Experiencer subjects

b. gwnaethaist i Llio boeni am Rhys
make.PST.2SG to Ll worry about Rh
'You made Llio worry about Rhys' Causative

c. poenai Rhys am ei hun
worry-IMPF.3SG Rh about POSS.3SG self
'Rhys worried about himself' Reflexive

d. cafodd Rhys ei boeni am
get.PST.3SG Rh POSS.3SG M\worry about
'Rhys was worried about' colloquial? – GET-passive

e. Poen-wyd am Rhys
worry-PST.IMPS about Rhys
'Things worried Rhys/Rhys was worried' Impersonal

For some speakers, the prepositional verbs become ungrammatical in GET-passives such as (21d), but they are available, at least colloquially, to others. These predicate types are somewhat stigmatized in standard Welsh, possibly due to their perceived similarity to English phrasal verbs (Rottet 2005).

3.2.4.2 Type II

Type II psych-verbs have no restrictions according to the diagnostics used, but, in this case, the experiencer is the verb's second argument.

(22) *poeni* 'worry'

a. poen-ai Iorweth Gwen
worry-IMPF.3SG Iorweth Gwen
'Iorweth worried/bothered Gwen' Experiencer object

b. gwnaethaist i Iorweth boeni Gwen
make.PRET.2SG to I worry G
'You made Iorweth bother Gwen' Causative

c. poen-ai Gwen ei hun
worry-IMPF.3SG G POSS.3SG self
'Gwen worried herself' Reflexive

d. cafodd Gwen ei phoeni
get.PRET.3SG G POSS.3SG F\worry
'Gwen was worried (by someone else)' GET-passive

e. poen-ir Gwen
worry-IMPS Gwen
'Things worried Gwen/Gwen was worried' Impersonal

None of these verbs takes a preposition to mark the experiencer, but many have a prepositional counterpart with an experiencer subject and belong to type I.

3.2.4.3 Type III

Type III verbs, like type II, all have an experiencer object and can appear in all of the constructions tested including the GET-passive, but are marginal in the causative.

(23) *plesio* 'please'

a. mae arian yn plesio Elin
be.3SG money PROG please.VRB Elin
'Money pleases Elin' Experiencer object

b. plesi-ai arian Elin
please-IMPF.3SG money Elin
'Money pleases Elin' Experiencer object

c. plesi-ai Elin
please-IMPF.3SG Elin
'Elin became pleased' Intransitive

In these verbs, the causative with *gwneud i* seems odd, but not completely ungrammatical, as though the verb may take a causative in the right context. However, such a context proves difficult to derive and illusive in text searches.

(24) a. *?gwnaethaist i arian blesio Elin
make.PST.2SG to money MUT\please.VRB Elin

*?You made money please Elin. Causative

b. *?gwnaethaist i Elin blesio
make.PST.2SG to Elin MUT\please.VRB
*?You made Elin please. Causative

Other type III verbs demonstrate that a causative may be acceptable when the controlled subject of the psych-verb clause is an entity that might be manipulated:

(25) a. ?gwnaethaist i'r ffigyr-au synnu Elin
make.PST.2SG to'ART figure-PL shock Elin
?You made the figures shock Elin. Causative

b. ?gwnaeth i'r teler-au foddhau'r cyfreithwyr
make.PST.3SG to'ART term-PL MUT\please.VRB'ART lawyers
?He/she made the terms satisfy the lawyers. Causative

There is likely some semantic restriction on the subjects of type III verbs that sets them apart from the near identical type II verbs. These differences do not seem to impact their grammaticality with the remaining diagnostics.

(26) plesi-odd Elin ei hun
please-PST.3SG Elin POSS.3SG self
'Elin pleased herself' Reflexive

(27) cafodd Elin ei phlesio
get;PST.3SG Elin POSS.3SG F\please.VRB
'Elin was pleased (by someone/thing)' GET-passive

(28) Plesi-wyd Elin
please-PST.IMPS Elin
'Someone/something pleased Elin / Elin was pleased' Impersonal

These verbs, again, like the previous type, do not seem to include any prepositional versions in their ranks.

So far, the psych-verbs have not provided any additional insight into the two potential Welsh passives, but have drawn attention to the need for further understanding of verbal semantics in Welsh, which is somewhat understudied to date. Such studies delineating the verb types according to the potential semantics of their arguments would be useful to discussions such as this one and would, of course, benefit from a large, tagged electronic corpus which does not, as yet, exist.

3.2.4.4 Type IV

Type IV verbs all have an experiencer subject and are grammatical only in the IMPS out of all the constructions tested.

(29) *gwybod* 'know; have knowledge of'

a. mae Cadi yn gwybod hyn
be.3SG Cadi PROG know this.ABST

'Cadi knows this'

b. 'roedd Cadi yn gwybod hyn
'PRT.be.PRET.3SG Cadi PROG know.VRB this.ABST
'Cadi knew this'

c. gwydd-ai Cadi hyn
know-IMPF.3SG Cadi this.ABST
'Cadi knew this'

Like type I verbs, some of these verbs combine with prepositions. For the verb *gwybod*, this does not seem to affect the position of the experiencer argument or the grammaticality of the diagnostics and so will be exemplified alongside the simple verb *gwybod*.

(30) *gwybod am* 'know about/of'

a. gwydd-ai Cadi am hyn
know-IMPF.3SG Cadi about this.ABST
'Cadi knew of/about this'

b. gwydd-ai ei chyfeillion amdani
know-IMPF.3SG POSS.3SG F\friend.PL about.F.SG
'Her friends knew about her'

(31) *gwnaeth yr athraw-es i Cadi wybod Ffrangeg
make.PST.3SG ART teacher-HUM.F DAT Cadi MUT\know French.language
Intended: the teacher made Cadi know French Causative

(32) ??Tair gwahanol ffordd o wneud i bobl wybod am y nwydd-au
three.F different way of make to people know for ART good-PL
a'r gwasanaeth-au
and'ART service-PL
'? Three different ways to make people know about the goods and services'
Causative
http://pdfbooksgive.org/k-41927086.html

Although one occurrence of the prepositional *gwybod am* does appear in a causative construction (32), the preferred and more standard form would be *gwneud pobl yn ymwybodol o* 'make people aware/conscious of'. For a native speaker (or at least for me), (32) reads awkwardly.[2] Again, a large corpus study might prove enlightening with regards to the causative construction, but for now, this example might be disregarded.

(33) *?gwydd-ai Cadi ei hun
know-IMPF.3SG Cadi POSS.3SG self
Intended: Cadi knew herself Reflexive

The reflexive (33), if grammatical, may only work as the intensifier usage of the reflexive conjunction, similar to its usage in (34). The reading of (33) as *'Cadi herself knew.'* or *'Even Cadi knew'* may then be possible, but this excludes the interpretation that the subject *Cadi* is acting on herself.

[2]The source is potentially a translation of an English exercise book from a UK examining board.

(34) […] fel y mae'n gwybod ei feddwl ei hun
[…] like PRT be.3SG'PROG know POSS.3SG M\mind POSS.3SG self
'[…] as he knows his own mind'
p.33 Lewis, H.D. (1969) Pa beth yw dyn? *Efrydiau athronyddol* [Journal] 32, pp. 26-42.

It may be that the construction in (33) is gaining acceptability due to its grammaticality in English, although this might be postulated for many examples when they prove to be ungrammatical in Welsh. Again, another *know* verb is preferable – *adnabod*, is the more appropriate for the reading 'Cadi knew herself'.

It is also difficult to derive a context for a grammatical reflexivized *gwybod am*, although it seems less ungrammatical and more semantically odd:

(35) ?gwyddai Cadi am ei hun
know-IMPF.3SG Cadi about POSS.3SG self
Intended: Cadi knew about herself Reflexive

Finally, these type IV predicates also fail to GET-passivize.

(36) a. *mae hyn yn cael ei wybod (gan Cadi)
be.3SG this.ABST PROG get POSS.3SG know (by Cadi)
Intended: this is known (by Cadi) GET-passive

b. *mae hyn yn cael ei wybod am (gan Cadi)
be.3SG this.ABST PROG get POSS.3SG know about (by Cadi)
Intended: this is known of (by Cadi) GET-passive

c. y Gweinidog sy'n penderfynu beth mae'r cyhoedd yn cael
ART Minister be'PROG decide what be.3SG'ART public PROG get
ei wybod
POSS.3SG M\know
'It's the Minister who decides what the public is allowed to know'
http: // www.ngfl-cymru.org.uk / vtc / ngfl / politics / 94 / 3_Nodweddion_Democratiaeth_Cynrychiadol / Llywodraeth / Y_Gwasanaeth_Sifil.doc

The only attested uses of *gwybod* with *cael* as in (36c) are in fact examples of the modal usage of GET, mentioned in chapter 2. The two real GET-passives with *gwybod* are marked as ungrammatical. By contrast, all of the type IV predicates are grammatical with impersonal morphology.

(37) Impersonals

a. [y] dref Rufeinig y gwydd-ir fwy-af amdani
ART town Roman PRT know.IMPS more-SUP about.F.SG
'the Roman town that the most is known about'
http://cy.wikipedia.org/wiki/Caerwent

b. salwch y gwyddid amdano
illness PRT know.IMPS.impf about.M.SG
'a known illness / an illness that is known about'
http://www.direct.gov.uk/cy/disabledpeople/employmentsupport/supportwhileinwork/

dg_4000382cy

c. nid oes unrhyw brosiectau adeiladu mawr y gwyddir
NEG beII.3SG one.type project-PL building.VRB big PRT know-IMPS
amdanynt
around.3PL
'there aren't any big construction projects that we know of'

http://www.sirddinbych.gov.uk/planningudp/cymraeg/chap16.htm

An additional verb which is similar in form to a type IV verb, *pallu* 'to fail, to refuse'[3] (cf. *gallu* 'to be able to' of table 3.1) may also behave in the way described in this section with regards to the diagnostics, but is limited to use in certain dialects only.[4] The lack of its attestation in modern, written sources in causative, reflexive and GET-passive constructions is insignificant as its transitive is also difficult to come by. It is, however, found as both a verb-noun (preposition + non-finite verb) in periphrastic constructions commonly and with IMPS.

(38) a. Pallodd ei iechyd.
fail;PST.3SG POSS.3SG health
'[His] health failed' intransitive

http://www.trefeurig.org/horebhanesgweinidogion.php

b. [roedd] un fenyw di pallu talu
[PRT.be.PRET.3SG] one female PERF fail pay.VRB
'one woman had failed to pay' analytic

https://t.co/jsYhe4nTS6

(39) pallwyd a'i gyhoeddi
fail;PST.IMPS with'POSS.3SG M\publish
'people failed to publish it / it failed to be published' impersonal

p.396 "Sgwrs y byd" *Heddiw* [Journal] Cyf. 5, rh. 8 (Ion. 1940), pp. 396-399

For the purposes of this thesis, this verb *pallu* then belongs to the 'other' category of type V, until more data is generated on its permissibility in causatives, reflexives and GET-passives. As far as the verb does not describe a psychological state, it is omitted from table 3.1. It may be argued that a few other verbs of the table are as un-psych-like, but that is of little consequence to the overall goal of differentiating passive-like structures and will therefore be left as a problem for future studies of Welsh verb classes. Type V psych-verbs are exemplified briefly in the following section.

3.2.4.5 Type V

It is challenging to find examples for some constructions with certain verbs; verbs that are used less frequently, formally or dialectally (as indicated by the many question marks in the columns of type V), and so these will have to be left to corpus studies or

[3] Thanks to Dr David Willis for this suggestion and for general feedback on analysing this dataset at various conferences.

[4] Attested in Ceredigion, Pembrokeshire and likely others.

speaker intuition-based questionnaire tasks in a larger study. These type V verbs are certainly transitive and some are found to impersonalize.

(40) galarai am yr anffawd
grieve;IMPF.3SG about ART misfortune
'[she] lamented the misfortune' Experiencer subject

(41) ni fali-wyd llawer
NEG MUT\care-PRET.IMPS much
'people did not much care' Intransitive impersonal
p.29 Lewis, H.D. (1969) Pa beth yw dyn? *Efrydiau athronyddol* [Journal] 32, pp. 26-42.

Two of the verbs fail to GET-passivize (*galaru am* 'grieve (for)' and *laru ar* 'tire of, have enough of'), but it is unclear as to whether the correlation between the ungrammaticality of the three diagnostics is retained in these two verbs.

(42) *galaru* 'grieve, mourn'

a. *caf-odd yr anffawd ei alaru am
get-PST.3SG ART misfortune POSS.3SG M\grieve about
Intended: the misfortune was lamented

b. *caf-odd y ferch ei galaru am
get-PST.3SG ART misfortune POSS.3SG grieve about
Intended: the woman/girl was grieved for/over

(43) *caf-odd y bara ei laru ar
get-PST.3SG ART bread POSS.3SG grow.tired on
Intended: the bread was grown tired of [people grew tired of it]

These two verbs are potential candidates for type IV, whereas the other three verbs might still belong to type I or else a new type entirely. The impact of the preposition on passivization is unclear, but has been shown to be grammatical in type I transitive verbs (colloquially perhaps).

3.2.5 Psych-verbs summary

The experiencer of the psychological state appears in subject position (first argument) with verbs of types I and IV, as exemplified by (9a) *ofni* 'fear' and (9d) *gwybod* 'know' above, whilst the experiencer appears in object position (second argument) in verbs of type II and type III like (9b) *poeni* 'worry' and (9c) *plesio* 'please'.

Prepositional or phrasal verbs are common to Welsh and are found throughout the sample barring types II and III. These phrasal verbs behave as type I in appearing in causative, reflexive, GET-passive and impersonal constructions, or belong to type IV for which none of the 'diagnostics' are grammatical but the impersonal.

Verbs of type II also appear unrestricted in the construction types tested, whilst verbs of type III are questionably ungrammatical in causative constructions, but appeared grammatical in all other construction types tested. These results could mean

that Belletti & Rizzi's (1988) (and Burzio's (1986)) causativization test for Italian may not hold for Welsh. However, introspection and web scraping would be best supplemented by the use of a (as yet, non-existent) tagged and parsed corpus of modern Welsh in order to be more certain about the results. As suggested in section 3.2.4.3, a causative usage for type III verbs may be possible in limited contexts. Type IV verbs – although they currently only form a very small subset of the sample used – behave consistently differently from the other psych verbs tested and cannot form the causative, reflexive or GET-passive constructions. Whilst a larger sample of verbs would be ideal to show that this behaviour is more widespread than just for these four verbs, the results for type IV Welsh verbs are consistent with that of verbs with derived subjects, assuming Belletti & Rizzi's conclusions as exemplified by their Italian data. In other words, the diagnostics used for Welsh and Italian produce the same results for Welsh type IV verbs as they do for Italian verbs with derived subjects and the diagnostics are shown to correlate with each other in their ungrammaticality.

What is clear from the data above is that a certain kind of argument structure may be associated with the verbs of each type respectively, naturally with the exception of type V. On the other hand, the association of the experiencer argument as either subject or object does not reflect the correlation of the grammaticality of the diagnostics. This differs from the Italian data. Belletti & Rizzi (1988) claim that the deep structure of the *preoccupare* and *piacere* types is similar to that of a double object construction only with no external argument, so the theme argument becomes the derived subject (the surface subject) in these verbs. Welsh psych-verbs with experiencer objects – types II and III – behave in the same way as the verbs assumed to have an external argument (type I) by analogy with the Italian results. By contrast, some experiencer subjects give indications of being internal arguments, according to the diagnostics adapted for Welsh.

Regardless of whether or not the subjects of Types I, II and III are 'deep' or structural subjects and whether the subjects of Type IV verbs are derived, the current data show a difference in the verbs' restrictedness. It seems that when GET-passivizing a verb results in an ungrammatical construction, the verb is not attested in causative or reflexive constructions. Belletti & Rizzi's external argument analysis may still apply, although not all the verbs of Table 3.1 behave as predicted. A difference is shown between the verbs allowed by the presumed diagnostic constructions, which in turn implies structural differences between the verb types which form prospective verb classes in Welsh.

3.3 Other 'psych' predicates

No dataset labelled Welsh psych-predicates can be described without acknowledging that lexical verbs are not the only manner of encoding psychological states in Welsh. With some psych-verbs, these 'other' constructions may even be preferred, although no frequency data exists at this point for the phenomenon. The constructions in question

encode property concepts including psychological states such as fear, regret and sorrow as possession. This section introduces the relation of possession and property concepts and the use of prepositions in Welsh to encode these concepts.

Welsh employs the prepositions *gan, genn-* 'by, with' and *gyda, gydag, gyda-* 'together with' (usually in southern-type dialects, but common in other varieties too. Sometimes *â, ag* 'with' is also used, at least historically)[5] to express possession[6], lacking a *have* verb, as is historically common in Romance languages and observed in many modern languages.

(45) Possession with *gan, genn-*

a. mae gennyf dŷ
be.PRS.3SG with;1SG MUT\house
'I have a house'

b. mae gen i dlws
be.PRS.3SG with 1SG MUT\trophy
'I have a trophy'

Psych-predicates can employ the same structure, as demonstrated by *ofn* 'fear' (cf. *ofni* 'fear.VRB').

(46) Psych predicate with *gan, genn-*

a. mae gennyf ofn
be.PRS.3SG with;1SG fear
'I am afraid/scared'

b. mae gen i ofn
be.PRS.3SG with 1SG fear
'I am afraid'

c. mae gennyf ofn gwyfyn-od
be.PRS.3SG with;1SG fear moth-PL
'I'm afraid of moths' or 'I have a fear of moths'

As observed by Borsley, Tallerman & Willis (2007:63-64,363), the word order can vary in that the NP and PP are interchangeable.

(47) Mae cwestiwn gyda fi
be.PRS.3SG question with 1SG

[6]The translations of these prepositions are loosely approximate

[6]Note that *hefo* 'with' is used colloquially in northern-type dialects but behaves differently. In these cases, *hefo* forms a PP with the possessed NP or the property concept, as opposed to the experiencer:

(44) a. mae o hefo gwallt du
be.PRS.3SG 3SG.M with hair black
'He has black hair'

b. mae hi hefo ofn mellt
be.PRS.3SG 3SG.F with fear lightning
'She has a fear of lightning' or 'she is scared of lightning'

Hefo is of the set of Welsh prepositions with no inflecting form and the word order of the PP it forms is not variable, as is found with *gan* and *gyda*.

'I have a question' Possession

https://www.facebook.com/c2radiocymru/posts/446615641987

(48) mae 'da fi *onesie*
be.PRS.3SG with 1SG onesie
'I have a onesie' Possession

https://t.co/jtBpA774WL

In example (47) the possessed argument appears immediately after *be* and before the PP's possessor, whereas the possessor and possessed's positions are the opposite in (48) (note that *gyda* is often reduced to *'da* colloquially). Examples (46) and (49) demonstrates the same variability in the possessive-style psych-predicates.

(49) ma […] syched da fi
be.PRS.3SG thirst with 1SG
'She is thirsty'

https://t.co/ZlUP6Axs4p

Koontz-Garboden & Francez (2010:201) postulate "the idea that the intuitive equivalence between being in the extension of a predicate and having the property expressed by that predicate has grammatical manifestation", which partly captures the diversity of the expression of property concepts as different parts of speech and in particular addresses the semantics of possession encoding property concepts. They state that for the language under investigation, Ulwa (Misumalpan), "one way of expressing that an object is in the extension of a predicate is asserting that the object stands in a possessive relation to the corresponding property". This relation certainly characterizes the Welsh strategy for psych-predicates (which fall under the 'human propensity' class of property concepts proposed by Dixon (1982)).

Possession can also relate to predicates extended using predicative *yn* 'in' and a psych-state-type property concept:

(50) mae'n braf gen i ddweud…
be.PRS.3SG'PRED pleasant by 1SG MUT\say…
'I'm happy to say…'

http://maes-e.com/viewtopic.php?f=3&t=12699&start=20

(51) mae'n ddrwg gen i
be.PRS.3SG'PRED bad by 1SG
'I'm sorry'

(52) mae'n flin 'da fi
be.PRS.3SG'PRED MUT\angry with 1SG
'I'm sorry' Colloquial, southern

In these cases, the possessor must follow the adjective describing the psychological state and there is mostly no variable word order. Forms such as *braf* in (50) might be consid-

ered adjectival as they can be shown to modify NPs straightforwardly:

(53) adjectival modification

a. diwrnod hir
day long
'a long day'

b. diwrnod braf
day pleasant
'a nice day'

However, it is clear that not all adjectives can appear in this possessive-type construction.

(54) *mae'n hir gennyf
be.PRS.3SG'PRED long with;1SG
Intended: I'm long/tall

Some examples of these adjectival constructions are found with an expletive subject *hi* (meaning 'she' – this is used as an expletive subject or 'impersonal pronoun' in Welsh) and this seemingly has no impact on the overall meaning (compare (55a) with (51) above).

(55) a. mae hi'n ddrwg gen i
be.PRS.3SG 3SG.F'PRED MUT\bad by 1SG
'I'm sorry'

b. mae hi'n bechod gen i
be.PRS.3SG 3SG.F'PRED MUT\sin by 1SG
'I feel sorry' or 'I feel it is a shame'
http: // golwg360.cymru / newyddion / cymru / 175380-cymry-di-gymraeg-yn-teimlo-fel-estroniaid

Psych-state 'nominals'(?) such as *ofn* 'fear' may appear in these adjectival constructions too, although only one text example was found and it is unclear as to whether the predicative *yn* (phonologically reduced to *'n* in these examples) has been adopted in (56) by analogy to adjectival forms such as (50).

(56) Mae'n ofn gen i
be.PRS.3SG'PRED fear by 1SG
'I'm afraid'
http://www.thesprout.co.uk/en/news/gwleidyddiaequoyoofrsquo/03002.html

It is clear that more research needs to be done on which psych-states may appear in which form and in which construction before drawing any conclusions about analogy to other constructions.

In addition to possession, the prepositions retain a spatial meaning of 'with', demonstrating that the examples above in (45) are of the 'locational' type of possession in Stassen's (2009) typological mapping of possessive predication. Stassen (2009:281-283) identifies Welsh and other Celtic languages as employing this strategy-type for express-

ing possession. Welsh is one of 129 languages, in his typological survey, which uses locational possession – a group with includes such diverse languages as Tamil (Dravidian), Korean (isolate or Altaic) and Tera (Chadic) according to Stassen (2009).

Supporting this categorization and interrelatedness of possession, location and predication is the fact that one other locational preposition is possible in constructions involving psychological states in Welsh – the preposition *ar, arn-* 'on'. This preposition has roughly the same static spatial meaning as English 'on, on top of' but also a variety of closely related meanings.

(57) mae hiraeth arn-a i
be.PRS.3SG longing on-1SG 1SG
'I feel longing' [approximately] Colloquial

Borsley, Tallerman & Willis (2007:362) state that *ar* "is restricted to temporary states of mind and body, and cannot be used for possession" whereas they characterize *gan* and *gyda* as indicating "temporary states such as illness and pain" (as well as possession and 'psych-type' states) although the temporariness is not well-defined. Interestingly, rather than encoding possession, *ar* can be used to describe debt:

(58) mae arn-af ddwy-bunt
be.PRS.3SG on-1SG MUT\two.F-MUT\pound
'I owe two pounds'

This of course parallels the use of *ar* with psychological states, which are restricted to the same concepts as *gan* and *gyda*.

(59) mae arnaf ofn
be.PRS.3SG on-1SG ofn
'I am afraid'

However, Borsley, Tallerman & Willis (2007:63-64) treat the theme of the predicate as a subject composed of a verb and a noun where *angen* in (60) is the verb and *arian* its noun and the experiencer, as in previous examples of this construction, is expressed as a PP.

(60) mae arnaf angen arian
be.PRS.3SG on-1SG need money
'I need money'

Although only explicitly mentioning the verbhood of *angen* 'need' and *eisiau* 'want', Borsley, Tallerman & Willis (2007) come upon the undesirable effect of inviting an analysis of verb for *ofn* of the parallel structure in (59). This is undesirable due to the explicitly verbal stem *ofni* 'to fear' (as seen in section 3.2.4), composed of the (presumed) noun *ofn* and the widespread verbal suffix *-i*, being eschewed in these constructions.

In brief, whilst these locational-type predicates have certain restrictions on how psych-states are encoded (either as nominal or adjectival forms) which are yet to be

explored in depth, their widespread use in Welsh is important to acknowledge as they overlap in function so clearly with their verb-oriented counterparts of section 3.2.4. It is clear that the PP arguments are not required for experiencers as illustrated by the experiencer arguments of the data in section 3.2.4, nor are they exclusive to experiencer, in its strictest sense.

(61) mae blas cas arnaf i!
be.PRS.3SG taste nasty on-1SG 1SG
'I taste nasty!'
http://formerly.cardiff.gov.uk/objview.asp?Object_ID=22683&

The example in (61) shows that it is the property concept that is encoded using the locational predicate rather than the role of experiencer that is marked.

The three intersecting grammatical and semantic concepts of the constructions described in this section are locational predication, possessive strategies and property concepts. Koontz-Garboden & Francez's (2010) characterization of a possessive strategy of predication, as quoted previously, parallels the function of the *ar* prepositional construction more accurately than 'marking an experiencer', despite *ar, arn-* being used to describe debt (58) and not possession. Further study is required to determine which psychological states can be expressed in a locational predicate as the limitations of these predicates remain to be described, although they are widely referenced in the literature on Welsh and Celtic languages (see Stalmaszczyk 2007 for an overview). Their relatedness to the domain of psychological state is the main motivation for their inclusion in this work, therefore further investigation will be left for a later date.

3.4 Conclusions and further work

Using a sample study of psych-verbs to attempt to find a differentiating structure for the applicability of GET-passives and impersonals has been more important in identifying verb classes, so far, than it has in understanding the two constructions themselves. Fortunately, the exercise has provided an overview of structural differences by verb class that will be useful for future research. Within the semantic superset of psych-verbs, only a small number showed any behaviour of interest to the study of the impersonal construction as type IV verbs impersonalize but fail to GET-passivize. The fact that the causative and reflexive constructions also fail to take these same verbs in a grammatical construction points to a structural commonality in these verbs worthy of further probing. Later, the analysis provided in chapter 4 concludes that it is the status of the theme 'argument' of these verbs that affects their grammaticality, which in turn provides evidence that the impersonal construction affects only the subject of a predicate, as discussed in chapter 6, as all verbs of table 3.1 were able to take impersonal morphology, including the type IV verbs.

A greater sample of verbs – of different semantic supersets perhaps – is needed to

prove that the correlation between grammaticality of the causative, reflexive and the GET-passive holds. Such a study need not be limited to psych-verbs as it has been shown by the dataset in 3.2.4 that the assignment of the experiencer does not correlate with these constructions. Web crawling is limited in revealing examples of causativization due to the nature of the construction with *gwneud* 'do/make' as its causative verb and so, where web crawling and introspection are insufficient to draw any firm conclusions on grammaticality, a parsed and tagged corpus is the closest to an ideal solution. Another method of investigation may prove fruitful is a large-scale targeted questionnaire requesting grammaticality judgements on the causative, GET-passive and impersonal, expanding the study above in 3.2.4 and allowing less frequent verbs to be included. A targeted questionnaire can only be done once more is known about the structure of the Welsh causative construction, in particular, which proves limiting for the analysis of derived subjects in chapter 4.

Further research in this thesis probes whether any verbs cannot take impersonal inflection in Welsh. The question left by this current chapter is whether the impersonal can in fact affect a subject regardless of whether that argument is a structural, 'external' argument or whether it undergoes derivation from a position internal to the VP on a structural level to become a derived 'surface' subject. If Belletti & Rizzi's (1988) findings for the correlations of their diagnostics hold for Welsh, that verbs with internal arguments *only* cannot passivize with the traditional GET-passive, then it should be possible to state that derived subjects cannot GET-passivize. If the conventional GET-passive has the external argument of its verb affected by suppressing or demoting its argument, it may be that the impersonal construction in Welsh does not affect the subject on the same level of representation. The weakness of testing this hypothesis is of course establishing which verbs differentiate between internal and external arguments in the first place, as is only assumed to be a cross-linguistic generalisation. The evidence so far is based on syntactic marking in Italian and lexical/semantic restriction in Welsh. To explain these different behaviours by labelling the arguments of seemingly anomalous verbs 'internal' and then applying this label to the arguments of all verbs which do not passivize or have an unexpected passive form in other languages is unproductive, if the 'internal' argument is not a coherent class. Chapter 4 is an attempt to further probe the notion of 'derived subjects' and verbs with only internal arguments (assumed to be synonymous) in Welsh.

CHAPTER

FOUR

DIAGNOSING UNACCUSATIVE VERBS

4.1 Aims

With the goal of better understanding the grammatical semantics of IMPS in mind, this chapter explores unaccusativity in Welsh in order to identify diagnostics for derived subjects and to potentially account for the verb classes found within verbs of psychological state (as given by the dataset in chapter 3). The links between the Italian diagnostics for derived subjects (Belletti & Rizzi 1988) and the surface subjects of unaccusative predicates (Cinque 1990 – ergative verbs in his terminology) are exploited in order to analyse the Welsh diagnostics of the previous chapter and, ultimately, to understand the structure of the few verbs which proved ungrammatical in those diagnostic constructions.

4.2 Unaccusativity and split intransitives

The lasting impact of Perlmutter's (1978) UNACCUSATIVITY HYPOTHESIS is the observation of structural differentiation between certain intransitive verbs (unaccusative verbs) and other intransitives. This analysis differentiates unaccusative intransitive verbs from unergatives by proposing different statuses (within Relational Grammar) for the sole arguments of these two verb-types: the inability of unaccusative verbs to passivize led to the conclusion that their sole argument corresponds to the object of transitive verbs, meaning that this sole argument must be realized as a surface subject due to language-specific requirements for agreement in surface relations. Later, Burzio (1981) treats these same observations on the behaviour of intransitive subjects under a different approach to syntax: the surface representation of the sole arguments of the two verb-types correspond to different structural positions occupied by those arguments.

This distinction is commonly realized in the intransitive verbs of various languages, sometimes marked by the selection of different auxiliary verbs for intransitive verb participles, as in German in (1), and other times realized by different case-morphology on intransitive subjects, like the dative subject of the Waris intransitive (2b).

(1) a. sie hat gearbeitet
she has worked.PTCP
'She has worked'

b. sie ist gestorben
she is died.PTCP
'She has died' German - auxiliary selection

In the above example from German, the unaccusative verb *gestorben* 'die' requires the copula *sein* whereas *haben* is used for unergatives.

(2) a. Ka-va ye-m hévakomandha-v.
1-TOP 2-DAT kill-PRES
'I kill you.'[1]

b. He-m daha-v.
3-DAT die-PRES
'He is dying.' Waris (Papua New Guinea; Brown (1988)[2]) - case marking

Although unaccusativity manifests in various morphosyntactic phenomena cross-linguistically, the assumption is that unaccusativity is semantically predictable, though syntactically encoded (Levin & Rappaport Hovav (1995), amongst others). Verbs which are syntactically unaccusative have sole arguments that will fall under the proto-Patient (Dowty 1991) or Undergoer macro-roles in terms of their semantics. On the whole, verbs with Patient subjects will have a structurally object-like position (Perlmutter 1978) and the sole Patient argument of an intransitive verb may be realized as a subject, despite having a structural position internal to the verb phrase.

Despite the assumption that patient-subjects do not occupy the same structural position as other subjects (at least not without some derivation, promotion or some such process), languages are known to differ in their sensitivity to patienthood. Some languages treat patient-subjects as they would any other, regardless of the verb's supposed argument structure and the subject's status as external or derived. This entails that a large sample of verbs which contrast in the thematic role of their subjects is required to reliably determine whether or not a language will differentiate morphosyntactically between proto-Patients and proto-Agents.

The goal here is, as mentioned above, to determine whether it is possible to identify unaccusative verbs in Welsh. Assuming that such structural differences exist in intransitive verbs, it should be possible to find the syntactic impact of this. Middle Welsh non-finite intransitives display some characteristics of unaccusativity, reviewed in section 4.3.1. Section 4.3.3 demonstrates one reflex of unaccusativity in Modern Welsh intransitives.

The second part of the investigation turns to transitive verbs. Although traditionally unaccusativity has been a term applied only to intransitive verbs, Belletti & Rizzi's (1988) proposal of derived subjects in transitive verbs invites comparison with the structure of

[1] -m only appears on animate or less-affected inanimate Ps (Brown 1988)
[2] Original glossing by Brown (1988)

unaccusative verbs. The parallelism of these assumptions leads to some of Belletti & Rizzi's diagnostics being used on both transitive verbs and intransitives (sections 3.2.1 and 4.5 respectively) followed by a discussion of the efficacy of the diagnostics for Welsh in section 4.7.

The results show that the diagnostics used for Welsh derived subjects in chapter 3 are not diagnostic of derived subjects as their Italian counterparts are standardly taken to be.

4.3 Unaccusativity in Welsh intransitives

Before addressing unaccusativity in modern-day Welsh, it is worth noting that unaccusativity was marked (variably) in Middle Welsh by some verbs. Section 4.3.4 reveals that these verbs no longer represent the set of unaccusative intransitives in Welsh, although there is some overlap.

4.3.1 Middle Welsh split

A split in the subject marking of non-finite intransitives has previously been observed for Middle Welsh (Manning 1995). A genitive preposition *o* marked the subject of non-finite transitives in Middle Welsh, as in (3), and likewise the subjects of certain intransitives (4b)[3], variably.

(3) kymryt o Arthur y daryan eureit
take GEN Arthur ART F\shield golden
'Arthur took[4] the golden shield'

(4) a. kynn diodef Crist
'Before Christ suffered'
b. kynn diodef o Grist
'Before Christ suffered'

As illustrated by the contrasting examples in (4), this marking was not always consistent in Middle Welsh, with both genitive-marked and unmarked sole arguments appearing with the same verbs, within the same texts, leading Manning to describe the system as fluid intransitivity (meaning Dixon's (1979) fluid-S system). A small set of verbs (table 4.1) tended to prefer O-marking of their subjects.
Manning (1995) found the verbs 'go, come' and 'meet' to strongly prefer O-marking their subjects (where O-marking, or object-marking, takes the form of Ø-marking, whereas A-marking would imply the use of the preposition *o*), as 87 of the 94 tokens of *mynet* 'go' exemplify. Table 4.2 (from Manning (1995)) shows that the animacy of the subject

[3]Translation Manning (1995), glossing my own
[4]translated from a non-finite form

Verb	Gloss	Total	O-marking	A-marking
mynet	'go'	94	87 (93%)	7 (7%)
dyuot	'come'	31	24 (77%)	7 (23%)
kyuaruot	'meet'	5	4 (80%)	1 (20%)

Table 4.1: Marking preferences of Middle Welsh (Manning 1995)

and the aktionsart class of the Middle Welsh verb influence the presence of the case-marking preposition, although, as with table 4.1, it is to be understood that the results describe tendencies in the data (no p-values were given for the factors involved) and not categorical results.

Transitivity	**S NP denotation**	**V aktionsart class**	**S marking**
Transitive			Yes
Intransitive	- Human S NP		O-marking
	+ Human S NP	Activity V	A-marking
		Achievement V	Fluid marking
		Stative V	O-marking

Table 4.2: Fluid intransitive system of Middle Welsh (Manning 1995)

Whilst the fluid intransitivity system of *o*-marking no longer applies to Modern Welsh, which simply uses *o* as a non-case marking preposition, the non-finite verbs found not to require *o* in Middle Welsh are of interest to this study, as a set of potential unaccusative verbs for the purposes of comparison, and are listed in Appendix A.

4.3.2 Modern Welsh

There is some difficulty in determining whether the sole argument of a Welsh intransitive is treated as Agent or Patient syntactically (being treated as the same as a transitive subject or not) due to several factors. Welsh word order (VSO) means that both would take the same position with respect to the verb in a basic clause. With auxiliary support, however, the word order would be AuxSVO – a prevalent sentence structure in Welsh – leaving the sole argument of intransitives in the subject position. Pronominal forms do not vary according to case or alignment in Welsh, with previous analyses suggesting givenness and information structural reasons for variation in the realisation of pronouns (Awbery 1976). Initial consonant mutation does not consistently mark direct objects of transitive verbs (Borsley & Tallerman 1996; Tallerman 2006; Borsley, Tallerman & Willis 2007), therefore it cannot mark case on sole arguments of verbs either – though claims have been made that this kind of mutation marks accusative case (Zwicky 1984; Roberts 1997) – see Tallerman (1987), Ball & Müller (1992) or Borsley, Tallerman & Willis (2007:Ch.7) for a full discussion. Without overt marking of A and P, we must rely on other syntactic diagnostics for unaccusativity or derived subjects.

4.3.3 Identifying diagnostics

As with English, the diagnostics for unaccusativity in Welsh are very limited. Welsh has no morphological marking, no variable auxiliary selection (of which there are at least remnants in English *she is gone* vs. *she has gone*) and no word order variation between verbs, to name a few diagnostics common to the literature on unaccusativity.

However, as in English, a split in the semantics of Welsh intransitives can be observed in resultative and depictive constructions – with *yn* + ADJ forming the VP adjunct for Welsh – as was found by Simpson (1983) for English and further explored by Levin & Rappaport Hovav (1995) in their work on unaccusativity.

(5) Resultative

a. rhew-odd y llyn yn galed
freeze-3SG.PST ART lake PRED MUT\hard
'the lake froze hard/solid'[5]

b. sych-odd y geg yn lân
dry-3SG.PST ART F\mouth PRED MUT\clean
'the mouth dried clean (/completely)'

In both examples given in (5), the adjectives *caled* and *glân*, respectively, describe the resulting state of the named argument as a consequence of the event named by the verb. For this reason, the preposition *yn* has been labelled with the function of PREDICATIVE as this usage seems consistent with the function of *yn* in copular clauses like *mae'r llyn yn galed*, 'the lake is hard'. This interpretation of *yn* + ADJ is consistent with Gensler's (2002) 'subpredicative' analysis of *yn*Len, which is the form of *yn* that triggers lenition/soft-mutation in the following noun or adjective. The examples in (6) have *yn* glossed as PRED and this reflects their 'non-predicative' function under Gensler's interpretation. The non-predicative adverbializing prepositions modify the verbs' meaning so that the property named by the adverb holds true for the whole event, and that the property is depicted at each point of the event named by the verb.

(6) Depictive

a. penlin-iodd Meilir yn flin-edig
kneel-3SG.PST Meilir PRED MUT\tired-ADJ
'Meilir kneeled tired(ly)'

Meilir kneeled until he was tired

b. chwardd-odd Erwan yn sâl/sal-aidd
laugh-3SG.PST Erwan PRED sick/sick-ADJ
'Erwan laughed in a sickly way'

Erwan laughed himself sick

This contrasts with (5) in which the adjunct names a state that requires the event to be

[5]Nouns unmarked in respect to gender or number and following an article should be interpreted as masculine singular. This has been omitted from the glosses due to the lack of morphological marking and frequency of occurrence, for legibility.

completed, meaning that a simple diagnostic phrase such as "and was already ADJ before the end of the event" can disambiguate a resultative from a depictive and possibly, then, a non-predicative from a subpredicative use of *yn*. The diagnostic has a non-sensical interpretation for the unaccusative verbs (7), but not for unergatives (8):

(7) #rhew-odd y llyn yn galed ac roedd yn galed
freeze-3SG.PST ART lake PRED MUT\hard and PRT.be.IMPF.3SG PRED MUT\hard
cyn i'r llyn rew-i
before DAT'ART lake MUT\ice-VRB
'#the lake froze solid and it was solid before the lake froze' Resultative

(8) penlin-iodd Meilir yn flin-edig ac roedd yn
kneel-3SG.PST Meilir PRED MUT\tired-ADJ and PRT.be.IMPF.3SG PRED
flin-edig cyn iddo benlin-io
MUT\tired-ADJ before DAT.3SG.M MUT\kneel-VRB
'Meilir knelt tired(ly) and was tired before he knelt' Depictive

A potential problem with this diagnostic is the lack of adverbial morphology in Welsh. Using three adjectives (*glân*, *caled* and *blinedig*) in the same construction yields a varying outcome as to which verb gives rise to resultative readings of their adjectives. For example, one adjective might give a resultative reading with the verb *rhewi* whilst another could only be depictive, whilst another yet might be ambiguous. This is exemplified and discussed both here and in section 4.3.4 below (examples (19a)–(19c)). This potential ambiguity may be due to the adjectival forms used by Welsh under each of these circumstances: whether adverbial or adjectival, the form is invariable as there is no adverbial morphology, as exemplified in (9).

(9) a. mae'r ceffyl hwn yn araf
be.PRS.3SG'ART horse PROX.M PRED slow
'this horse is slow'

b. symud-ai'r ceffyl hwn yn araf
move-IMPF'ART horse PROX.M PRED slow
'this horse moves slowly'

However, when the construction VERB + *yn* + ADJ must be interpreted as resultative rather than depictive (when a depictive reading is unavailable as in (5)), the diagnostic selects a structural object as the recipient of the resultant state named by the adjective, as shown by a two-argument verb:

(10) rhew-odd ei rhewgell y dŵr yn galed
freeze-3SG.PST POSS.3SG F\freezer ART water PRED MUT\hard
'Her freezer froze the water hard'

The adverbial adjunct *yn galed* in (10) can only be interpreted as being the result state of the verb's object, *y dŵr*, after the event named by the verb has taken place. Accordingly, a depictive reading can apply to a subject:

(11) penlin-iodd Meilir ei blent-yn yn flin-edig
kneel-3SG.PST Meilir POSS.3SG M\child-SG PRED MUT\tired-ADJ
'Meilir kneeled his child tiredly'

This example clearly describes the subject and agent, Meilir, as the tired party whose tiredness was not brought about by the event named, but other VERB + *yn* + ADJ constructions are more ambiguous.

(12) cur-odd Bryn yr hufen yn galed
beat-3SG.PST Bryn ART cream PRED MUT\hard
'Bryn whipped the cream hard'

Whilst the most obvious interpretation of this utterance is that of the depictive reading – as glossed, in which the action named by the verb is modified by *yn galed* 'hard', it is also possible to interpret *yn galed* as being the result state of *yr hufen* 'the cream', if we take this hard state to be relative to the consistency of cream in (12). These results vary, with certain adjectives more prone to receiving a depictive interpretation than others, but examples such as (10), in which a depictive reading is not possible, suggest that the structural status of the subject may differ from predicates with a depictive or ambiguously depictive reading.

This may be the strongest diagnostic for unaccusative verbs in Welsh, where no available depictive reading indicates an unaccusative structure.

For English, adjectival passives or perfect participial adjectives are used as an additional diagnostic of unaccusative verbs (Levin & Rappaport 1986; Levin & Rappaport Hovav 1992): unergative verbs are unable to produce adjectives of the kind **the much-painted artist, *the shouted worker* as opposed to the unaccusative *the melted snow, the badly-written letter*, which are perfectly acceptable.

A deverbal suffix *-edig* is often referred to as a resultative suffix in Welsh (Haspelmath 1994), as in (6a)'s *blinedig* and as illustrated in table 4.3, and forms resultative adjectives. However, this suffix does not consistently imply that a change of state has taken place, as is commonly assumed to be the function of this type of morphology cross-linguistically, and as implied by Borsley, Tallerman & Willis (2007:1:10) who state that the suffix is "lexically restricted to a minority of verbs and often having an idiosyncratic meaning"[6]. This implies that the Welsh deverbal adjectives formed using *-edig* do not behave in the same way as the participial English diagnostic adjectives as confirmed below, and of course nominal modification is not restricted to the deverbal adjectives that we expect to derive from unaccusatives (13) (marked P in table 4.3 as having a semantic proto-Patient subject, impressionistically).

Examples of the adjectival suffix *-edig* given in table 4.3 show that both verbs with proto-Agent and proto-Patient subjects derive adjectives with *-edig*.

[6]Semantic shift may contribute to the diverse meaning types of the *-edig*, which sees a clear resulting state semantics to adjectives such as *sathredig* 'trodden', *gwywedig* 'wilted' and *llygredig* 'polluted', for example, and a less clear relation between the adjectives *caredig* 'kind, kindly', *colledig* 'missing' and *gweledig* 'visible' and their verbal roots.

Verb	Translation	Adjective	Subj of: intrans	trans
llygru	pollute	llygredig	A	A
amgau	enclose	amgaëdig	A	A
cysegru	consecrate	cysegredig	A	A
nodi	note	nodedig	A	A
sathru	stomp	sathredig	A	A
ysgrifennu	write	ysgrifenedig	A	A
caru	love	caredig	A	?A
crwydro	wander	crwydredig	A	?A
gweld	see	gweledig	A	?A
methu	unable	methedig	A	n/a
ymadael	leave	ymadawedig	A	n/a
darfod	finish	darfodedig	?A	A
troi	turn	troëdig	A	A/P
crynu	shake	crynedig	P	A
blino	tire	blinedig	P	A
syrthio	fall	syrthiedig	P	n/a
diflannu	disappear	diflanedig	P	n/a
gwywo	wilt	gwywedig	?P	A
anghofio	forget	anghofiedig	?	?
colli	missing, be lost	colledig	n/a	?P

Table 4.3: Deverbal adjectives with *-edig*

(13) byddin fawr, flin-edig
army F\big, F\tire-ADJ
'a big, tired army'
Straeon ac Arwyr Gwerin Groeg, Myrddin ap Dafydd, CEG[7]

(14) yr holl sylwad-au ysgrifen-edig
ART entire comment-PL write-ADJ
'all the written comments'
Cofnodion Cyngor Dwyfor, CEG

Alternatively, it could be argued that rather than being derived from a verb with a proto-Patient subject, adjectives such as *blinedig* in (13) simply have no external cause inferences. Verbs with proto-Agent subjects, like *ysgrifennu* 'write', do not alternate with inchoative intransitives, but still fail to build adjectives with external cause inferences (14). Of course, it is arguably the case that adjectives such as *ysgrifenedig* 'written' are derived from verbs with proto-Agent subjects but with two structural arguments, where the object is implied by the verb's semantics. However, as the problem returns to needing identified unergative intransitives in order to test the diagnostics themselves, the examples below in (15) are perhaps the most conclusive evidence available to this analysis.

The *-edig* deverbal adjectives are not participial like English diagnostic adjectives,

[7]Examples marked CEG are taken from the electronic database of Welsh (Ellis, O'Dochartaigh, Hicks, Morgan & Laporte 2001)

which are unmarked deverbal adjectives, and the nominal modification is not restricted to the deverbal adjectives that we expect to derive from unaccusatives (13). Some adjectives of this type seem more awkward to apply postnominally than others, such as *?ceffyl rhededig* 'a run horse' and *dyn gwaeddedig* 'a shouted man' which are equivalents of English unergative derived adjectives and whose contexts might be a little obscure, but the forms are attested in Modern Welsh.

(15) a. arbrawf rhed-edig
experiment run-ADJ
'running experiment'

http://www.golwg360.com/blog/adolygiadau/78306-barn-y-bwyles-ar-s4c July 2012

b. eu pechod-au ffiedd gwaedd-edig
POSS.3PL sin-PL odious shout-ADJ
'their odious, crying sins'

E. ab Ellis (1761) *Cofiadur Prydlon Lloegr* (GPC)

This data demonstrates that Welsh 'resultative' *-edig* deverbal adjectives are not diagnostic of unaccusative verbs, as their equivalents are in other languages, such as English.

Other diagnostics exist for unnaccusativity in the languages of the world, but of course many are language specific and do not apply to Welsh, as noted above. Some of the most well-known diagnostics deriving from Levin & Rappaport Hovav (1995) – and not addressed above – were dismissed as appropriate diagnostics for Welsh, in the same vein as the *-edig* verbs above are dismissed as they do not behave as prenominal perfect participles were found to behave with English unaccusatives (Levin & Rappaport 1986; Levin & Rappaport Hovav 1995).

The cognate object and *there*-insertion diagnostics were dismissed as their successfulness is highly dubious. It is unclear that what is considered ungrammatical by Levin & Rappaport Hovav (1995) is ungrammatical by other native speakers' standards. In addition, further work on unaccusativity shows that there is a mismatch in unaccusativity diagnostics when *there*-insertion is employed, suggesting that further structural differences exists between 'unaccusatives' (Alexiadou & Schäfer 2011), as a semantically determined class (as is widely accepted – see Sorace 2000; Alexiadou & Anagnostopoulou 2004; Ramchand 2008). Whilst this could be an interesting area for further research, verb classes within unaccusatives are not under investigation here.

Locative inversion is not considered to be diagnostic of unaccusativity by Levin & Rappaport Hovav (1995:Ch.6) and is inappropriate for Welsh as the subject remains postverbal in PP-fronted constructions due to the word order of Welsh.

Finally, the *X's way* diagnostic may have potential in a broader study of Welsh unaccusativity, but as Levin & Rappaport Hovav (1995) note, stativity is one of its additional restrictions and therefore it is of little use to the overall purpose of this chapter, concerning type IV verbs.

(16) *Sylvie is knowing her way to first prize (Levin & Rappaport Hovav 1995:150)

As suggested, further research, especially grammaticality judgement surveys, are needed to determine its usefulness as an unaccusativity diagnostic for Welsh, as demonstrated by (17).

(17) a. *rhew-odd y llyn ei ffordd yn galed
freeze-PST.3SG ART lake POSS.3SG way PRED MUT\hard
Intended: the lake froze its way hard

b. ?penlini-odd y dyn ei ffordd i'r wobr
kneel-PST.3SG ART man POSS.3SG way DAT'ART MUT\hard
'?the man knelt his way to the prize'

c. siarad-odd ei ffordd (allan) o'r frwydr
talk-PST.3SG POSS.3SG way (out) GEN'ART F\battle
'he/she talked his/her way out of the battle'

d. ??oer-odd y cawl ei ffordd i dymheredd ystafell
cold-PST.3SG ART soup POSS.3SG way to MUT\temperature room
'the soup cooled its way to room temperature'
Ungrammatical in English for Levin & Rappaport Hovav (1995:173).

4.3.4 Comparison with Manning (1995)

Using the adjectival modification diagnostic from 4.3.3 on the set of verbs identified by Manning (1995) reveals that his verb classification does not correlate to the reading of the structure *yn* + ADJ, as proposed here. Only two of the Modern Welsh counterparts of the Middle Welsh verbs, *mynd* 'go' and *dod* 'come', from either the A-marking or O-marking lists (see Appendix A), gave rise to a resultative interpretation of the adjective.

(18) daeth y rhaff yn rhydd
come.3SG.PST ART rope PRED free
'the rope came loose/free'

Three more verbs, *cerdded* 'walk', *rhedeg* 'run' and *ymwasgu* 'squeeze together', lend their adjectives a resultative interpretation. All three are motion verbs, with two manner of motion verbs, *cerdded* and *rhedeg*, but with all three encoding some kind of directed motion, and take adjectives as predicative complements denoting a resultant state.

(19) a. cerdd-odd Nelson Mandela yn rhydd
come-3SG.PST Nelson Mandela PRED free
'Nelson Mandela walked free'
http://www.bbc.co.uk/cymrufyw/20663565

b. o foch [...sydd] yn cael cerdded yn rhydd
GEN MUT\pig.PL [...be.REL] PROG get walk.VRB PRED free
'from pigs that are allowed to roam freely'
http://www.pagwynedd.org/docs/gwynedd-ar-blat.pdf

c. ...wedi cael eu gweld yn cerdded yn rhydd,
...after get POSS.3PL see PROG walk PRED? free
'...were seen walking free/freely'

http://www.golwg360.com/newyddion/145969-sylwebwyr-milwrol-yn-cael-eu-rhyddhau-yn-yr-wcrain

As suggested by the translation of (19b) a depictive interpretation of *cerdded* 'walk' (as well as *rhedeg* 'run' and *ymwasgu* 'squeeze together') is also possible. In this example, *yn rhydd* means to depict the character of the walking, not to describe a new state that results from the event of walking. The example in (19c) is more ambiguous as to which reading is intended, even in context, although it is likely resultative.

The four adjectives used to test the list of verbs in Appendix A were *rhydd*, as illustrated above, *blinedig* 'tired', *caled* 'hard' and *glân* 'clean'. There are potential problems with this diagnostic as *blinedig*, a derived adjective as discussed in 4.3.3, seems to force a depictive reading in all but *mynd* 'go' and *dod* 'come', to which it optionally provides a depictive meaning. The adjective *caled* 'hard' sees the same results, but it additionally lends the predicate formed with *ymwasgu* 'squeeze together' the option of having a depictive or a resultative reading. Lastly, *glân* 'clean' is more consistent with *rhydd* in picking out the five verbs mentioned above with a resultative reading. Additionally, the verb *ymwahanu* 'to separate, to diverge' forms a predicate with a resultative interpretation with *glân*.

These kinds of exceptions are common to the class of motion verbs, as demonstrated by the fact that Basque and Italian verbs of inherently directed motion take the same auxiliary as unaccusative verbs (despite the semantic proto-Agent subject) (Levin & Rappaport Hovav 1995:148), English motion verbs patterning with unaccusatives in being unable to appear with a cognate object according to Levin & Rappaport Hovav (1995:148) – unlike unergatives – and Dutch manner of motion verbs participating in an 'alternation' between unergative and unaccusative structures (Van Hout 2013:55-56).

It seems then that Levin & Rappaport Hovav's (1995) diagnostic for English unaccusatives using a resultative construction can be applied to Welsh too. The same construction, as described in this section (4.3.3), produces a depictive reading of the 'adjectival' adjunct for unergatives, whereas Welsh unaccusative intransitive verbs produce a resultative reading of their adjectival adjuncts. Another potential diagnostic, based on English and as found by Levin & Rappaport Hovav (1995), did not yield the same results (the alleged 'resultative' adjectives suffixed by *-edig*) and did not prove to be diagnostic of any verbs with semantic patient subjects and therefore, potentially unaccusativity.

4.4 Derived subjects

This section revisits the data of the previous chapter in order to determine whether a relation holds between semantic unaccusatives and derived subjects in Welsh.

To reiterate and summarize the study up until this point, Belletti & Rizzi (1988) explore the relation between the assignment of θ-roles and the morphosyntactic marking of arguments in language by using data from Italian. Their data show that there is a clear

relation between what is realised in the surface syntax and the thematic roles of their verbs, which led to the identification of derived subjects in semantically and syntactically consistent verb groups. They hypothesize that correlations in the surface syntax were due to differences in the verb's underlying argument structure. This was outlined in more detail in section 3.2.1.

Assuming that verbs which are semantically unaccusative (have patient subjects) have a syntactically derived subject, this chapter asks whether these derived subjects are marked differently from true, external subjects in Welsh.

Belletti & Rizzi's (1988) paper supports the split in the behaviour of unaccusatives and unergatives going beyond intransitives, as these verbs also differ in that one type lacks an external argument, meaning that other languages can be expected to carry the same split in their predicate structures.

4.4.1 A return to psych verbs

Using Belletti & Rizzi's (1988) diagnostics to test transitive verbs of psychological state, it can be shown that both verbs with experiencer subjects, *fear*, and verbs with more more agent-like subjects, *worry*, passivize, reflexivize and causativize in Welsh. Whilst Welsh potentially has several different passivizing strategies, the GET-passive is the most suited for this diagnostic purpose as its restrictions, thus far, seem more straightforward than any other Welsh valency-reducing construction.

The first verb type, exemplified in section 3.2.4.1 by the verb *hoffi*, 'to like', has an experiencer subject and passes all the diagnostics. A verb of the same class (of which the experiencer is *Lliwedd* in (20)) is presented here in order to replicate the dataset for variety and convenience.

(20) a. edmyg-ai Lliwedd ei chwaer
admire-IMPF.3SG Lliwedd POSS.3SG sister
'Lliwedd admired her sister' Transitive

b. mae rhywbeth yn gwneud i Lliwedd edmygu ei chwaer
be.3SG something PROG make to Lliwedd admire POSS.3SG sister
'something makes Lliwedd admire her sister' Causative

c. edmyg-ai Lliwedd ei hun
admire-IMPF.3SG Lliwedd POSS.3SG self
'Lliwedd admired herself' Reflexive

d. mae ei chwaer yn cael ei hedmygu
be.PRS.3SG POSS.3SG sister PROG get POSS.3SG F\admire
'her sister is admired' Passive

Similarly, the transitive verb *dychryn* 'scare, frighten', has an experiencer object, but still passes all the diagnostics:

(21) a. dychryn-ai Alaw Gwyndaf
scare-IMPF.3SG'ART Alaw Gwyndaf

'Alaw scared Gwyndaf' Transitive

b. gwnaeth-ai i Alaw ddychryn Gwyndaf
make-IMPF.3SG to'ART Alaw MUT\scare Gwyndaf
'he/she/it made Alaw scare Gwyndaf' Causative

c. dychryn-ai Alaw ei hun
scare-IMPF.3SG Alaw POSS.3SG self
'Alaw scared himself/herself' Reflexive

d. cafodd Gwyndaf ei ddychryn
get-PST.3SG Gwyndaf POSS.3SG M\scare
'Gwyndaf was scared' (but # 'Gwyndaf became scared') Passive

A representative sample of the results of the 47 psych-verbs and predicates studied is illustrated again in table 4.4 for convenience and sees the verbs fall into four distinct 'types', according to their behaviour.

Verb		Exp. SUBJ	Causative	Reflexive	Passive
ofni 'fear' hoffi 'like' edmygu 'admire' meddwl *am* 'think of/about'	I	✓	✓	✓	✓
dychryn 'frighten' poeni 'worry' diflasu 'get bored of' blino 'tire'	II		✓	✓	✓
plesio 'please' boddhau 'please, satisfy' bodloni 'please, content' syfrdanu 'shock'	III		?	✓	✓
gwybod 'know' gallu 'be able to do' medru 'be able to do' ymddigrifo *mewn* 'entertain (in)'	IV	✓			

Table 4.4: Simplification of table 3.1 – transitive psych predicates and diagnostics for derived subjects

The verbs all pass the diagnostics, despite the role of experiencer varying between subject and object positions in these transitives. This differs from the Italian data shown by Belletti & Rizzi (1988) as they found the assignment of θ-roles to correlate with the verbs causativizing, accepting a reflexive clitic and passivizing.

The acceptability of causativization is the only differentiating factor between the Welsh verbs of type II and III of table 4.4, with type II verbs all being perfectly acceptable in the causative construction. Type III verbs are all a little less acceptable with the causative construction, although a context might be found in which they may be more acceptable. Type IV verbs on the other hand behave quite differently with regards to the diagnostics.

Type IV verbs, of which there are only 4, all fail to causativize, reflexivize and passivize. Like type I, these verbs all have experiencer subjects. Superficially, these groups do not differ from type I verbs in any sort of marking or in the assignment of θ-roles, but they do differ from type I verbs in failing the diagnostics.

As a two-place predicate, the verb *gwybod*, 'to know', is perfectly acceptable with the experiencer appearing in subject position, post verbally, and the information that is known appearing in the object position after the subject. However, *gwybod* is the verb which is used for 'knowing information' or 'knowing a fact' – as is common in other European languages, but unlike the English counterpart which encompasses being familiar with a person or a place etc. Instead, Welsh uses another verb or verbal stem, *adnabod*, for knowing or recognising a person which falls into type I of the verbs in the table above.

(22) gwyddai Gwennan y gwir
know.IMPF.3SG Gwennan ART truth
'Gwennan knew the truth'

The verb *gwybod* is unacceptable in the causative construction which is formed here again with an analytic causative comprising an auxiliary verb *do* as the causing verb followed by a preposition, as the other verb types allowed.

(23) *gwneud i Gwennan wybod y gwir
make to Gwennan know ART truth
Intended: cause Gwennan to know the truth

The reflexive NP is equally as unacceptable with *gwybod* – speakers would again select the 'familiar' type of knowing in these reflexive contexts.

(24) *gwydd-ai Gwennan ei hun
know-IMPF.3SG Gwennan POSS.3SG self
'Gwennan knew herself'

Passivizing *gwybod* results in an ungrammatical utterance. This time, although the other knowing verb *adnabod* would be acceptable passivized, it would not give an equivalent meaning. In this instance it is simply not grammatical to use this verb in a passive construction.

(25) *caiff hyn ei wybod (gan Gwennan)
get.PRS.3SG this.ABST POSS.3SG know (by Gwennan)
'this is known by Gwennan'

In summary, a correlation was found in the syntactic behaviour of four verbs using causativization, reflexivization and passivization (type IV). This correlation in the diagnostics suggests that there may be a difference in the syntactic structure of type IV versus verbs of type III and their arguments. One potential explanation is that this may indicate that verbs of type IV have syntactically derived subjects, like those found in the

Italian data. As this correlation has no relation with the assignment of θ-roles, it is difficult to draw such a parallel based on the shared behaviour of three diagnostics alone, especially as the point of Belletti & Rizzi's (1988) paper was to account for this relation between case grids and θ-assignment.

On the other hand, the analysis of derived subjects cannot be disregarded as type IV verbs still display a difference in their syntactic behaviour compared to the other three groups. Some property of type IV verbs causes their subjects to be treated differently from the other verb 'types' or subsets of psych verbs.

However, the lack of correlation of patient subjects and the ungrammaticality of the diagnostics does cause additional problems for an unaccusative analysis. Furthermore, the awkwardness of causatives with type III verbs suggests it is a weak diagnostic in the first place, leaving only two diagnostics.

4.5 Unaccusativity and derived subjects

If the causative, reflexive and passive constructions diagnose the structural status of the subject, intransitives should exhibit the same behaviour as transitives. The prediction that follows is that the diagnostics should result in an ungrammatical utterance with unaccusative intransitives and, conversely, unergative intransitives should pass these diagnostics.

The results, partly illustrated by table 4.5, show that all intransitives pass the causative diagnostic and that none of them passes either the reflexive or the passive diagnostic. A question mark (?), as throughout the thesis, represents the uncertainty of a particular grammatical judgement which fails to be confirmed as grammatical when searching electronic sources.

As evident in table 4.5, the thematic role of the sole argument of these predicates is unrelated to the results of the syntactic tests – as was the case in the transitive results. The verbs have been coded impressionistically as to whether the subject or sole argument is more of a Dowtian proto-Agent or proto-Patient, represented by A and P respectively in the final column.

The following intransitive predicates (in (26)), of the 28 considered, were found to behave as described above:

(26) blodeuo 'flower/blossom', eistedd 'sit', sefyll 'stand', aros 'wait/stay', gafael 'grip /hold', diflannu 'disappear', cyrcydu 'crouch', penlinio 'kneel', rhedeg (as intrans.) 'run', marw 'die', cysgu 'sleep', edrych 'look', mynd allan 'go out/exit', dod 'come', mynd i lawr 'go down/descend', cydio 'grab', cydfyw (recip.) 'coexist', byw 'live', digwydd 'happen'.

Applying the diagnostics to intransitives that alternate with transitive verbs yielded the expected result – the causative can apply to either, whilst the reflexive and passive are

Verb	Translation	Caus	Refl	Pass	Arg
eistedd	sit	✓	?	X	A
aros	wait/stay	✓	?	X	A
blodeuo	flower/blossom	✓	?	X	P
digwydd	happen	✓	X	X	P
diflannu	disappear	✓	X	X	P
marw	die	✓	X	X	P
cysgu	sleep	✓	X	X	P
penlinio	kneel	✓	X	X	A
mynd allan	go out/exit	✓	X	X	A
dod	come	✓	X	X	A
dychwelyd	return	✓	?	X	A
geni	be born	X	X	✓	P

Table 4.5: A selection of the 28 intransitive verbs (predicates) tested

only grammatical with the transitive verbs. Semantic unergatives were most difficult to differentiate due to possible dropped objects of cognate object effects.

Geni 'to be born', of the dataset in table 4.5, is a defective verb, meaning the verb's paradigm is incomplete and the apparent passivization is simply a remnant, similar to English 'be born'.

The less-well-behaved intransitive verbs found in the dataset of 28 verbs were mostly verbs prefixed by *ym-* and are laid out in table 4.6. Interestingly, *ym-* is frequently referred to as a reflexive prefix (A.R. Thomas 1992; P.W. Thomas 1996), it is a misleading shorthand for a prefix which shares its etymology with Indo-European preverbal affixes, cf. Greek *afufri-*, Latin *ambi-* (Morris-Jones 1913:263-264), Proto-Celtic *ambi-* and Proto-Indo-European *mbhi-/ambhi-* (Hamp 1973). The Modern Welsh prefix is acknowledged to have reflexive as just one of its functions and not as its basic function (Irslinger 2014), with the reflexive meaning having extended from the reciprocal, which in turn developed from the prepositional meaning of *ym-/am-* 'around, about' (Morris-Jones 1913; Vendryes 1927).

Verb	Translation	Caus
ymsefydlu	settle/establish	✓
ymolchi	wash (animate)	✓
ymledu	spread/expand/dilute	✓
ymddeol	retire	✓
ymwasgaru	scatter	✓
ymafael	grasp/grip	✓
ymddangos	appear	✓
ymddigrifo	be entertained	X

Table 4.6: Intransitive verbs 'prefixed' with *-ym*

Additionally, restrictions apply to the arguments of *ymafael* and *ymddigrifo* of table 4.6; the subject of *ymafael* 'grasp/grip' is restricted to things that have the ability to grip, whether animate or inanimate, and *ymddigrifo* 'be entertained/find entertainment' is the only verb of table 4.6 to require a preposition in order to take an object at all (see table 4.7).

Verb	Translation	Caus	Refl	Pass	Arg
ymsefydlu	settle/establish	✓	✓	X?	A?
ymolchi	wash (animate)	✓	✓	✓	A?
ymledu	spread/expand/dilute	✓	✓	✓	A?
ymddeol	retire	X?	X	✓	A
ymwasgaru	scatter	✓	X	X?	A?
ymafael *yn/mewn*	grasp/grip	X?	X	X	A
ymddangos	appear	X	X	X	P
ymddigrifo *mewn*	be entertained	X	X	X	P

Table 4.7: Transitive verbs 'prefixed' with *-ym*

The first two verbs of table 4.6 may be accounted for by the meaning of verbs' transitive counterparts interfering with the diagnostics (being unable to force an intransitive reading and so on) as these behave as normal transitives of types I–III. The next *ym-* verb behaves as a normal intransitive of table 4.5 would and as its non-prefixed stem is quite rare – *deol* 'banish' (cf. *diarddel, alltudio*, also 'banish') – and as the semantics of *ym-* has shifted from the original un-prefixed meaning somewhat, it may be that this prefix+stem has become fully lexicalized. Certainly, *ymddeol* is a far more common verb than *deol* in Modern Welsh, with zero attested occurences of *deol/ddeol* in the CEG [electronic database of Welsh] (Ellis, O'Dochartaigh, Hicks, Morgan & Laporte 2001) compared to 53 for the lemma *ymddeol*.

The first and most obvious problem is that the diagnostics used here for derived subjects fail to pick out classic unaccusatives such as *break*:

(27) a. gwnaeth y rhew i gord-iau'r ffenestr dorri
made.PST.3SG ART ice DAT cord-PL'ART window MUT\break.VRB
'the ice made the window cords break'[8]

b. gwnaeth y rhew i'r dyn eistedd
made.PST.3SG ART ice DAT'ART dyn sit
'the ice made the man sit / caused the man to sit'

[8]Compare example (27) with the following:

(28) Gall olwynion pwli sydd wedi rhewi… 'Frozen pulley wheels can…'

achosi i gordiau'r ffenestr dorri
cause:VRB DAT MUT\cord:PL'ART window MUT\break
'cause the window's cords to break'
http://cadw.gov.wales/docs/cadw/publications/Maintenance_Matters_Replacing_Sash_Cords_CY.pdf

The causative verb *achosi* 'cause' is used, rather than *gwneud* 'do/make' as has been used to exemplify the Welsh causative construction in this thesis. The example in (27) was constructed for consistency.

Assuming that *the man* is agentive in the unergative *sit*, and that *sit* is an unergative verb, there is a split in the grammaticality of the previously correlating diagnostics. Intransitive verbs all pass the causative diagnostic, but not the other two diagnostics. If the type IV verbs from table 4.4 fail the three diagnostics due to having derived state of their subjects, this is not reflected by semantically unaccusative intransitives, implying that transitive verbs and intransitive verbs would need a very different structural account.

On the other hand, if the diagnostics assumed for unaccusativity in fact diagnose transitivity and properties of transitivity, perhaps a unified account of two-place and one-place predicates can be retained. Only a diagnostic for intransitive unaccusatives has been identified in this paper (section 4.3.3), namely the resultative and depictive readings of intransitives in those respective contructions. The correlations in the diagnostics based on the Belletti & Rizzi (1988) diagnostics appropriate for the Welsh data have not shown the same correspondence between the expression of the experiencer role and the assignment of subject position as occurs in the Italian data, but have left the behaviour of a few verbs unexplained, namely the type IV verbs of chapter 3 as revisited in section 4.4.1.

4.6 Potential accounts for restricted verbs

4.6.1 Transitivity

Hopper & Thompson's (1980) identification of independent properties of transitivity provides one possible account for the correlation in the diagnostics for type IV verbs. Hopper & Thompson propose that transitivity might be viewed as a gradient feature comprised of several separate properties, which are properties of the entire clause rather than the predicate alone. These properties provide several parameters for the concept of transitivity, which are shown in table 4.8.

	HIGH	LOW
A. PARTICIPANTS	2 or more participants A and O	1 participant
B. KINESIS	action	non-action
C. ASPECT	telic	atelic
D. PUNCTUALITY	punctual	non-punctual
E. VOLITIONALITY	volitional	non-volitional
F. AFFIRMATION	affirmative	negative
G. MODE	realis	irrealis
H. AGENCY	A high in potency	A low in potency
I. AFFECTEDNESS OF O	O totally affected	O not affected
J. INDIVIDUATION OF O	O highly individuated	O non-individuated

Table 4.8: Hopper & Thompson's (1980) parameters of Transitivity

The consequence of this take on transitivity is that a one-place predicate may be

'more transitive' than a two-place predicate. Interestingly, they state that "…although the presence of a true patient participant is a crucial component of Transitivity, that of a second participant which is not much of a patient (i.e. which does not receive any action) is not." (Hopper & Thompson 1980:254), which seems to describe fairly well the case of the type IV verbs. The second argument of (22), 'Gwennan knew the truth', is not much of a patient as it does not receive any action, arguably.

This approach to transitivity suggests that type IV verbs – *gwybod* 'know', *gallu* and *medru* 'be able to' and *ymddigrifo (mewn)* – fail to causativize, reflexivize and passivize due to their low transitivity properties. Interestingly, this generalized scale fails to capture the correlations found by Van Valin (1990) and van Hout (2004) between telicity (high transitivity) and unaccusatives (typically telic). Evidence from Dutch (van Hout 2004), for example, has shown that telic intransitive verbs are unaccusative and atelic intransitives are unergative. Assuming that type IV verbs are to be considered unaccusative, section 4.6.2 finds that animacy plays a role in type IV's restrictions, but provides no further evidence to suggest that low transitivity of the Hopper & Thompson (1980) variety, has any relation to this.

4.6.2 Cognizer

The four verbs which fail the diagnostics for derived subjects, *gwybod* 'know', *gallu* and *medru* 'be able to' and *ymddigrifo (mewn)*, all have objects arguably unaffected by the state named by the verb and almost equally unaffected subjects, or at least subjects which are less 'affected' than the other verbs of psychological state of table 4.4. That is, the (experiencer) subject of a verb of emotion undergoes that named emotion at some point as it is a temporary state, whereas verbs of cognition name states which are intuitively more permanent. These three verbs fall into a different semantic group from the other psych-verbs, in that the subject fits with the 'Thematic Relation' of cognizer, parallel to emoter and perceiver – each a subtype of the macrorole experiencer (Foley & Van Valin 1984). Cognizers have the semantic roles of thinkers, believers, knowers and presumers, as opposed to the likers, lovers and haters of the emoter relation (Van Valin 2004). The representations in (29) detail the semantic composition of verbs of cognition, first their macroroles, then the thematic role of the cognizer subtype, as suggested by Van Valin (2004).

(29) a. **know**(x, y) x = EXPERIENCER, y = THEME
b. **know**(x, y) x = COGNIZER, y = CONTENT

Under this approach, EXPERIENCER can be interpreted as either an Actor or an Undergoer (in Van Valin's terms), or proto-Agent and proto-Patient for the purposes of this paper. This is compatible with a gradient view of transitivity, as a verb with an Actor-experiencer subject has more transitive properties and will therefore causativize, reflexivize and passivize, whilst a verb with an Undergoer-experiencer subject would fail

the diagnostics. This distinction may be not only language-specific but also context-dependent.

If verbs of cognition form a semantic group to which Welsh grammar is sensitive, (transitive) verbs with cognizers as subjects would be predicted to fail the diagnostics used in this paper. However, no additional verbs of type IV were found within this limited group.

Verb of cognition	Translation	Psych-type
credu	believe	I
deall	understand	I
beirniadu	judge	I
parchu	respect	I
cofio	remember	I
dysgu	teach	I
dysgu	learn	no reflexive
meddwl	think	no reflexive
synhwyro	sense	no reflexive
gallu/medru	know how to	IV

Table 4.9: Cognizers

The verbs of cognition in table 4.9 are either included in the full dataset, referred to in section 4.4.1, and their experiencer subjects happen to be of the type 'cognizer', or fit into type I, or form a new type. Cognition verbs of this new Type V causativize and passivize but fail to reflexivize. This suggests, again, that reflexivization is really sensitive to semantic factors which coincide with those of causativization and passivization to some extent, when testing verbs of psychological state. The diagnostics will be explored individually in section 4.7.

4.6.3 Animacy of the object

Type IV verbs remain difficult to characterize semantically, perhaps predictably so (Levin 1999). One remaining potential proposal is in the characterization of their objects, which in the case of *gwybod* 'know', *gallu* and *medru* 'be able to', at least, must all be inanimate, as is reillustrated by the verb *gwybod* in section 4.4.1, examples (22)–(24).

(30) *gwydd-ai Eleri ei thaid
know-IMPF.3SG Eleri POSS.3SG F\grandfather
'Eleri knew her grandfather' (cf. (24))

(31) a. *medr-ai Cian heddwas
be.able.to-IMPF.3SG Cian policeman
'Cian was able to [be] a policeman'

b. medr-ai 'r delyn
be.able.to-IMPF.3SG 'ART F\harp
'He/she could [play] the harp'

Although animacy of the object was not controlled for in the initial study of psych verbs outlined in this paper, a cursory search for transitive psych-verbs with inanimate objects reveals that the diagnostics still yield grammatical results:

(32) cafodd ei ffug-len ei hedmygu
get;PST.3SG POSS.3SG fake-lore POSS.3SG F\admire
'His literary fiction[9] was admired'
http://cy.wikipedia.org/wiki/Arthur_Machen

Therefore this generalization does not seem to hold, unless it applies only to verbs which cannot take an animate object at all, which suggests that a property other than animacy is the true cause of this behaviour in these four 'type IV' verbs.

4.7 Diagnostics

As well as failing to identify actor or proto-Agent, versus experiencer or proto-Patient, as seen in the psych-verb data, intransitives show that the diagnostics fail to differentiate between (semantic) unaccusatives and unergatives as evidenced by (27). Assuming that transitives and intransitives behave similarly under these diagnostics, the explanation for the fact that type IV verbs fail the diagnostics becomes trickier.

4.7.1 Causative

All of the intransitive and most of the transitive verbs were found to causativize with *gwneud i*, the basic structure of which was demonstrated in chapter 3, section 3.2.3. The Welsh causative seems to be a traditional clause union-type causative, combining the argument structure of two clauses straightforwardly.

The Welsh causative construction did not differentiate prototypical semantic unaccusative intransitives from unergative intransitives. Its failure to be applied to three transitive verbs may be attributed to other properties of those verbs, although this does not rule out the conclusion that the subjects of those verbs are syntactically derived from a position internal to the VP.

4.7.2 Reflexive

The Welsh reflexive is a true reflexive of the form POSS.PRON + *self* (NP), as mentioned in chapters 2 and 3, and as such can only apply to verbs with two argument slots, in which the referent is able to act on itself.

The examples in (33) illustrate that the reflexive differentiates transitives from intransitives, not unaccusatives from unergatives.

[9]Note that the author is male (marked masculine where agreement is available) and the noun *ffuglen* 'fiction' is feminine.

(33) a. *diflannodd y frenhines ei hun
disappear-PST.3SG ART F\queen POSS.3SG self
'*the queen disappeared herself'

b. *penliniodd y frenhines ei hun
kneel-PST.3SG ART F\queen POSS.3SG self
'*the queen knelt herself'

c. dychrynodd y neidr ei hun
frighten-PST.3SG ART snake POSS.3SG self
'the snake scared itself'

The first example above is of a reflexive NP failing to be grammatical as part of an unaccusative one-argument verb, the second as part of an unergative one-argument verb and the third shows the grammaticality of a two-argument verb with the reflexive NP in the position of its second argument.

The failure of the reflexivization then simply reflects the status of the verb's second argument – the second argument must be affected by the first argument or verb in order for reflexivization to occur.

4.7.3 Passive

As established in chapter 2, a standard passive in Welsh is formed with the auxiliary verb GET (*cael*) + POSS.PRON + VERB (non-finite verbnoun).

The passive, like the reflexive, also requires two arguments in order to apply. Below in (34) are the same unaccusative, unergative and two-argument verb as above.

(34) a. *cafodd y frenhines ei diflannu
get.PST.3SG ART F\queen POSS.3SG disappear
'*the queen was disappeared'

b. #cafodd y frenhines ei phenlinio *(ganddi ei hun)
get.PST.3SG ART F\queen POSS.3SG F\kneel *(by.3SG.F POSS.3SG self)
'# the queen was knelt *(by herself)'

c. cafodd y neidr ei ddychryn (ganddo ei hun)
get.PST.3SG ART snake POSS.3SG M\frighten (by.3SG.M POSS.3SG self)
'the snake scared itself'

The second example above (34b) shows that the unergative verb is grammatical in a passive construction when it can be interpreted as having a suppressed agent. The reflexive agentive adjunct shows that as a one-argument verb, the intransitive interpretation is unlicensed.

The failure of the passivization also reflects the status of the verb's second argument – the second argument must be affected by the first argument or verb in order for passivization to apply.

4.8 Summary of conclusions and outcomes

There is no evidence that the assumed semantic unaccusative transitives are treated differently, syntactically, in Welsh, until the macrorole of experiencer is reconsidered as branching into actor and undergoer. Once this is proposed, it may be the case that the four two-argument verbs which correlate in their syntactic diagnostics may have derived subjects and correspond to semantically unaccusative verbs. Nevertheless, this analysis would imply that prototypical unaccusatives such as 'break' would not be expected to pass the same diagnostic in Welsh. The sole argument of 'break' would need to be considered under the role of proto-Agent in this case, which, although unusual, might be possible under the heading Actor, where volition is less obviously implied.

The exact nature of the causative construction, *gwneud i* (section 4.4.1 and 3.2.3) has yet to be determined in terms of its impact on argument structure, which could lead to the conclusion that the Welsh constructions tested in this paper are not sensitive to the structure of verbs with derived subjects. The type IV verbs determined in chapter 3 might be considered too low in transitive properties to reflexivize and GET-passivize (as suggested in section 4.6), with both being diagnostics of transitivity rather than of derived subjecthood.

Another argument against causatives, reflexives and passives as diagnostics of unaccusativity is the lack of correlation between their results with two-place and one-place verbs. Whilst their behaviour was uniform with the intransitive verbs tested, the split between the ungrammaticality of the group IV verbs in causative, reflexive and GET-passive constructions and the other 47 verbs of psychological state suggests the overlap in the argument structures of the three constructions in question lies elsewhere.

The findings of section 4.3.3 suggest that the semantics of intransitive verbs in the resultative construction may be the only diagnostic of unaccusative structures in Welsh, which of course requires further corroboration to be meaningful to the field of Welsh syntax.

The outcome of this chapter with regards to Welsh impersonal morphology (IMPS) is a proposed diagnostic for unaccusative intransitives which were broadly conceived in chapter 2 by assuming that intransitive verbs with proto-Patient subjects found to be unaccusative in other languages would also prove to be unaccusative in Welsh. Later data will be informed by this diagnostic, in later chapters of this thesis and, hopefully, in the future study of Welsh syntax. In addition, the verbs *gwybod, gallu* and *medru* will be used for further comparison with intransitive impersonals in order to further understand the status of their second arguments.

CHAPTER

FIVE

DELIMITING RESTRICTIONS ON THE IMPERSONAL

5.1 Introduction

This chapter returns its focus to the impersonal construction, which takes the form demonstrated in (1).

(1) a. Verb-TENSE.IMPS + argument (+ agentive adjunct)
b. Verb-TENSE.IMPS (+ agentive adjunct ?)

The most obvious question that has been raised in the previous chapters is whether the impersonal morphology can apply to any kind verb taking any kind of argument.

The results of the study of previous literature (chapter 2) and of testing verbs of psychological state (chapters 3 and 4) are that the GET-passive can only apply to eventive two-place predicates. However, the impersonal has been shown to share no such restriction. Verbs with subjects falling under Dowty's (1991) proto-Patient type (see chapter 4) have been shown to impersonalize throughout the thesis. The psych-verb data of section 3.2.4 have also shown the impersonal to apply to all two-argument verbs, regardless of whether the arguments are 'lower' in terms of the properties of transitivity, as discussed in 4.6.1.

In chapter 2, IMPS was shown to apply to intransitive verbs with proto-Patient arguments, as demonstrated with the verb *dioddef* 'suffer' in section 2.4.2, which contrasted with the analytic passive which could not apply to intransitive verbs with proto-Patient arguments. These verbs were assumed to be unaccusative, but as shown in previous chapters (chapters 2 and 4), the GET-passive only applies to two-argument verbs (as a minimum) and as such is irrelevant to the analysis of unaccusativity in intransitives. Section 5.2 uses the resultative construction diagnostic proposed in chapter 4 to further explore the relationship of the impersonal construction and unaccusative intransitives.

The impersonal construction seems – so far – to apply to any argument, whether internal or external. Under investigation in this chapter is whether the impersonal construction is restricted at all. Using verb classes identified by both semantic and syntactic

conditions in the linguistic literature, this chapter provides evidence of classes or subclasses of verbs which fail to impersonalize. The chapter adopts an exploratory style in order to provide a basis for future work on the semantics and syntax of Welsh verbs: negative results are included even when an entire verb class is irrelevant to the structure of IMPS. To this end, the results of the 'diagnostics' of chapter 3 (the causative, reflexive and analytic passive constructions) are also included, where most relevant to testing transitive (two argument) verbs.

This chapter probes which verb classes and argument types restrict the impersonal morphology. Following on from the previous chapter, section 5.2 presents evidence which seems to suggest that unaccusative intransitives resist impersonalization, despite assumptions to the contrary in earlier chapters. Later evidence throughout the chapter reveals that the observation made by Blevins (2003) (referenced previously in chapter 2) – that IMPS tends to be associated with the semantics of an indefinite human argument – might equally be the cause of this restriction, rather than unaccusativity. Nevertheless, the verb classes tested in sections 5.3, 5.4 and 5.5 reveal that the restrictions apply only to intransitive verbs, regardless of the verb semantics. The definition of intransitive has to be refined in order to make this generalization however, with the extent 'argument' of measure verbs in section 5.5 deemed to be a special case, as supported by previous literature on this verb class (Andrews 1985; Rizzi 1990; Schwarzschild 2005). Section 5.6 uses alternating change of state verbs to test whether alternating verbs favour a transitive reading when impersonalized, but instead finds no property other than animacy to be relevant to the applicability of impersonal morphology, which is supported by the data showing a restriction on unaccusative intransitives. Chapter 6 investigates further into this animacy effect in order to provide a summary of the impersonal accurate enough to see it incorporated into current theories of passive in chapter 7.

5.2 Unaccusativity diagnostics and the impersonal

According to the diagnostics established for intransitive unaccusatives in chapter 4, impersonal morphology can apply to intransitive unergatives, as demonstrated in chapter 2 using the unergative *rhedeg* 'run' and here with *penlinio* 'kneel', one of the unergatives established in section 4.3.3 of the previous chapter.

(2) Penlin-ir yn galed.
kneel-PRS.IMPS PRED hard
'People kneel (down) hard'

In contrast, the intransitive unaccusative *rhewi* 'freeze' of section 4.3.3 does not seem to impersonalize in (3).

(3) ??Rhew-ir yn galed.
freeze-PRS.IMPS PRED hard
Intended: It froze hard / It was frozen solid.

The semantics of these grammaticality judgements are a little obscure, out of context. The use of the double question mark suggests that the reading may not be ungrammatical for all speakers, which is discussed further in section 6.4.2. Examples (4) and (5) expand on the sentences above in order to provide some contextual clarity and contrast the ungrammaticality of (3).

(4) *Mae olion llyfn ar y graig…* 'There are smooth marks on the rock…'

lle penlin-ir yn galed o flaen y cerflun
where kneel-PRS.IMPS PRED hard GEN MUT\front ART statue
'where people kneel down hard in front of the statue/carving'
…yn y deml hynafol '…in the ancient temple'

(5) *Mae mannau diogel i groesi o lan i lan…* 'There are safe spots to cross from one riverbank to another…'

??lle rhew-ir yn galed
where freeze-PRS.IMPS PRED hard
Intended: 'where it freezes solid' or 'where it is frozen solid'

These examples are directly comparable in terms of their contexts, as in neither is a referent introduced for the impersonalized verb: the presumed worshippers are unmentioned in (4) and the intended frozen river is previously unactivated in (5), though both should be retrievable from the context. Had these referents been previously activated, the impersonal would be perceived as ungrammatical due to the requirement that the verbs in question – *penlinio* 'kneel' and *rhewi* 'freeze', should agree with the referents of their arguments. The results differ, however, as is reflected by the examples' respective translations. Although a potential referent of both *penlinir* in (4) and *rhewir* in (5) is available given the context, the interpretation of *rhewir* as affecting an object is blocked, in favour of an agentive interpretation; that is, *lle rhewir yn galed* of (5) might be interpreted as 'where people freeze X solid' or 'where X is frozen solid', but 'X' is lacking a referent. This points to the semantics of the impersonal morphology requiring an agentive subject, but examples like *dioddefir* 'people suffer' of 2 (section 2.4.2) suggests that this cannot be the case.

The ungrammaticality of intransitive *rhewi* with IMPS, coupled with the previous unaccusative diagnostic from chapter 4, suggests that there may indeed be a structural difference between *rhewi*, *dioddef* and *penlinio*. An unaccusative verb should have only an argument that is affected by the event named by the verb and that argument forms part of the verb phrase. It could be that IMPS suppresses an external argument only and the presence of IMPS would therefore indicate that an external argument is unspecified, leading an unaccusative verb like *rhewi* to be ungrammatical without the presence of a referent for its internal argument. The implication that falls out of this analysis is that only intransitive unergatives impersonalize, whereas intransitive unaccusative do not.

This is partly confirmed by other intransitive change-of-state verbs in section 5.6.2. A second implication of this analysis is that intransitive unaccusatives in Welsh are not characterizable by the semantics of the sole argument as 'affected', Undergoer or proto-Patient.

Alternatively, an entirely semantic account for these differences in the grammaticality of the intransitive may yet be possible. The striking semantic similarity of the interpretations of *dioddefir* 'people suffer' and *penlinir* of (2) is the interpretation of the unspecified argument of IMPS as 'people'. Due to the nature of the verb *rhewi* 'freeze', the default interpretation of *people freeze* might be that of 'people' as an agentive argument, rather than the undergoer of the freezing. Certainly the context set up in (5) excludes the possibility of a human being affected by the freezing event. The relevance of animacy to the semantics of IMPS is explored further in chapter 6.

The two competing analyses proposed here in brief reflect the broader debate of the nature of unaccusativity and whether it truly reflects differing syntactic structures of the sole argument with respect to the VP (Levin & Rappaport Hovav 1995) or whether it is a purely semantic phenomenon (Van Valin 1990). Whilst the Welsh data presented in this thesis might be relevant to this debate, the debate is not advantageous to the analysis of the Welsh data and therefore will not be expanded on here.

5.3 Reciprocal verbs

The impersonal construction seems to apply to both proto-Agent and proto-Patient, as observed in the psych-verb data of chapter 3 and above in section 5.2. It has been proposed in section 5.1 and in earlier chapters that the impersonal can apply to 'any higher argument' or any verb with two arguments in which one argument has a thematic role 'higher' than the other in terms of a thematic hierarchy. Another approach is to focus on the asymmetry of the arguments in transitive verbs (two-argument verbs), rather than on the status of the suppressed argument. Hopper & Thompson (1980) use the concept of affectedness to define transitivity (as detailed in section 4.6.1 of the previous chapter), therefore verbs with arguments of an equal status – 'reciprocal' or 'equative' verbs – should form a class very low in the properties of transitivity, according to their model. The reciprocal verbs selected in table 5.1 largely belong to Levin's (1993)'s class of 'understood reciprocal object alternation verbs' for English, but also happen to be mostly stative, with a few exceptions. Stative verbs have already been encountered in the impersonal construction (*bod* 'be' in chapter 2 and *gwybod* 'know (information)' in chapter 2 and others from the set of psych verbs in chapter 3), but the properties relating to stativity are separate from affectedness according to Hopper & Thompson's (1980) parameters of transitivity (outlined in table 4.6 of chapter 4) and might therefore behave differently.

However, when the arguments are equal in terms of their thematic roles, as the arguments of the verbs tested in table 5.1 are, it seems that the impersonal morphology

again encounters no restriction.

Verb	Trans	IMPS	Causative	Reflexive	Passive
croesi	'cross/intersect'	✓	✓	✓	✓
cymysgu â	'mix'	✓	✓	✓	✓
tebygu i, at	'resemble'	✓	✓	✓	✓
gwrthdaro â	'collide'	✓	✓	✓	✓
ymateb i	'respond'	✓	✓	✓	✓
perswadio	'persuade'	✓	✓	✓	✓
gwahaniaethu	'differentiate'	✓	✓	✓	✓
cwffio	'fight'	✓	✓	✓	✓
cyffwrdd	'adjoin, touch'	✓	✓	✓	✓
cyffinio	'adjoin'	✓	✓	X	✓
ffinio	'adjoin, border'	✓	✓	X	✓
cyfateb (i)	'correspond to'	✓	✓	X	✓
gohebu â	'correspond with'	✓	✓	X	✓
cyfarfod	'meet'	✓	✓	?	✓
cwrdd	'meet'	✓	✓	?	✓
ymdebygu i, at	'resemble'	✓(?)	X	✓	X
edrych fel	'resemble, look like'	X	✓	✓	X

Table 5.1: Verbs with arguments of equal status

Interestingly, the verbs of Table 5.1 show no uniformity in their reflexivization. In these verbs, the verbal semantics restrict the reflexive due to either the impossibility of the referent to be in a certain arrangement with regards to itself (as is the case with *cyffinio* 'adjoin' and *ffinio* 'adjoin, border') or the improbability of a plausible context for the referent to be compared with itself (*cyfateb (i)* 'correspond to' and *gohebu â* 'correspond with') or to be assigned a certain interpretation (*cyfarfod* and *cwrdd* 'meet').

The following examples illustrate the behaviour of these verbs, which generally resemble type I of the psych verbs. Type I was the most common type, in appearing in all the constructions tested and – in the case of the psych verbs – having experiencer subjects.

(6) *cwffio* 'fight'

a. cwffi-ai Gwen Llinos
fight-IMPF.3SG Gwen Llinos
'Gwen fought Llinos'

b. gwnaeth rhywun i Gwen gwffio Llinos
made someone to Gwen fight Llinos
'someone made Gwen fight Llinos' Causative

c. cafodd Gwen ei chwffio gan Llinos
get-PST.3SG Gwen 3SG.POSS F\fight by Llinos
'?Gwen was fought by Llinos' GET-passive

d. cwffi-wyd Llinos
fight-PST.IMPS Llinos
'Llinos was fought' Impersonal

(7) *gwahaniaethu* 'differentiate, distinguish'

a. gwahaniaeth-ai'r terfyniad-au –us ac –um rhwng y gwrywaidd
differentiate-IMPF.3SG suffix-PL –us and –um between ART masculine
a'r niwtral yn yr ail ogwyddiad
and'ART neutral in ART second declension
'the suffixes –us and –um distinguish the masculine and the neutral in the second declension'

https://cy.wikipedia.org/wiki/Lladin_Llafar

b. Roedd-ynt yn cael eu gwahaniaeth-u gan enw-au
be.PST-PST.3PL PROG get POSS.3PL different-VRB by name-PL
'they were distinguished by the names' GET-passive

https://cy.wikipedia.org/wiki/Rhestr_Llengoedd_Rhufeinig

c. gwahaniaeth-ir rhwng dilyniant (progression) a
differentiate-PRS.IMPS between progression ("progression") and
pharhad (continuity)
M\continuity ("continuity")
'we differentiate between progression and continuity' or 'we distinguish progression from continuity' Impersonal

The verb *ymdebygu i/at* belongs to the group of verbs prefixed by *ym-* explored in section 4.5 as a set of transitive verbs (table 4.7). These all exhibited different behaviour with regards to the causative, reflexive and passive with three of the eight showing results unaccounted for by the four psych-verb types, none of which matches the behaviour of *ymdebygu i/at* here. This suggests that more work should be done on these *ym-* verbs in general, but its results do not impact the hypothesis of this section.

Another puzzling result of table 5.1 is another prepositional verb *edrych fel* 'look like, resemble'. Although not the only example of a transitive verb requiring a preposition to introduce a second argument used in this dataset, the example of (8) is striking in that both the impersonal and analytic GET-passive is restricted in this construction.

(8) *edrych fel* 'look like, resemble'

a. Edrych-ai Rhys fel Emlyn
look-3SG.IMPF Rhys like Emlyn
'Rhys looks like Emlyn'

b. Edrych-ai Emlyn fel Rhys
look-3SG.IMPF E like Rh
'Emlyn looks like Rhys'

c. gwnaeth yr adran goluro i Emlyn edrych fel Rhys
made ART department make-up.VRB to Emlyn look like Rhys
'the make-up department made Emlyn look like Rhys'

d. *cafodd Emlyn ei edrych fel gan Rhys
get;PST.3SG Emlyn POSS.3SG M\look like by Rhys
Intended: Emlyn was resembled by Rhys

e. *Edrych-ir fel Emlyn
look-PRS.IMPS like Emlyn
Intended: people look like Emlyn

The simple verb *edrych* 'look, view, watch' does not resist impersonalization, even when supported by a preposition as seen in section 5.4.3. In the case of *edrych fel*, it might be that the relation of the preposition and the verb is different from other prepositional verbs in that the preposition *fel* 'like' changes the meaning of the stem more-so than other similar verbs. Whereas *tebygu i/at* 'resemble' of table 5.1 has the same lexical meaning with either preposition, *edrych fel* 'resemble' has only common elements to the meaning of *edrych i* 'to look to, attend to, be mindful of'. In the case of this prepositional verb, as opposed to others seen in this thesis, it might be that the preposition carries more lexical weight, in *edrych fel*, making it more clearly a phrasal verb than others with a seemingly similar structure. The status of phrasal verbs is not well-studied in Welsh, as previously noted in section 3.2.4.1.

Whilst there is no clear solution to this puzzle, it does not drastically alter the conclusion of this section; in general, a verb having thematically equal arguments does not affect the applicability of IMPS.

5.4 Predicative complements with IMPS

Although certain measure verbs cannot impersonalize, previous research has revealed that for a verb to have an experiencer subject alone does not block the construction. Stativity should not be a problem either, according to impersonal morphology on the verbs *gwybod* 'know' and *bod* 'be'. This leaves the nature of the predicate to be investigated.

The relation between a predicate, a complement and the argument have not yet been explored with regards to the impersonal construction. The goal of this section is to examine how the impersonal construction interacts with predicative complements.

5.4.1 Resultative predicative complements

These transitive resultative verbs with predicative complements fail to GET-passivize, but consistently take the impersonal verbal morphology.

(9) *dod* 'come, become'

a. daeth Owen yn ddeintydd
came.PST Owen PRED MUT\dentist
'Owen became a dentist' personal

b. wrth astudio […] deuir yn ymwybodol o'r hyn sydd
by studying […] come;PRS.IMPS PRED conscious of'ART this beIII
ei angen i fod yn dditectif creigiau!
POSS.3SG M\need to MUT\be PRED detective rocks!
'whilst studying […] the reader is made aware of what is needed to become a rock detective!' impersonal

http://www.gwales.com/goto/biblio/en/9781847713803

c. *caf-odd ei ddod yn ymwybodol
get-PST.3SG POSS.3SG M\come PRED conscious
*was become aware GET-passive

Complex intransitives with resultative predicative complements reveal a possible restriction on the impersonal.

(10) personal

a. daeth y rhaff yn rhydd
come.PST.3SG ART rope PRED free
'the rope came loose'

b. aeth yr afal yn ddrwg
go.PST.3SG ART apple PRED MUT\bad
'the apple went bad'

c. trodd yr awyr yn las
turn.PST.3SG ART sky PRED MUT\blue
'the sky turned blue'

(11) impersonal

a. ??deir yn rhydd yn aml
come-IMPS.PRS PRED free PRED often
'it/things often come loose'

b. ??eid yn ddrwg
go.IMPS.SUBJ PRED MUT\bad
'things go bad'

c. ??troir yn las
turn.IMPS.PRS PRED MUT\blue
'it turns blue'

The verbs with resultative predicative complements in (11) resemble the unaccusative verbs in resultative constructions in 5.2 in that the predicative resultative adjunct denotes a resulting state in both cases, but they differ in the relation of the results state to the event. In these predicative complements in (10), the entire event is dependent on the resulting state being part of the predicate as the verb *turn*, for example, has little to do semantically with *turning blue*, whereas *freeze* by contrast names an event with or without the support of its resultant state *freeze solid*.

No intransitive examples of these verbs were found, by text search, without a human subject (as in (12)), suggesting that the questionable grammaticality of the examples in (11) is due to the context being atypical for a human or higher animate subject.

(12) eir yn hen
go.PRS.IMPS PRED old
'People become old'
'*Y Rhagoriaeth*' [poem] (1824), by Evan Thomas

All of these forms were able to occur with impersonal inflection when an object was present. However, to have a resulting state it is not possible to have anything but an eventive reading of these verbs. In each case, a causer must exist, even though one is not as strongly implied as in the eventive readings of measure verbs seen later in section 5.5. The cause can even be internal, such as in the case of *eid yn ddrwg* in the context of fruit, 'they go bad, they rot', where the properties causing this result could be properties of the fruit or of their environment (or both). This means that, according to Hopper & Thompson (1980), these predicates are higher in terms of the properties of transitivity than stative intransitives would be.

5.4.2 Transitive stative verbs with predicative complements

Transitive (two-argument) stative verbs with predicative nominal complements seem to have no effect on either the passive or the impersonal construction and behave as other transitive verbs with an external argument.

Verb	Trans	IMPS	Causative	Reflexive	Passive
cydnabod	'acknowledge'	✓	✓	✓	✓
dychmygu	'imagine'	✓	✓	✓	✓?
cofio	'remember'	✓	✓	✓	✓
gweld	'see'	✓	✓	✓	✓
disgrifio	'describe'	✓	✓	✓	✓
gwrthwynebu	'oppose'	✓	✓	✓	✓
credu	'believe'	✓	✓	✓	✓
meddwl	'think'	✓	✓	✓	✓
derbyn	'accept'	✓	✓	✓	✓
cynnal	'maintain'	✓	✓	✓	✓
datgan	'declare'	✓	✓	✓	✓

Table 5.2: Stative transitives with PCs

Table 5.2 shows a selection of verbs which take predicative complements and seem to belong to Levin's (1993) set of verbs which participate in the dative alternation in English and partly to the semantic set of "appoint verbs" and verbs which participate in the "as" alternation. In Welsh, although the nominal complement might be considered an argument itself, it clearly has some form of sub-clause relation to the verb and its object. For example, the state of 'being a secretary' in (13a) is predicated of the object *Ithel*.

(13) *cydnabod* 'acknowledge'

a. cydnabydd-odd y llywydd Ithel yn weinydd
acknowledge-PST.3SG ART president Ithel PRED MUT\secretary
'the president acknowledged Ithel (as) secretary'

b. 'naeth y llywydd gydnabod Ithel yn weinydd
do-PST.3SG ART president MUT\acknowledge Ithel PRED MUT\secretary
'the president acknowledged Ithel (as) secretary' Periphrastic

c. cafodd Ithel ei gydnabod yn weinydd gan y
get;PST.3SG Ithel POSS.3SG M\acknowledge PRED MUT\secretary by ART
llywydd
president
'Ithel was acknowledged/recognised as secretary by the president' Passive

d. cydnabuwyd Ithel yn weinydd (gan y llywydd)
acknowledge;PST.IMPS Ithel PRED MUT\secretary (by ART president)
'Ithel was acknowledged/recognised as secretary (by the president)' IMPS

Example (15) suggests that some of these verbs may participate in the "as" alternation in Welsh too, with the with the addition of *fel* 'like, as' to the structure found in (14).

(14) cydnabydd-ir hi yn feistres y mor-oedd
acknowledge-PRS.IMPS 3SG.M PRED MUT\mistress ART sea-PL
'she's acknowledged as master of the seas/mistress of the seas'. Impersonal

http://www.archive.org/stream/ytraethodydd00igoog/ytraethodydd00igoog_djvu.txt

(15) Cydnabydd-ir ef fel un o brif ffurf-wyr polisi
acknowledge-PRS.IMPS 3SG.M like one GEN MUT\principal form-gents policy
Plaid Cymru
Plaid Cymru
'he is recognised as one of Plaid Cymru's main policy makers' Impersonal

http://cy.wikipedia.org/wiki/Cynog_Dafis

(16) *dychmygu* 'imagine'

a. dychmygodd y llywydd Marian yn weinydd
imaginePST.3SG ART president Marian PRED MUT\secretary
'the president imagined Marian as secretary'

b. 'naeth y llywydd ddychmygu Marian yn weinydd
do-PST.3SG ART president imagine Marian PRED MUT\secretary
'the president imagined Marian as secretary' Periphrastic

c. ?cafodd Marian ei dychmygu yn weinydd gan y
get.PST.3SG Marian POSS.3SG F\acknowledge PRED M\secretary by ART
llywydd
president
'?Marian was imagined as secretary by the president' GET-passive

d. dychmygwyd Marian yn weinydd ?(gan y llywydd)
imagine-IMPS.PRET Marian PRED M\secretary (by ART president)
Marian was imagined as secretary ?(by the president) Impersonal

No data relevant to restrictions on the impersonal were found amongst these transitive

verbs, which all seemed to behave as type I of the psych verbs.

5.4.3 Intransitive statives with predicative complements

Eventive verbs with predicative complements do not seem to block the impersonal morphology from applying. However, looking at intransitive stative verbs with predicative complements reveals that impersonals are still not restricted by these factors either.

(17) *bod* 'be'

a. Buwyd mewn ysgoldai am hyd
be.PRET.IMPS in.II schoolhouses for length
'people were in schoolhouses for a while' Impersonal

b. buwyd yn ymweld â'r Oleulong
be.PRET.IMPS PROG visit with'ART light;ship
'people/they visited the Lightship' Impersonal
http://www.bromyrddin.sirgar.sch.uk/27-10-04.htm

c. *cafodd ei fod mewn ysgoldai am hyd
get;PST.3SG POSS.3SG be in schoolhouses for length
Intended: people were in schoolhouses for a time GET-passive

d. Buwyd yn ffodus iawn
be.PRET.IMPS PRED fate.ADJ right
'people/they were / it was very lucky' Impersonal
http://www.capeli.org.uk/uploads/newsletter_12.pdf

The verb *bod*, 'to be', as seen in previous work, fails to passivize but impersonalizes without issue. It is also found with predicative complements in its impersonal form.

The same pattern is observable with other stative verbs with predicative complements.

(18) *edrych yn flin* 'look angry'

a. edrych-wyd yn flin ar bob un a ddaeth
look-IMPS.PRET PRED MUT\angry on each one PRT came
'everyone who came was looked at angrily'

b. *cafodd eu edrych yn flin ar bob un a ddaeth
get;PST.3SG POSS.3PL look PRED MUT\angry at each one PRT MUT\came
Intended: everyone who came was looked at angrily

In (18a) above, the impersonal construction proves grammatical whilst (18b)'s get-passive fails to form.

It is difficult to analyse these verbs conclusively as the form *yn* is completely ambiguous as to whether it is functioning as a predicate marker or an adverbial marker. More verbs of this type are needed to prove that the impersonal is not restricted, definitively, as the context of example (18a) is marginal. On the whole, it seems that verbs with predicative complements pose no barrier to IMPS and that eventivity is not as relevant a factor to impersonalization as animacy, as suggested by Blevins (2003) and the data in

section 5.4.1.

5.5 Stative verbs of measure

As yet, the nature of the second argument of a verb or predicate has not been tested. Measure verbs were selected for testing due to their low transitivity properties Hopper & Thompson (1980) and the status of their extent argument. It has been shown that the impersonal construction can still be formed with an experiencer argument as either first or second argument in the psych-verb data of chapter 3. The hypothesis at work here is that the less argument-like the second argument or complement, the more likely it is that the verb will fail to impersonalize. By looking at stative readings of measure verbs, the impersonal construction can be tested with an 'argument' which is an extent (Andrews 1985), or "a set-of-degrees or interval argument" (Schwarzschild 2005). Rizzi (1990) shows that these arguments are non-referential and that they behave differently from more conventional arguments in resisting extraction from *wh*-islands.

Verb	Trans.	IMPS	SUBJ	Causative	Reflexive	Passive
mesur	'measure'	X	P	✓	X	X
pwyso	'weigh'	X	P	✓	X	X
costio	'cost'	X	P	✓	?	X
parhau	'last'	X?	P	✓	X	X
darllen	'read'	X	P?	✓	X	X
cofrestru	'register'	X	P?	✓	X	X
cario	'carry'	?	?	✓	X	X
dal	'hold'	?	?	✓	X	X
eistedd	'seat'	?	?	✓	X	X

Table 5.3: Stative readings of verbs of measure tested

The stative readings of the first six measure verbs in this table do not to impersonalize, revealing the first restriction on the impersonal construction.

The verbs were tested in the causative and reflexive constructions in addition to the two passives, in order to establish whether a similar correlation existed to that found in verbs of psychological state. The causative could apply in all cases as an external causer could be seen to affect the interval in each verb, in the right contexts. As previously established, there must be a two-place predicate, with one of those arguments being agentive for the GET-passive to apply, so none of these measure verbs will appear in the GET-passive in their stative readings. Similarly, the reflexive must have an argument which is somewhat more agentive and animate than those seen here and so, unsurprisingly, does not apply to these verbs.

The tentative correlation here is seen between the thematic role of the higher argument and the impersonal failing to be formed. The first six verbs of Table 5.3 have a

proto-Patient subject which is described by the interval of the second argument. The verbs themselves are the scale, of which the second argument is a set. It follows that the impersonal construction could not apply, as the higher argument is removed and there is no longer anything for the set-of-degrees to be a property of, which hinges on the extent argument's status as non-referential.

(19) *mesur* 'measure'

a. Mesur-odd y ddynes y Pachycephalosaurus
measure-PST.3SG ART woman ART Pachycephalosaurus
'the woman measured the Pachycephalosaurus' Eventive

b. Gwnaeth rhywun i'r ddynes fesur y
make.PST.3SG someone to'ART woman MUT\measure ART
Pachycephalosaurus
Pachycephalosaurus
'Someone made the woman measure the Pachycephalosaurus' Causative

c. Mesurodd y deinosoriaid hyn rhwng 4.5 a 5 metr
measure-PST.3SG ART dinosaurs these between 4.5 and 5 metre
'These dinosaurs measured between 4.5 and 5 metres' Stative

http://cy.wikipedia.org/wiki/Pachycephalosaurus

d. ?Gwnaeth rhywun i'r deinosoriaid hyn fesur
make.PST.3SG someone to'ART dinosaurs DEM.PROX.PL MUT\measure
rhwng 4.5 a 5m
between 4.5 and 5m
'Someone made these dinosaurs measure between 4.5 and 5m' Causative

e. Gwnaeth y pensaer i'r wal hwn fesur 200m
make.PST.3SG ART architect to'ART wall this.M measure 200m
'the architect made this wall measure 200m' Causative

The examples in (19) contrast the eventive predicate with the stative predicate of the verb *mesur*, 'to measure', which has one argument less. These stative predicates might be considered to be intransitive according to Hopper & Thompson (1980) and perhaps this is a reasonable conclusion if the 'extent' is not a true referential argument.

The nature of the relation between the causer and the experiencer is also seen to affect the grammaticality, as expected.

(20) Mesur-odd y deinosor-iaid eu hun-ain rhwng/yn 4.5 a 5m
measure-PST.3SG ART dinosaur-PL POSS.3PL self-PL between/PRED 4.5 and 5m
'The dinosaurs measured themselves between/at 4.5 and 5m'Reflexive, eventive

A reflexive noun phrase always gives rise to an eventive reading when grammatical (in a world where dinosaurs are capable of measuring themselves) or an intensifier reading of the reflexive NP.

(21) Cafodd y deinosor-iaid hyn eu mesur yn 4.5m
get;PST.3SG ART dinosaur-PL these POSS.3PL measure PRED 4.5m
'these dinosaurs were measured 4.5' GET-passive, eventive

Passivizing this verb type can only be grammatical with the eventive reading - (21) implies an external agent if grammatical.

(22) Mesurwyd y deinosoriaid hyn yn bum metr
measure-PST.IMPS ART dinosaur-PL these PRED MUT\five metre
'these dinosaurs were measured 5m' Impersonal, eventive

The impersonal construction in (22) also implies an external agent, giving an eventive reading with *mesur* 'measure'.

The 'extent' does not require the predicative particle *yn*, although it often occurs with it, suggesting that these verbs participate in an alternation.

(23) a. Mesur-ai 'r drws 1.5m
measure-IMPF.3SG ART door 1.5m
'The door measured 1.5m' stative

b. Mesur-ai 'r drws yn 1.5m
measure-IMPF.3SG ART door PRED 1.5m
'The door measured 1.5m' or 'he/she measured the door at 1.5m' stative or eventive

However, the impersonal can only be formed with the aid of predicative *yn* (or *rhwng*), as in previous examples.

The same holds for the other measure verbs. The following examples are only grammatical because there is an external proto-Agent implied and are both eventive:

(24) *costio* 'to cost'

a. Mae'n hanfodol bod unrhyw strategaeth a gynigir yn
be.3SG'PRED essential be any strategy PRT MUT\offer:IMPS in
y dyfodol yn cael ei chostio'n briodol
ART future PROG get POSS.3SG cost:VRB'PRED appropriately
'It is essential that any strategy offered in future should be costed appropriately.' GET-passive
http://online.carmarthenshire.gov.uk/agendas/cym/AAMG20020227/SUM07.htm

b. mae'n hanfodol bod unrhyw strategaeth a gynigir yn
be.3SG'PRED essential be any strategy PRT MUT\offer:IMPS in
y dyfodol yn cael ei chostio'n briodol (*ond
ART future PROG get POSS.3SG F\cost:VRB'PRED appropriately (*but
heb i neb/dim ei chostio)
without to nobody/nothing POSS.3SG F\cost-VRB
'It is essential that any strategy offered in future should be costed appropriately (*but no one should cost them)' GET-passive

It may be possible to test whether a verb is eventive using an adjunct stating that an event of the verb in question has not occurred as in (24b), where the resulting statement would contradict itself. For example, the truth conditions of (19c) are not violated by a using this adjunct:

(25) Mesurodd y deinosoriaid hyn rhwng 4.5 a 5 metr (heb i
measure-PST.3SG ART dinosaurs these between 4.5 and 5 metre (without DAT
neb/dim eu mesur)
nobody/nothing POSS.3PL measure
'These dinosaurs measured between 4.5 and 5 metres without anyone measuring them'

(26) *costio* 'cost VRB'

a. Costiwyd yr argymhellion yn ofalus (*heb i
cost:VRB:PST.IMPS ART suggestion.PL PRED care:ADJ (without to
neb/dim eu costio)
nobody/nothing POSS.3PL cost-VRB)
'the suggestions have been carefully costed (*without anyone costing them).'
http://cylchgronaucymru.llgc.org.uk/browse/viewpage/llgc-id:1134021/llgc-id:1161783/llgc-id:1161885/getText

b. costiwyd y CD yn ddeg-punt
cost:PST.IMPS ART CD PRED MUT\ten-pounds
'The CD was cost(ed) at ten pounds'

c. *costiwyd yn ddeg-punt (gan y CD)
cost:PST.IMPS PRED MUT\ten-pounds (by ART CD)
Intended: *were cost ten pounds (by the CD)

d. *costiwyd deg-punt (gan y CD)
cost:PST.IMPS ten-pounds (by ART CD)
Intended: *were cost ten pounds (by the CD)

The ungrammaticality of (26c) and (26d) shows that the stative reading cannot be grammatical and that there must be an external agent, as the CD – an inanimate – cannot be the agent of the verb cost.

(27) *cofrestru* 'register'

a. cofrestr-odd y daear-gryn yn ddeg ar y raddfa maint
register-PST.3SG ART earth-quake PRED MUT\ten on ART F\scale size
moment
moment
'the earthquake registered 10 on the moment magnitude scale.'

b. cofrestrodd y peiriant ddeg pwynt pump ar y sgrîn
register-PST.3SG ART machine MUT\ten point five on the screen
'the machine registered a 10.5 on the screen'[1]

(28) a. cofrestr-odd y daeargryn yn ddeg ar y raddfa maint
register-PST.3SG ART earthquake PRED MUT\ten on ART F\scale size
moment (ond heb i neb/ddim ei gofrestr-u)
moment (*but without to nothing POSS.3SG register-VRB)
'the earthquake registered 10 on the moment magnitude scale (*but without anyone/thing registering it)'

[1]Future work will need to look into *mesur* +extent versus *mesur rth yn* +extent as the two seem to have subtly different but perhaps inconsistent interpretations.

b. cofrestr-odd y peiriant ddeg pwynt pump ar y sgrîn (?ond
register-PST.3SG ART machine MUT\ten point five on the screen (but
heb i neb/ddim ei gofrestr-u)
without to nothing POSS.3SG M\register-VRB)
'the machine registered a 10.5 on the screen (?but without anyone/thing registering it).'

These examples only show whether or not there exists an external agent and the agentivity of the higher argument (as opposed to the extent argument) of stative readings of verbs such as *cofrestru* 'register' and *darllen* 'read', as in *the screen reads 10.5*, is low.

(29) *cofrestrwyd 10.5 gan y daeargryn
register-PST.IMPS 10.5 by ART earthquake
*10.5 was registered by the earthquake

The verb *cofrestru* still fails to impersonalize in the above example in its stative/intransitive form, alongside the other first 6 verbs of Table 5.3.

The subjects of the final three verbs in Table 5.3 – *cario* 'carry', *dal* 'hold, contain', *eistedd* 'sit, seat (verb)' – are not as clearly proto-Patient as the first six measure verbs, in which the higher argument has no plausible proto-Agent properties. That is, despite having an extent argument, the last three are verbs of containment and may well behave differently from the others.

(30) ??eistedd-wyd chwech yn yr hen geir
seat-PST.IMPS six in ART old car.PL
Intended: the old cars seated six or 'six were seated in the old cars'

The interval in this case is a capacity and the argument it pertains to may be suppressible, if the set-of-degrees has a relationship less bound to the verb. No naturally occurring data was found to confirm the grammaticality of the impersonal construction with these verbs, however. In the first six verbs of table 5.3, the unit of measurement part of the interval argument was a 'property' of the verb; metres is a unit of measurement, pounds is a unit of cost etc. Verbs of containment do not specify the property of their intervals in such a way, only that a 'set-of-degrees' exists, i.e. *the bus seats 10 people/ocelots/pizza boxes*, where 'seating' does not describe a property of the 'units'. By contrast, *this bus measures 10 pizza boxes* picks out the measurement property of the pizza boxes and takes that as a unit for the degrees of the interval. Under Hopper & Thompson (1980) parameters, these three verbs are higher in properties of transitivity than the first six due to their 'objects' (the 'extent') being more individuated. Levin (1993) also lists the English counterparts of these three last verbs as differing in behaviour from the others, in which *carry, hold* and *seat* belong to a related but separate set of "fit" verbs – these verb classes are listed in Appendix B for reference.

5.5.1 Impersonals are temporal?

The evidence presented in the current work on Welsh impersonals supports a largely unrestricted impersonal construction which seems to apply to almost any verb, whether stative or eventive, with thematic arguments such as an agent or non-thematic as a predicative complement. The restrictions which apply to impersonals with verbs of measure are, so far, the only clear ones found.

Koontz-Garboden (2010) shows that some deadjectival verbs only have spatial interpretations – these are derived stative verbs. In cases where a stative reading of an impersonal intransitive verb is blocked, the lack of temporal properties may be the relevant restriction. A verb like *llydanu*, 'widen', cf. *llydan* 'wide', can only impersonalize with an eventive reading.

(31) *llydanu* 'widen'

a. llydanwyd y Cob
widen-IMPS.PRET ART Cob
'the Cob was widened' (but # the Cob widened)
http://historypoints.org/index.php?page=cob-conwy

b. ?llydan-ir lonydd gan weith-wyr
widen-IMPS.PRET road.PL by MUT\work-HUM.AG.PL
'roads are widened by workers'

c. *llydan-ir yma
widen-IMPS.PRET here
Intended: it widens here

Whereas a verb like *rhedir* 'it was run' can be grammatical with the right contextualization, a context for *llydanir* is more elusive, without an affected argument.

Sweetser (1997) shows that transitives are temporal, meaning that the transitive reading will apply when a verb participates in an alternation. This is consistent with the data for Welsh, on the whole, which does not seem to support a strictly spatial interpretation, based on the data in (31).

Testing verbs which participate in an alternation where the intransitive has a spatial reading reveals whether impersonals need a temporal reading to apply (see section 5.6.2). A second method of testing this hypothesis is to see whether a temporal measure verb impersonalizes in its stative reading, which is the topic of section 5.5.2.

5.5.2 Temporal measure verbs

The 'temporal restriction' line of investigation is complicated by data of a temporal measure verb:

(32) *parhau* 'last'

a. ??parh-eir deir-awr.
last-IMPS.PRS three.F\-hour

Intended: 'it lasts three hours' (context: concerts last 4 hours.)

b. ?parheir am bum metr
last-IMPS.PRS for MUT\five metre
Intended: 'it goes on for five metres'

c. ??parh-eir mis
?last-IMPS.PRS month
Intended: 'it lasts a month'

There were no natural examples of this impersonal verb as an intransitive (discounting the temporal extent as a full argument) readily available. Based on introspection, these examples seem ungrammatical, though this will require further investigation with similar verbs in future.

5.6 Alternating verbs

Previous sections of this chapter examined the nature of the predicates which impersonalize in Welsh in order to find any restrictions to impersonalization. Verbs with predicative complements (PCs) were found not to have an impact on impersonalization, although some intransitive verbs (with just one core or direct argument) with PCs resisted impersonalization in section 5.4.1. It was also shown that stativity alone was not a restriction to impersonalization, by data from stative verbs with PCs (with either one or two core or direct arguments) in sections 5.4.2 and 5.4.3. Measure verbs in section 5.5 revealed a restriction to their stative intransitives (measure verbs with just one core argument in addition to the 'extent' part of the predicate) which suggests that alternating verbs may force an eventive reading of impersonalized verbs. The data also suggest that, in some instances, the properties of the argument are expressed in the verb and that this may affect impersonalization. *Llydanu* 'widen' of section 5.5.1 does not imply that roads are being referred to, whereas *rhedeg* implies a person or other animate 'running'.

The following sections continue to investigate the limits of the verbs to which IMPS may be applied. This will involve testing stative readings of verbs which have both transitive and intransitive forms, including underived and de-adjectival change-of-state verbs. Previous impersonal data from 2 will also be revisited in section 5.6.3 to compare the generalizations found in this chapter with those found in the previous literature.

5.6.1 Testing for agentivity

If the transitive, eventive interpretation of an impersonal construction will block an intransitive interpretation, it will always be assumed that an agent has been suppressed unless an agentive argument is not a valid choice for the verb in question. This is seen to be true of the measure verbs whose intransitive readings were blocked in the impersonal in (26c), repeated here for convenience.

(33) a. costiwyd y CD yn ddeg-punt gan y cwmni
cost-PST.IMPS ART CD PRED ten-pounds by ART company
'the CD was costed at 10 by the company'

b. *costiwyd (yn) deg-punt (gan y CD)
cost-PST.IMPS (PRED) ten-pounds (by ART CD)
*were cost ten pounds by the CD repeated (26c)

In order to demonstrate whether the intransitive impersonal interpretation is blocked, verbs participating in alternations need to be tested. Change of state (COS) verbs are well-known verb class for their participation in the causative alternation, but there is some ambiguity as to whether the intransitive counterparts might still be interpreted as having an external causer or agent.

One method of testing the agentivity of arguments is to use agentive adverbs, which in Welsh are formed by *yn* + ADJ. Some adjectives used to form agentive adverbs are presented here:

(34) bwriadol 'purposeful, intentional', bodlon 'content, willing', pwyllog 'careful', ?hamddenol 'casual', gofalus 'careful', pwyllgar 'cautious', ymwybodol 'conscious', ?gwirfoddol 'voluntary', penderfynol 'determined', ?trylwyr 'thorough'.

The question mark indicates that the agentivity of these adjuncts may be questionable.

(35) Yn ystod y gwanwyn ... y torr-ir y coed yn fwriadol
in while ART spring ... PRT cut-IMPS.PRS ART tree.PL PRED intentional
'It's in spring ... that trees are cut(/broken)'
http://www.clwydianrangeaonb.org.uk/files/1272299948-Walk8-CoedLlandegla.pdf

In (35), there must be an external agent or cause because the action was carried out intentionally, i.e. this verb can't be interpreted as inchoative.

(36) a. gwlychir yn fwriadol wrth olchi elyrch
wet-IMPS.PRS PRED intentional by/during wash swan.PL
'people get wet deliberately when washing swans'

b. *Fe'u gwlychir yn bwyllog gan law trwm y
PRT'POSS.PL wet-IMPS.PRS PRED careful by MUT\rain heavy ART
mynyddoedd
mountain-PL
'*They are wettened carefully by the heavy mountain rain'

The example in (36a) is strange but not ungrammatical, whilst the next example is not allowed. This may be due to the inanimacy of the agent, which suggests that some of these agentive adjuncts may test volition rather than agentivity as assumed.

The data in table 5.4 looked at the use of such adjuncts with intransitive change of state verbs.

Verb	Trans	Agentive
malu	'break'	X
torri	'break/cut'	X
rhigo	'rip/tear'	X
hollti	'split'	X
(y)sigo	'weaken'	X
plygu	'bend/fold'	X
crino[2]	'crumple'	X
crebychu	'crinkle/wrinkle'	X
gwlychu	'wetten'	X
tywyllu	'darken'	X
caledu	'harden'	X
melysu	'sweeten'	X
hirhau	'lengthen'	X
byrhau	'shorten'	X
cwtogi	'shorten'	X
iacháu	'heal'	?
rhyddhau	'free/loosen'	X
llacio	'loosen'	X

Table 5.4: 10 intransitive COS verbs

The results in Table 5.4 suggest that the agentive adverbs are more a test for animacy than agentivity, as the suppressed agent of intransitive *iacháu* 'heal' might be said to have some agentivity or volition over their condition, whereas the other inchoative verbs cannot plausibly have an animate agent.

The inchoative test by-itself is also of little use as the interpretation of 'without anything/one else around' easily overrides the 'acting without external aid' interpretation.

(37) cwymp-odd y dyn ar ben ei hun
fall-PST.3SG ART man on head POSS.3SG self
'the man fell on his own'

5.6.2 Change of State verbs

The following selection of alternating change of state verbs behave in the same way as the verb of measure in (26c) in failing to impersonalize their intransitives (one core or direct argument).

(38) *ysigo* 'deform, weaken, cause to sag'

a. mae cerddwyr yn sigo gatiau metal
be.3SG walkers PROG weaken gates metal
'walkers break metal gates' Colloquial, transitive

b. mae gatiau metal yn sigo
be.3SG gates metal PROG weaken

[2]Impersonal forms of *crino* 'crumple' occur in archaic examples only.

Verb	Trans	Impersonal of tr.	Impersonal of intr.
malu	'break'	✓	X
torri	'break/cut'	✓	X
rhigo	'rip/tear'	✓	X
hollti	'split'	✓	X
(y)sigo	'deform'	✓	X
plygu	'bend/fold'	✓	X
crino	'crumple'	✓	X
crebychu	'crinkle/wrinkle'	✓	X

Table 5.5: 10 alternating change of state verbs

'metal gates break' Colloquial, intransitive

c. ysigir gatiau metal gan gerddwyr
weaken-PRS.IMPS gates metal by walkers
'gates are broken by walkers' Impersonal

d. *ysigir (gan gerddwyr)
weaken-PRS.IMPS (by walkers)
*are damaged (by walkers) Impersonal

These inchoative (intransitive) verbs cannot be considered stative, suggesting once more that stativity is not a relevant property to the restriction of IMPS.

(39) *torri*, 'break, cut'

a. mae dyn yn torri coed
beII.3SG man PROG break tree.PL
'man cuts trees (down) / there is a man cutting trees/wood'

b. Yn ystod y gwanwyn ... y torr-ir y coed
in while ART spring ... PRT cut-IMPS.PRS ART tree.PL
'It's in spring ... that trees are cut(/broken)'
http://www.clwydianrangeaonb.org.uk/files/1272299948-Walk8-CoedLlandegla.pdf

c. *torrir (gan weithwyr)
cut/break-IMPS (by workers)
*are cut/broken (by workers)

(40) *sigo*, 'bend by weighing on'

a. mae cerddwyr yn sigo gatiau metal
beII.3SG walkers PROG sway/crush gates metal
'walkers break metal gates'

b. sigir gatiau metal gan gerddwyr
sway-IMPS.PRS gates metal by walkers
'gates are broken by walkers'

c. *sigir (gan gerddwyr)
sway-IMPS (by walkers)
*are damaged (by walkers)

The ten verbs of the sample in table 5.5 appear to confirm that impersonals are restricted in intransitive verbs which have a transitive counterpart. This may support the hypothesis put forth in 5.6, that the impersonal construction is restricted when an eventive reading of a verb blocks a stative, only that in the case of COS verbs both versions are eventive. The working hypothesis must therefore be modified to include the number of core or direct arguments, and to exclude eventivity as a predictor of impersonalization. The generalization that captures the behaviour of IMPS can now be hypothesized as applying to all verbs, unless an intransitive counterpart of the same verbal root exists, in which case the transitive reading is forced.

As it has been suggested that deadjectival verbs may have different properties from the simple COS verbs of table 5.5 (see section 5.5.1), table 5.6 tests deadjectival alternating COS verbs.

Verb	Trans	Impersonal of tr?	Impersonal of intr?
gwlychu	'wetten'	✓	?
tywyllu	'darken'	✓	X
caledu	'harden'	✓	?
melysu	'sweeten'	✓	X
hirhau	'lengthen'	✓	?
byrhau	'shorten'	✓	X
cwtogi	'shorten'	✓	X
iacháu	'heal'	✓	?
rhyddhau	'free/loosen'	✓	?
llacio	'loosen'	✓	X

Table 5.6: 10 alternating deadjectival change of state verbs

(41) *tywyllu*, 'darken'

a. …y tywyllir y cornea - sef y rhan allan o'r llygaid.
PRT dark-IMPS.PRS ART cornea - that.is ART part out GEN'ART eye.
'the cornea – the outer part of the eye – darkens.' transitive
Context: *Prif achosion tywyllu'r cornea yw cloryn, anaf neu losg.* 'The main cause of the darkening of the cornea is a little bump, an injury or a burn/sting.'
http://cylchgronaucymru.llgc.org.uk/browse/viewpage/llgc-id:1048090/llgc-id:1049472/llgc-id:1049509/getText

b. *tywyllir (gan y cornea)
dark-IMPS.PRS (by ART cornea)
Intended: the cornea darkens intransitive

c. Weithlau [sic] tywyllir awyrgylch yr anialwch hwn gan
a_time;PL dark:IMPS.PRS atmosphere ART desert DEM.M.SG by
gymylau o dywod
MUT\cloud;PL GEN MUT\sand
'sometimes the atmosphere of this desert is darkened by clouds of sand

http://kimkat.org/amryw/1_testunau/sion_prys_008_dgac_08_1214k.htm

The examples in (41) demonstrate that the verb *tywyllu* 'darken' (cf. *tywyll* 'dark') impersonalizes as a transitive verb (41a), does not impersonalize as an intransitive verb (41b), with or without a by-phrase, and that a by-phrase is permissible with the transitive counterpart of this verb (41c). The context provided for (41a) clarifies that there is an external causer to the darkening.

For some of the verbs in table 5.6 however, it seems that an intransitive impersonal may be possible. The context given to (42a) implies that human argument is suppressed.

(42) *gwlychir*, 'wetten'

a. ?gwlych-ir yn aml wrth olchi dillad
wet-IMPS.PRS PRED often by/during MUT\wash clothes
'?people are often wettened when washing clothes' intransitive

b. Fe'u gwlych-ir gan law trwm y mynyddoedd
PRT'POSS.PL wet-IMPS.PRS by MUT\rain heavy ART mountain-PL
'They are wettened by the heavy mountain rain' transitive

c. ...un-waith y gwlych-ir y gwallt, neu y bydd yn
one-a_time PRT wet-IMPS.PRS ART hair, or PRT be.FUT.3SG PROG
amsugno lleithder o'r aer
absorb humid;ABST GEN'ART air
'...once the hair is wettened, or it absorbs moisture from the air' trans.

Unlike the simple verbs, half of the alternating deadjectival COS verbs seem to be more acceptable when the object undergoing the change of state can be interpreted as human. This property of animacy or of an implied human argument is investigated further in the next chapter.

5.6.3 Revisiting impersonals of intransitive verbs

The only restrictions listed by the previous literature on the impersonal morphology of a verb is in instances of intransitive verbs (Awbery 1976; Fife 1985).

(43) rhed-ir yno
run-PRS.IMPS there
'people run there / you run there' (2-78) (Fife 1985:112)

There are grammatical examples of these verbs as clear transitives.

(44) rhed-wyd erthygl gan 'Golwg'
run-PST.IMPS article by 'Golwg'
An article was run by 'Golwg'

In these examples, it seems that the intransitive reading is not blocked by the transitive with an agent argument, contrary to prior conjecture. A plausible argument may be that *run* of a person and *run sth.* are two different stems or lexical entries for the verb

run. However, both 'run' as in (43) and 'run a race' of a cognate object alternation can be impersonalized, as demonstrated by (45), which seems to contradict the hypothesis under review in the previous section.

(45) rhedir rasys
run-PST.IMPS races
'people run races / races are run'

The impersonal inflection is also used with alternating verbs with proto-Patient subjects:

(46) a. dioddef-ir yn ofnadwy mewn rhyfel-oedd
suffer-PRS.IMPS PRED terrible in war-PL
'people suffer terribly during wars / there is terrible suffering in wars'

b. dioddef-ir yr adar
suffer-PRS.IMPS ART bird.PL
'the birds are tolerated'

(47) cwympir yn aml yma
fall-PRS.IMPS PRED often here
'people often trip (and fall) here' (2-79) Dialectal (southern), intransitive

However some verbs with proto-Patient subjects do not take a second direct or core argument (without that argument being introduced by a preposition).

(48) *cwympo* 'fall (intransitive)'

a. *cwymp-ir y gris yn aml yma
fall-PRS.IMPS ART step PRED often here
Intended: [People] fall the step often here

b. *cwymp-odd dyn-ion y gris yma
fall-PST.3SG man-PL ART step here
Intended: men fell the step here/this step

c. cwymp-odd dyn-ion dros y gris yma
fall-PST.3SG man-PL over ART step here
'men fell over the step here/this step'

The types of sole arguments these intransitive verbs take seem to account for restrictions on the impersonal more than the verb's status as participating in alternations.

5.7 Discussion

Throughout this chapter, it is the animate, or perhaps more specifically, human property that has survived in intransitive readings of verbs. Whilst it is still unclear what links all the examples of the ungrammatical impersonal, it seems that when there is a possible human actor or undergoer, that interpretation wins out.

Section 5.4 provides evidence for the special status of nominal arguments of predicative complements as the behaviour of these verbs is identical to that of simple verbs

when considering the number of direct or core arguments as relevant to impersonalization. The same goes for the special status of the extent arguments of section 5.5, when those arguments are clearly non-referential, which supports previous research on the topic. Analysing these 'special' arguments in this way means that the only distinction relevant to the impersonal is whether the verb it affects has one direct argument or two; whether the verb is intransitive or transitive, in the traditional sense. This removes the need for the stative / transitive distinction and the importance of verbs participating in alternations.

The generalization that the impersonal construction has an animacy restriction in intransitive verbs is corroborated by the verb analysed as an intransitive unaccusative in section 5.2, *rhewi* 'freeze', which also belongs to the set of alternating change of state verbs of table 5.5.

The nature of the restriction on intransitive verbs is the topic of the next chapter, which summarizes the data on the impersonal in this thesis.

CHAPTER

SIX

ARGUMENT STRUCTURE AND ANIMACY EFFECTS

6.1 Impersonal morphology

It has been demonstrated in the previous literature on Welsh impersonals and throughout this thesis that impersonalization is a valency-reducing process in Welsh.

However, the set of verbs which impersonalize is much broader than the set of verbs which passivize with the auxiliary GET. In fact, the properties which allow verbs to take this impersonal morphology has proven very difficult to delimit (Awbery 1976; Fife 1985; Jones & Thomas 1977).

The tendencies of impersonalization observed by Blevins (2003) are confirmed as restrictions on the Welsh impersonal morphology and expanded on in this chapter. Section 6.2 confirms that impersonal morphology in Welsh is not sensitive to the thematic roles of its arguments by summarizing the results of previous chapters. Section 6.5 shows that restrictions on the animacy of the sole argument of the impersonal have slightly different criteria to those observed by Blevins. Intriguingly, these restrictions only apply to intransitive impersonalized verbs: section 6.6 discusses the differences of intransitives to the restrictions on transitive impersonalized verbs.

6.2 Restrictions on impersonalization

Whilst an obvious effect of the impersonal morphology is clearly to reduce the number of explicit surface arguments of the verb by one, it is less clear what semantics the morphology is sensitive to. Previous accounts of the Welsh impersonal have found no restriction of this sort (Awbery 1976; Fife 1985; Siewierska 1984), whereas Blevins (2003) claims that there are two, based on data from a handful of European languages, including Balto-Finnic, Balto-Slavic and Celtic.

The first of these two claims is that "Impersonal verb forms [...] are insensitive to the argument structure of a verb". The second is that "[t]here is a strong tendency to interpret the suppressed subject of an impersonal as an indefinite human agent. Hence

impersonalization is often felicitous only for verbs that select human subjects" (Blevins 2003:473).

The evidence from Welsh supports both of these observations to some extent – this is unsurprising as Welsh was included as one of the Celtic languages in Blevins's study. Closer scrutiny of these restrictions reveal them not to capture a precise enough semantics of the impersonal morphology to account for the data presented in this thesis, although both parts of his observation are relevant. The 'argument structure of verbs' which impersonalize is taken to mean 'the θ-roles that the verb assigns to its arguments or their thematic roles' in section 6.3 and is shown to be irrelevant, based on data from chapters 2, 3 and 5. Sections 6.4 investigates the nature of the possible suppressed argument of impersonal verbs and section 6.5 finds that unspecified human subjects are the only relevant semantic element to the impersonal morphology such that verbs which cannot have a subject of this sort fail to impersonalize.

6.3 Argument Structure

This section shows that the thematic roles of a verb's arguments are irrelevant to IMPS. The only fact of argument structure that seems to be relevant to the impersonal construction is that a verb should have a surface subject of any kind that IMPS might suppress, as shown by section 6.3.2. The Dowtian proto-roles of the arguments are taken to be evidence of this in sections 6.3.3.

6.3.1 Valency reducing syntax

The Welsh impersonal shares syntactic properties with the GET-passive in that both seem to be valency reducing processes, as evident in the examples from Awbery (1976) in 2.3, repeat here:

(1) rhybuddi-odd y dyn y plant
warn-PST.3SG ART man ART children
'the man warned the children' (2-60) transitive

(2) rhybuddi-wyd y plant (gan y dyn)
warn-PST.IMPS ART children (by ART man)
'the children were warned (by the man)' (2-61) impersonal

(3) caf-odd y plant eu rhybudd-io (gan y dyn)
get-PST.3SG ART children POSS.3PL warn-VRB (by ART man)
'the children were warned (by the man)' (2-62) GET-passive

Agent suppression/deletion occur in both (2) and (3) and the suppressed argument is identically optional in the form of an agentive adjunct. The subject of the predicate is understood to be as affected by the action in (2) and (3) as when it is presented as the object of an active transitive verb in (1).

The similarities of the two constructions end with transitive verbs, as the GET-passive is unable to form with intransitive verbs – as expected of traditional passives. Passivization has long been used as a diagnostic for transitivity (Burzio 1986), whereas IMPS shows no such relation to the number of arguments a verb takes, as shown in the following section, 6.3.2.

6.3.2 Suppressible arguments

Welsh impersonal morphology IMPS requires only a verb with an argument, regardless of the total number of arguments or the underlying state of that subject. The verbs referenced here exemplify impersonalized ditransitives, transitives and intransitives respectively.

(4) Rhoddwyd y wobr i ni fel Cymuned
give.PST.IMPS ART F\prize DAT 1PL like Community
'This Award was given to us as a Community'[1]
https://www.flickr.com/photos/abermaw/5876586243/

Example (2) shows a verb with two available arguments with impersonal morphology and reduced by one argument, with that argument optionally expressible as the nominal argument of a prepositional *by*-phrase adjunct, taking the preposition *gan* in Welsh either as a preposition and NP complement or as an inflecting preposition (see chapter 2).

Similarly, (5) shows a verb with one available argument with impersonal morphology and reduced by that one argument. Example (5a) below shows the impersonalized verb with a prepositional adjunct, and (5b) similarly exemplifies the verb with an adverbial adjunct.

(5) *eistedd*, 'sit'.

a. eistedd-ir ar draean blaen cadair neu glustog
sit-PRS.IMPS on MUT\third front chair or MUT\pillow
'you/people sit on the front part of a seat or pillow'

b. eistedd-ir yn gefn.syth
sit-PRS.IMPS PRED MUT\back.straight
'you/people sit with a straight back'
http://cy.wikipedia.org/wiki/Zazen

Impersonal morphology in Welsh is not sensitive to the thematic roles of its arguments and can in fact apply to almost any verb.

In the previous literature, Fife (1985) observes that both intransitive verbs with agent subjects (6) and patient subjects (7) impersonalize, suggesting that IMPS will apply to any verb.

[1]Translation and capitalization as provided in the original caption by the author of the image.

(6) rhed-ir yno
run-PRS.IMPS there
'people run there / you run there' Repeated example (2-78)

(7) cwymp-ir yn aml yma
fall-PRS.IMPS PRED often here
'people often trip (and fall) here' Repeated example (2-79)

The impersonal morphology is insensitive to the thematic role of the sole argument of the verbs in (6) and (7).

The behaviour of verbs of psychological state in relation to IMPS in section 6.3.3 confirms this fact in transitive verbs.

6.3.3 Psych verbs

As detailed in chapter 3, Belletti & Rizzi (1988) propose a distinction between deep structure subjects and derived subjects, realized in the surface syntax of their Italian verb data. Testing transitive (two direct or core argument) verbs of psychological state for ability to causativize, reflexivize, GET-passivize and impersonalize shows that transitive verbs with experiencer subjects (proto-Patient), *fear*, and proto-Agent subjects, *worry*, both pass all the diagnostics, including impersonalization.

Verbs of the type *ofni*, 'fear', have experiencer subjects, which are suppressed when the verb takes an impersonal suffix. These verbs causativize, reflexivize and passivize successfully.

(8) ofn-ir llifogydd
fear-PRS.IMPS floods
'floods are feared'

Another psych-verb type, *poeni* 'worry' has the object assigned as experiencer. The subject is suppressible as in the *ofni* type verbs, although it is not the experiencer in these verbs.

(9) poen-ir Carys
worry-PRS.IMPS Carys
'Carys is worried'

Very few verbs behave as the verb *gwybod*, 'know'. These verbs, detailed in section 3.2.4.4 of chapter 3, are striking in that they fail to causativize, reflexivize and passivize, although they are transitive verbs with experiencer subjects, just like the *ofni*-type verbs. Whilst their exact argument structure has not been defined, the impersonal morphology is still perfectly acceptable with these *gwybod*-type verbs.

(10) [y] dref Rufeinig y gwydd-ir fwy-af amdani
[ART] town F\Roman PRT know-PRS.IMPS more-SUP about.F.SG
'[the] Roman town that most is known about' Repeated example (3-37)

http://cy.wikipedia.org/wiki/Caerwent

The consequence of the impersonal being grammatical and semantically licensed with all these verbs is that impersonal morphology must be insensitive to the underlying argument structure of the verb. If the correlations in the syntactic tests for the *gwybod*-type verbs do identify verbs with a derived subject, as Belletti & Rizzi's analysis suggests, IMPS gives us no indication of this.

As all psych verbs tested impersonalized, impersonals cannot be sensitive to thematic role. If we take Blevins (2003)'s claim about impersonals being insensitive to argument structure to refer to the thematic roles of the arguments, then the data from Welsh upholds this observation.

Impersonal morphology must apply to any surface subject, suggesting that surface grammatical relations are more relevant to the semantics of IMPS than thematic roles, although this hardly constitutes a restriction to IMPS as intransitive verbs in Welsh will necessarily treat their sole argument as a surface subject. That is, in order to test whether impersonalization requires a surface subject, a verb with no surface subject would be required, which cannot be proven to exist in Welsh. This leaves us with the conclusion drawn by Blevins, that IMPS is simply insensitive to argument structure.

6.4 Testing properties of the subject

Testing the impersonal construction's applicability by verb type in chapter 5 has revealed that argument type may be a more reliable factor for determining restrictions to the application of IMPS. The non-agentive arguments of inchoative and stative measure verbs resisted impersonalization and though the connection was hypothesized to be animacy, the exact scope of the argument types available to IMPS remains unproven.

In previous chapters, verb types were tested with arguments from randomly selected types of nouns or noun phrases, that is, without controlling for the properties of the arguments. This was done in order to find whether there was a grammatical reading of a particular verb in the impersonal form, with the most natural sounding data possible. This section will concentrate on the opposite; finding the kinds of NP that are not possible arguments (either suppressed or unspecified) of an impersonalized verb.

6.4.1 Low transitivity and argument types

Hopper & Thompson (1980) extracted features of arguments which are +individuated as being more transitive and −individuated as being less transitive. To complete the investigation into gradient transitivity as a possible restriction to IMPS, these properties of arguments might be used. The properties proposed include proper nouns vs. common nouns, human and/or animate vs inanimate, concrete vs. abstract, sg vs pl, count vs mass.

The disadvantage to analysing verbs in this way is that verbs are already restricted as to which arguments they can take, as exemplified by the verb *gweld*, 'to see' in Table 6.1. This verb can only take something capable of seeing in some way as its surface subject – the argument that the impersonal morphology suppresses.

no. of args	Tense	Individuated	non-individuated	property
one-place	Present/future	X	✓	proper vs. common
		✓	X	animate vs. inanimate
		✓	X	concrete vs. abstract
		✓	✓	sg vs. pl
		X	✓	referential vs. non-ref
	Past	X	✓	proper vs. common
		✓	X	animate vs. inanimate
		✓	X	concrete vs. abstract
		✓	✓	sg vs. pl
		X	✓	referential vs. non-ref
two-place	Present/future	X	✓	proper vs. common
		✓	X	animacy
		✓	X	+/-concrete
		✓	?	-/+ plural
		X	✓	referentiality
	Past	X	✓	proper vs. common
		✓	X	animacy
		✓	X	+/- concrete
		✓	✓	-/+ plural
		X	✓	referentiality

Table 6.1: testing the sole/higher argument of impersonal verb *gweld*, 'see'

The approach must therefore be to use verb classes, once more, which exclude these properties, as it is not possible to hold the verb as a constant whilst testing different subject-types.

6.4.2 Motion verbs

Keller & Sorace (2003) found uncontrolled (physical) processes to correlate with an increase in acceptability of German impersonal passives, based partly on the verb class 'body-internal motion' as listed by Levin (1993). A few of these verbs were also used as intransitives here, with the results tabulated in table 6.2. In addition, the verbs *disgyn, syrthio* and *cwympo* 'fall' were found to only impersonalize with animates (human) as the suppressed argument.

The properties of 'concrete' and 'abstract' are perhaps irrelevant as an animate is necessarily concrete and it is unclear what the limit of 'abstract' is under Hopper &

Verb	Trans	Morphology	Animate	Inanimate	Concrete	Abstract
syrthio	fall	Impersonal	✓	X	✓	?
disgyn	fall		✓	X	✓	?
cwympo	fall		✓	X	✓	?
baglu	trip		✓	n/a	✓	?
gwingo	fidget, writhe		✓	X	✓	X
rhynnu	freeze (to death)		✓	n/a	✓	?
syrthio	fall	Personal	✓	✓	✓	✓
disgyn	fall		✓	✓	✓	✓
cwympo	fall		✓	✓	✓	✓
baglu	trip		✓	n/a	✓	✓
gwingo	fidget, writhe		✓	✓	✓	✓
rhynnu	freeze (to death)		✓	n/a	✓	✓

Table 6.2: Intransitive verbs of body internal motion

Thompson's (1980)'s approach, whether it should include association or similar. The clearer restriction is again on the inanimate subjects.

(11) *disgyn*, 'fall'

a. Mae llawr y goedwig yn ansad i gerddwyr. Disgynnir
beII.3SG floor ART forest PRED unsteady DAT walkers. Fall-PRS.IMPS
yma'n aml.
here'PRED often.
'the forest floor isn't solid enough for walkers. People often fall here.

b. Mae 'r tir yn rhy ansad i goed mawr. #Disgynnir
beII.3SG 'ART land PRED too unsteady DAT tree.PL big. #Fall
yma'n aml
here often.
'the ground isn't solid enough for big trees. #Trees often fall here'

The example in (11) contrasts these animate and inanimate arguments by providing a context in which the impersonal may and may not apply. The generic and inanimate *coed mawr* 'big trees' in is not retrievable as the suppressed subject of the impersonal morphology which forces the interpretation of 'people falling'. This results in an odd context as the reader or listener is expected to make the connection between the surface being unable to support big trees but that people are falling, without information on the kind of surface that would cause these two events, perhaps to the exclusion of smaller trees falling.

Once again, animacy seems to be the only relevant restriction to the impersonal construction.

6.5 Animacy

Blevins's (2003) observations – referred to in section 6.2 above – seem to hold for the impersonal, although the data so far has not contrasted animate and human subjects. The described tendency is for impersonalization to apply to verbs with human subjects. 'There is a strong tendency to interpret the suppressed subject of an impersonal as an indefinite human agent. Hence impersonalization is often felicitous only for verbs that select human subjects.' (Blevins 2003:473)

Whilst section 6.3 rules out agency as a necessary property of the suppressed argument of the impersonal, given that unaccusatives with patient-like subjects impersonalize, this thesis confirms that a subject's animacy, or more specifically the feature [+human] may restrict impersonalization (Siewierska 1984; Blevins 2003; Bentley 2006). This gives rise to the prediction that animate and inanimate subjects will yield different results in impersonalizing verbs. A second prediction is made as Siewierska (1984) observes that - '[h]umans, other animates and natural forces felicitous in the impersonals of Russian, Lithuanian and Welsh transitives'. This observation predicts that verbs without animate subjects should fail to impersonalize. Some of the data on intransitives from chapter 5 and as well as the data from section 6.4.2 above can be taken to confirm only the generalization for animacy or humans, but this section attempts to examine every aspect of these claims and concludes by refining the concepts proposed to be relevant to impersonalization, at least in Welsh.

6.5.1 Subject as human agent

Both animates and inanimates can act as the sole non-agentive argument of intransitive 'fall' in Welsh.

(12) a. Disgynnai cerdd-wyr yma'n rheolaidd.
fall;IMPF.3SG walk-HUM.PL here'PRED regularly
'Walkers fall here all the time.'

b. Disgynnai coed yma'n flynyddol.
fall;IMPF.3SG trees here'PRED year.ADJ
'Trees fall here every year.'

Only the human subject in (13) (based on (11) above) is available as an interpretation of the verb *disgyn* 'fall' with IMPS.

(13) a. ...rhan o'r goedwig yn ansad i gerddwyr. Disgynnir
...part GEN'ART F\forest PRED unstable DAT walk:HUM.PL. fall;PRS.IMPS
yma yn aml
here PRED frequent
'...part of the forest is unsteady/unstable for walkers. (People) often fall here'

b. …rhan o'r goedwig yn ansad i goed. #Disgynnir yma
…part GEN'ART F\forest PRED unstable DAT trees. #fall;PRS.IMPS here
yn flynyddol
PRED annually
'…part of the forest is unsteady/unstable for walkers.' Intended: '[Trees] fall here every year'

However, not all animates, or humans for that matter, are able to be suppressed by IMPS. Human, singular, specific subjects cannot impersonalize.

(14) #Plyg-ir
bend-PRS.IMPS
#one bends
Context: Osian stretches every morning.

This example is designed to illustrate that *plygir* cannot be said of Osian specifically, only of people in general. This supports findings on Italian *si*-impersonals, where the interpreted suppressed argument must be [+human] and unspecified (Bentley 2006:160).

6.5.2 Verbs with inanimate subjects

The second prediction described at the beginning of section 6.5 (based on Siewierska 1984) falls out of the observation that a small number of (European) languages allow the suppressed argument of impersonals to be interpreted as a natural force and as an animate other than [+human].

A set of entity-specific intransitive verbs were found not to impersonalize, as predicted.

(15) *rhydir, rhydwyd* 'rust' - no naturally occuring examples found

a. ?rhydir mewn dim amser
rust:FUT.IMPS in NEG time
?will rust in no time.

b. *rhydwyd dros gyfnod o ganrif-oedd
rust:PST.IMPS over period of MUT\century-PL
*was rusted over a period of centuries

As the only restriction found in chapter 5 was on verbs with no human subject, change-of-state verbs of entity specific change can be predicted to fail to impersonalize. Indeed, they all imply an external agent or cause in the impersonal, where natural data was found, meaning that an external cause is interpreted as responsible for a change on an implied or cognate object.

(16) *dirywio*, 'deteriorate'.
diryw-ir eu hiechyd
deteriorate-FUT.IMPS POSS.3PL 3PL\health
'their health will deteriorate'

Context: *Os arferir hwy i ormod llafur, llethir eu natur, attelir eu tyfiant, dirywir eu hiechyd, a gwneir hwy yn annedwydd yn ystod eu holl dymhor ar y ddaear.* 'If they are used to too much labour, their nature will become subdued, their growth will be stunted, their health will deteriorate, and they will be made wretched for the entirety of their period on earth.'

p. 245 *Greal (Llangollen)* [Journal?] November (1869)

(17) *pydru*, 'rot'.
pydr-ir ei awen
rot-FUT.IMPS POSS.3SG muse
'his poetic gift will rot'
Context: *Os try bardd yn wastad o fewn cylch ei bersonoliaeth ei hun pydrir ei awen, a difethir ei grefft.* 'If a poet/bard should always remain within the confines of his own personality his gift will rot and his craft will spoil.' or 'his gift will become rotten (because of his attitude)'

p. 145 *Y Traethodydd* [Journal], Vol. CX, 477 (1955)

(18) *cancrir, cancrwyd, cancrid* 'corrode' - no examples found

Verb	Trans	Morphology	Animate	Inanimate	Concrete	Abstract
rhydu	rust	Impersonal	n/a	X	X	?
cancro	corrode		n/a	X	X	X
pydru	rot		n/a	X	X	X
blodeuo	flower/blossom		X	X	X	?
egino	sprout		n/a	X	X	X
gwywo	wilt		X	X	X	X
rhydu	rust	Personal	X	✓	✓	✓
cancro	deteriorate		X	✓	✓	✓
pydru	rot		X	✓	✓	✓
blodeuo	flower/blossom		✓	✓	✓	✓
egino	sprout		n/a	✓	✓	✓
gwywo	wilt		✓	✓	✓	✓

Table 6.3: Entity-specific intransitive verbs

Table 6.3 demonstrates that these verbs take no animate subjects and that, consequently or coincidentally, they also fail to impersonalize.

A further sample testing the intransitives of certain verbs yielded two results. Either verbs had no impersonal of the intransitive (19), such as the entity-specific verbs above, or, that these verbs impersonalize with an implied human or natural force as subject (20).

(19) *rhydu* 'rust', *cancro* 'corrode', *pydru* 'rot', *malu* 'break', *torri* 'break', *tywyllu* 'darken', *melysu* 'sweeten', *rhyddhau* 'release/free', *cwtogi* 'shorten' etc.

(20) *cwympo* 'fall', *disgyn* 'fall', *iacháu* 'heal', *plygu* 'bend/fold', *gwlychu* 'wetten/get wet'

(21) gwlych-ir wrth olchi elyrch
wet-PRS.IMPS by/during wash swan.PL
'people get wet when washing swans'

Impersonalized intransitives with inanimate arguments are only felicitous with an understood human/natural force as agent:

(22) ?Mae hi'n amhosib i ffenestr-i olchi heb ddŵr.
beII.3SG 3SG.F'PRED impossible DAT window-PL MUT\wash without water.
Gwlych-ir er mwyn glendid.
wet-PRS.IMPS for benefit cleanliness.
'It's impossible for windows to (become) clean without water. You/we/they/people wetten them for cleanliness.'

Whilst the example in (22) suggests that 'windows' is the subject of 'get wet/wetten', the only possible interpretation is that there is some external agent of the wetting and that the windows are a dropped object, given the explicit reference to them in the previous utterance, leaving the impersonalized verb in the second utterance of (22) with no overt arguments.

These results serve to confirm the general restriction on inchoatives found in chapter 5, that COS verbs cannot impersonalize when intransitive.

6.5.3 Unspecified human arguments

Continuing to deconstruct the observations made by Blevins, the 'indefinite' part of 'indefinite human agent' can be interpreted as 'unspecified', not singular or generic group, as illustrated in (14). In addition, testing for animacy has shown that Welsh intransitive impersonals necessarily imply an unspecified or generic human subject. Thirdly, unaccusative intransitive impersonals such as *cwympir, disgynnir* 'people fall' and *gwlychir* 'wetten/get wet' show that agentivity is not essential for the subjects of impersonals. Whilst it has been shown that the suppressed sole argument of an intransitive impersonal is interpreted as an unspecified human, this is not the only argument type that IMPS can affect, given the right context or adjunct. Suppressing the sole argument of an intransitive verb whilst adding the interpretation of unspecified human argument to the predicate is one function of IMPS, although performing a different function with transitive verbs. This other function will be outlined in section 6.6.

Although this chapter has made no distinction between human and animate, it is frequently a non-specific human interpretation that is forced by the presence of the impersonal inflection, when no *by*-phrase adjunct is present. This may be indistinguishable from other animates or perhaps by analogy to humans, but this requires the careful construction of broad contexts to prove and will not be attempted in this work. It is shown that transitive impersonals do not share this restriction, interestingly, and this is shown in the following section 6.6.1.

6.6 Remaining issues and complications

6.6.1 Transitive impersonals

The above generalizations on the nature of the suppressed subject only appear to hold of intransitive impersonalized verbs. Although the interpretation of (22) falls in line with the expected unspecified human agent subject, this classic example of the Welsh impersonal (Awbery 1976) shows that the demoted argument of transitive impersonals can be not only singular but also specified.

(23) rhybuddi-wyd y plant (gan y dyn)
warn-PST.IMPS ART children (by ART man)
'the children were warned (by the man)'

Unlike the example seen in (14) from the intransitives sample study, human singular subjects are shown here to impersonalize in transitive verbs. Whilst it is tempting to claim that the generalization holds when an agentive adjunct *gan*+NP is restricted from appearing or would be ungrammatical, it is at present unclear what licenses the agentive adjunct. It is possible that no intransitive impersonalized verbs allow for a *gan*+NP adjunct, meaning that the argument would become circular: it cannot be the case that intransitive impersonals must have unspecified agents because they do not license a *gan*-adjunct and that transitive impersonals allow *gan*-adjuncts when they are not unspecified.

Even if this trend were found to hold true, that no intransitive impersonal allows a *gan*-adjunct – demonstrably false as seen throughout the thesis – it may be the case that not all transitive impersonals allow a *gan*-adjunct either.

(24) a. gadawyd y gweddill gan y mynach-od
leave;PST.IMPS ART rest by ART monk-PL
'the rest was left by the monks/the monks left the rest'.

b. gadewir y gweddill **?**gan y mynach-od
leave;PRS.IMPS ART rest **?**by ART monk-PL
'the rest is left / people/you leave the rest' **?** by the monks

c. gadawyd y gweddill i ddychymyg y plant **?**gan
leave.PST.IMPS ART rest DAT MUT\imagination ART children **??**by
ddylun-wyr
design-HUM.PL
'designers left the rest to the children's imagination'.

It is unclear how much tense affects the semantics of the *gan*-adjuncts in (24). It is also unclear whether the length of the NPs has an effect on the permissibility of a *gan*-phrase as in (24c). This discussion is resumed, though without conclusion, in section 6.6.2.

In addition, when specified, the suppressed/demoted subject of IMPS may be inanimate, contrary to the findings in section 6.5 for intransitive impersonals.

(25) a. Dychryn-wyd Waldo gan gyhudd-iad Gandhi
fear-PST.IMPS Waldo by accuse-NMLZ Gandhi
Waldo was frightened/shocked by Gandhi's accusation
http://www.rmjones-bobijones.net/llyfrau/Geraint.pdf

b. Dychryn-wyd y llywodraeth gan yr adrodd-iad-au hyn
fear-PST.IMPS ART government by ART recite-NMLZ-PL DEM.PL
The government was frightened/shocked by these reports
http://www.wjec.co.uk/uploads/papers/s05-473-51.pdf

c. Fe'i poen-wyd hefyd gan ol-ion y grefydd Gatholig
PRT'POSS.3SG worry-PST.IMPS also by hind-PL ART F\religion Catholic
'he was also troubled by remnants of the Catholic faith'
http://yba.llgc.org.uk/cy/c-DAVI-RIC-1501.html

d. dyffryn a am-linell-ir gan y mynydd-oedd cyf-agos
valley PRT around-line-PRS.IMPS by ART mountain-PL co-near
'a valley which is outlined/defined by the nearby mountains'
http://www.andesceltig.com/cym/ariannin.calafate.html

e. Ysbryd-ol-wyd ein holl waith gan fynydd-oedd,
spirit-ADJ-VRB.PST.IMPS POSS.1PL entire MUT\work by mountain-PL,
traeth-au a hanes y sir brydferth hon
beach-PL and history ART county beautiful DEM.F
All of our work is inspired by the mountains, beaches and history of this beautiful county
http://handmadeinthehills.co.uk/page7.htm

The adjuncts in (25) all refer to an inanimate agent of their respective impersonal verbs. Although the *gan*-adjuncts have been used to demonstrate the breadth of the potential suppressed subjects of transitives, it should be noted that the same breadth remains when the suppressed argument is unspecified. Without their adjuncts, these predicates are still grammatical and the interpretation of an inanimate agent is possible.

(26) dinistr-wyd y tai
destroy-PST.IMPS ART house.PL
'the houses were destroyed'

With no other context, (26) might be interpreted as having a natural force as its suppressed subject, meaning that even without the adjunct *gan gorwynt*, it might be understood that the houses were destroyed 'by a tornado'. Siewierska (1984:199) shows that natural forces can act as the demoted agents of Russian impersonals, although they are specified and marked by instrumental case morphology. Lithuanian, in the example provided, seems to allow a natural force to be the suppressed argument of even intransitive verbs, which has not been found to hold for Welsh.

Rather than looking to default interpretations free of context, the difference here is simply the intransitive *plygir* of (14) being unable to render the meaning 'Osian bends' or 'specified bender bends'. This contrasts with the verbs exemplified in (25), which are all able to specify an agent argument.

(27) *Plyg-ir gan Osian
bend-PRS.IMPS by Osian
'Osian bends'

Transitive verbs, on the other hand, can take such agents, as seen in (23) and illustrated again here.

(28) rhybuddi-wyd y plant gan Osian
warn-PST.IMPS ART children by Osian
'the children were warned by Osian'

These data suggest that IMPS has a different function when suffixed to transitive verbs, at the very least allowing an additional feature of an agentive adjunct. It is plausible that this is due to analogy with passives, including the Welsh GET-passive and English passives, through contact. This hypothesis of this analogy is difficult to refute and would lead to the interesting observation that the analogy is restricted as intransitives (or at the very least, some intransitives) cannot take the *gan*-adjunct.

Impersonal morphology therefore has no restrictions on the animacy of the argument it suppresses or demotes in transitive verbs, and additionally increases the predicate's places to allow an agentive prepositional phrase.

6.6.2 Measure verbs revisited

The behaviour of the small subset of measure verbs (Table 5.3) can be explained by the function of IMPS with intransitives, as unspecified human subjects are not restricted from these contexts.

This applies only to stative (and therefore, intransitive, by the definition provided in chapter 5) readings of measure verbs like *costio* with a non-thematic argument which is an extent - see table 5.3 of chapter 5.

Only a transitive reading of *costio* 'cost' is possible, as proven by the impossibility of the adverbial adjunct's contradictory interpretation in (26a), repeated below.

(29) Cost-i-wyd yr argymhellion yn ofalus #(heb i neb
cost-VRB-PST.IMPS ART suggestion;PL PRED care:ADJ (without DAT nobody
eu cost-io)
POSS.3PL cost-VRB)
'the suggestions have been carefully costed #(without anyone costing them).'

(30) *cost-i-wyd deg-punt (gan CDd-iau)
cost-VRB-PST.IMPS ten-pounds (by CD-PL)
*were cost ten pounds (by CDs)

Like the intransitives studied in previous sections, unspecified human subject interpretations may be licensed by some of these measure-intransitives, where the context allows.

(31) Context: *Roedd pobl yn llai yn y gorffennol.* 'People were smaller in the past.'

?Pwys-wyd 25cg ??(gan rai)
weigh-PST.IMPS 25kg (by MUT\some)
'?(Some) weighed 25kg'

In most examples used in this thesis, the *by*-phrase adjunct can only refer to an agent or agents, which would force a transitive interpretation of the verb *pwyso*, 'to weigh'. The *by* or *gan*-phrase in (31) may be permissible, but this is questionable and needs to be confirmed with grammaticality judgements by other native speakers. Other prepositional phrases such as *ar gyfartaledd* 'on average' which reinforce the context of humans being weighed in (31) are possible. Very little research has been done on the impact of *by*-phrases with synthetic impersonals and it is unclear as to which factors may impact their permissibility. It is possible that the length of the NP in the adjunct plays a role as *gan y lleiaf o ddynion dros 20 oed* 'by the smallest of men over 20 years old' would be a more acceptable adjunct than the short *gan rai* 'by some'. Equally, the distance of the adjunct from the impersonalized verb may play a role in their grammaticality, as in *pwyswyd 25cg yn llai, ar gyfartaledd, ?gan ferched* 'women, on averaged, weighed 25kg less'.[2] For the purposes of this thesis, however, the *by*-phrase's exclusion in certain contexts cannot be taken as evidence against a human subject.

Like verbs of entity-specific change which fail to take IMPS when intransitive, these measure verbs are able to take human (or animate) subjects in non-impersonal contexts.

(32) rwy'n pwyso'r un peth a darn 10 ceiniog
PRT.beI.1SG'PROG weigh'ART one thing as piece 10 pence
'I weigh the same as a ten pence piece'
http://www.outdoorcardiff.com/ObjView.asp?Object_ID=30164&language=

(33) #rwy'n rhydu'r un fath a darn 10 ceiniog
PRT.beI.1SG'PROG rhydu'ART one type as piece 10 pence
'I rust the same way a ten pence piece would'

A human or animate subject is not a licensed interpretation of (33), but if a context is created in which the narrator is an animate made of metal, (33) becomes plausible. Once more, this highlights the restriction being on the possibility of a human or higher animate subject as to whether verbs can take the impersonal morphology.

These facts confirm the proposed intransitive function of the impersonal as proposed in section 6.5, although our knowledge of this Welsh verb class and the *gan*-phrase would

[2]Note that the distance from the agentive adjunct to the verb is greater in the Welsh text due to word order differences.

benefit from corpus research.

6.7 Impersonal as active

In chapter 2, a seemingly "double" passive construction was introduced from online text sources (repeated here), to counter the claim made by (Awbery 1976), that the impersonal and the GET-passive could not co-occur.

(34) a dyna cafwyd ei wneud
and then.that get;PRET.IMPS POSS.3SG M\do
'and that's what was done' Repeated (2-76)

http://www.myspace.com/golaola

(35) ceir ei ddisgrifio fel man "anial a di-groeso"
get;PRS.IMPS POSS.3SG M\describe as place "desolate and without-welcome"
'it is described as a "desolate and unwelcoming" place' Repeated (2-77)

http://www.bbc.co.uk/cymru/cylchgrawn/theatr/adolygiadau/povey-tyner-02.shtml

If the analysis of the possessive pronoun as a straightforward agreement proclitic ((Borsley et al. 2007) – see section 2.2.3.1) is correct, the examples simply appear to be impersonalization of transitive complex predicates. The verb *cael* 'get', associated with the GET-passive is an auxiliary verb supporting the non-finite verbs *gwneud* 'do' and *disgrifio* 'describe' in (2-76) and (2-77) respectively and the agreement proclitic appears due to the absence of the object in the postverbal position. In (2-76) the referent of *ei* has been fronted before the auxiliary and in (2-77) the referent of *ei* is previously active in the discourse and is identical to the referent of the argument *man* 'spot, place' in the prepositional phrase headed by *fel* 'like'. The suppressed subject of the impersonal in (2-76) is clearly an animate agent, whilst the subject of (2-77) is a little more obscure but can be interpreted as having a generic 'people' reading, with the 'find' interpretation of *cael* (giving a reading closer to *you find it described as "desolate and unwelcoming place"* or *it is found to be described as a "..." place* for the translation of (2-77)).

These data suggest that the status of the referent *ei* is that of a surface object, as objecthood was shown to be a governing factor of the agreement proclitic's appearance in section 2.2.3.1 of 2. This would confirm the Fife (1985, 1992)/Borsley et al. (2007) analysis of the impersonal construction as 'active'. Data such as these are relatively uncommon, but more electronic corpora may be able to confirm this status.

The objects of transitive verbs have provided no evidence of any impact on the impersonal morphology during the course of this research project and whilst the animacy and proto-role of the object of transitives was not strictly controlled for, examples of transitive verbs have included all of these object types. It seems that the only impact the object has on the impersonal is its presence, as it the only restrictions to the impersonal morphology occur in verbs with no objects.

It seems plausible that objects or second direct arguments are unaffected by impersonalization altogether, implying that impersonalization is a process of subject suppression and not object promotion. This contrasts with the Welsh analytic passives which were seen to suppress or demote their subjects in addition to triggering subject agreement in the form of inflection of the auxiliary, whilst retaining the proclitic object agreement in section 2.2.3.2.

Ultimately, the status of IMPS as passive morphology is still dependant on the definition of passive employed – if the only prerequisite for the term is subject suppression or demotion then IMPS may still be considered passive or at least a 'non-canonical passive'. Definitions of passive are outlined in chapter 7.

6.8 Conclusion and further research

It has been shown in this chapter that IMPS is not reliant on argument structure in terms of the thematic roles of its arguments. The observed tendency named by Blevins (2003), that impersonalization is not sensitive to argument structure (according to this definition), is supported by the Welsh data in both transitives and intransitives. However, argument structure in the sense of number of direct arguments does affect the semantics of the impersonal, although the number does not restrict the morphology.

The role of agent was proposed to play a part, though it is animacy or possibly a feature [+human] that IMPS is sensitive to in its unspecified suppressed subjects of intransitive verbs. Agentivity has been shown in this chapter and throughout the thesis not to be essential for the interpretation of implied subjects, only to the possibility of an agentive adjunct *gan*-phrase. Welsh intransitive impersonals necessarily have generic, unspecified human (or natural cause) subjects, but the same does not hold for transitives. Consequently, Blevins's observed tendency of impersonalization suppressing human arguments only holds for intransitive verbs, as shown in section 6.6.

The significance of the supposed 'agentive' adjuncts or *gan*-phrases has yet to be investigated fully. It is unclear whether these adjuncts broaden the semantics possible for suppressed surface subjects, or whether they are merely diagnostic of those semantics. Whether the *gan*-phrases are restricted by any structural factors remains to be seen, but any number of factors such as tense, NP length and NP distance from the verb may have an impact on their grammaticality. This is left to future research.

Two separate functions of IMPS are therefore proposed in this thesis. The first is that intransitive IMPS suppresses the sole unspecified generic (non-singular) human argument of the verb and cannot apply to any verb without the property [+human] on its sole argument. The second is that transitive IMPS affects any verb with more than one argument, suppressing its subject and conditioning a position in the verb's structure for an optional agentive adjunct, in verbs with agentive subjects. An attempt to incorporate these two functions into current theories of passive is made in chapter 7.

CHAPTER

SEVEN

PROTOTYPES AND THEORIES OF THE PASSIVE

The first syntactic description of Welsh passives (Awbery 1976) makes the assumption that the impersonal construction is a variant of a passive and uses Transformational Grammar as a framework to describe both the impersonal and the GET-passive constructions. Fife (1985, 1992), on the other hand, analyses the two constructions according to several different frameworks including Chomsky (1957), the higher-BE analysis (Langacker & Munro 1975) and early work in Relational Grammar and Cognitive Grammar. Although their conclusions are divergent, their analyses only differ in which arguments are considered subject and object, using this to determine whether the linguistic process to differentiate the impersonal and GET-passive is one of subject demotion or of object promotion.

Throughout this thesis, the Welsh impersonal is shown to have various properties which differentiate it from the GET-passive and a handful of restrictions to the impersonalization process, if it is to be characterized as such, have been uncovered. The purpose of this chapter is not to attempt to classify the impersonal as passive or non-passive, but to review the current state of the theory of passives in order to try to accommodate the new facts uncovered. If a particular linguistic framework has a robust account of what the passive is or does as a process, the impersonal should pose no great problems: that is, if there is a clear structural difference in the GET-passive and the impersonal as this thesis and others (Awbery 1976; Fife 1985) have shown there to be, any given contemporary framework should reflect that difference.

The categorisation of the Welsh impersonal is one which varies from framework to framework – if the framework is able to accommodate it at all. The definition of 'passive' in any particular framework depends on the original data being described and more often than not, the English passive will be considered to be of the 'basic' variety, or the most 'well-behaved' passive, as a source of comparison. Unsurprisingly, this approach is flawed as the members of the passive category are already decided upon before the definition of passive (and the theoretical process bringing about a passive construction) has been proposed. The result of this is a very broad phenomenon which potentially

has no common rule or process underlying it, and so becomes an unhelpful label. In fact, the passive is often described as having a 'cluster of properties' with incremental membership (Langacker & Munro 1975; Perlmutter 1980; Siewierska 1984), likely due to the starting point of this characterization being a pre-selected group of constructions sharing a superficially similar meaning or usage.

On the other hand, the approaches to the passive mentioned above do not present a random selection of similarly translated phrases. Typologically, constructions labelled passive vary greatly in their syntax and morphology but can still be classified according to their structure, as has been attempted by Siewierska (1984), Keenan (1985) and Keenan & Dryer (2007). Clearly, most of the phenomena have in common a valency decreasing effect on verbs, but the overall class of 'passive' – as defined in the typological literature – has little else to unify it. This typological approach to studying passives is addressed in section 7.1 by summarizing some of the major works in this area, before turning to individual frameworks' treatment of passives in the remainder of the chapter.

7.1 Canonical and prototypical passives

Only a handful of seminal works on the passive have attempted to determine what underlyingly unifies the constructions in question. As passive is a term which has been long-used in linguistics, it is often assumed that a standard definition exists. Work such as Siewierska (1984), Shibatani (1985) and Keenan (1985) all recognize the similarity of the passive to other valency changing processes such as reflexivization, causativization and even 'active impersonals', whilst maintaining that passivization forms a separate process with a change in the verb's potential argument structure. Each of the works concludes that there is no process or rule which unifies all passive constructions, but that there is a passive prototype or 'canon' which some languages may exhibit, though others deviate from it synchronically and others still do not employ at all. Siewierska's (1984) thesis outlines a canonical passive following a broad cross-linguistic study, which takes into consideration personal passives, impersonal passives, periphrastic passives (discounting stative verbs) and reflexive passives and finds the three properties below to be common to all constructions that have been labelled passive.

> ...a construction:
>
> a) Which has a corresponding active, the subject of which does not function as the passive subject
>
> b) The event or action expressed in the passive is brought about by some person or thing which is not the passive subject, but the subject of the corresponding active
>
> c) The person or thing if not overt is at least strongly implied.

(Siewierska 1984:256)

The first point is not uncontroversial as there is no clear active-passive distinction without first a definition of a passive. What is clear is that certain predicates have a number of arguments which is reduced *by one* in some contexts. Keenan & Dryer (2007) disagree with the need for a corresponding active for an utterance to be considered passive, due to their interpretation of the basic passive as one that appears without an agent phrase. They claim that passives are never formed in "any of the ways in which one sentence could be derived from another" (2007:328), to counter the claims made in some generative frameworks. There is no regular semantic relationship allowing a passive sentence to be derived from an active, as *Mary was kissed* entails that someone, x, kissed Mary, but *every cake was stolen* does not entail x stole every cake (2007:339-340). The passive-active distinction was used by Siewierska to distinguish passives from constructions such as inchoatives and statives when discussing periphrastic passives, like the English passive which is formed with an auxiliary verb.

(1) a. The glass is broken
b. The glass is (regularly) broken by vandals

Therefore "[p]assive clauses [...] depict both an action and a resulting state" (Siewierska 1984:140), suggesting that aktionsart classes may play an important role in passivization. Keenan & Dryer find this point less important for their model of passive, but do mention an ambiguity in the interpretation of passives as either dynamic or stative in English. An example is given from German, which uses 'become' for the passive dynamic and 'be' for the stative, respectively *das Haus wird verkauft* vs *das Haus ist verkauft* 'the house is sold', which suggests that this is a language specific issue, if German disambiguates but English does not. The same issue is encountered in Welsh.

(2) Mae afanc wedi (cael) ei weld yn yr afon
be.3SG beaver after (get) POSS.3SG M\see in ART river
'A beaver was seen/has been seen in the river'

In (2) the verb of reception, *cael* 'get', is optional. This is the same analytic passive as seen in (2-62), but in the present tense and formed with an auxiliary 'be'. In Welsh, *cael* is an optional part of the analytic passive when there is another auxiliary to form the predicate with the verb (here in (2) the verb *gweld*) as is also observed by Fife (1985). When GET is omitted the meaning is almost identical, but becomes ambiguous as to whether a state or an action is described, similar to the affect of omitting the agent phrase in (1) above. Keenan & Dryer (2007) do not exclude these stative adjectival constructions, such as *the glass is broken*, from their definition of passive, allowing them to dismiss the passive-active derivational analysis. Although transitivity does not come into their prototype, the notion of a decrease in valency still plays an important part for Keenan & Dryer's basic passive: "the standard passive derives a one-place predicate from a two-

place predicate." (2007:345) and they show that for impersonal passives, including Welsh data, this decrease still holds (n=0 when deriving an n-place predicate from an n+1-place predicate).

Shibatani's (1985) passive prototype includes reference to the valency of the predicate. As this is a prototype analysis, it resembles the above two analyses, in which very little is excluded from the term passive and any construction which shares any number of the features listed below are deemed "like passives TO THE EXTENT that they share this function" (p.837).

(3) Characterization of the passive prototype

(a) Primary pragmatic function: Defocusing of agent.

(b) Semantic properties:

i. Semantic valence: Predicate (agent, patient).

ii. Subject is affected.

(c) Syntactic properties:

i. Syntactic encoding: agent → (not encoded). patient → subject.

ii. Valence of P[redicate]:
Active = P/n;
Passive = P/n- 1.

(d) Morphological property:
Active = P;
Passive = P[+passive]

This prototype fits with Keenan & Dryer (2007)'s analysis of the passive as a predicate-level phenomenon. Passives are, then, a way of forming a verb-phrase, not of modifying a sentence. In this case, a passive cannot be identified by analyzing the morphological or syntactic marking of the NPs of a passive verb as they will also be found to occur in active sentences. This certainly applies to Welsh as there is no known case marking, synchronically, and initial-consonant mutation has been found to be a poor indicator of subject or object. A slight differentiation between these two analyses is Keenan & Dryer's claim that information structure is a separate phenomenon from passivization, with the argument that information structure is marked at the sentence level. Shibatani, however, cites defocusing – presumably a device of information structure – as the pragmatic function of the passive. The pragmatics of the Welsh GET-passive and the IMPS have not been studied to any great extent, beyond well-recorded register differences.

Shibatani dismisses the analysis of subject demotion or object promotion based on the cross-linguistic variation found in passives, citing evidence from the Welsh IMPS as one reason that object promotion cannot explain passivization. However, this appears to stem from the pre-theoretic assumption that the IMPS are passive before building the passive prototype around this assumption. This assumption is made by most other accounts of the passive too. Keenan & Dryer (2007:333-339) list the Welsh IMPS as one

of their 'strict morphological passives' and use them as evidence for their analysis of morphological passives:

(4) Strict Morphological passives

a. The passive may fail to agree with its subject.
b. Passive verbs may simply have different affixes from active verbs
c. The passive verb may agree with its subject as though it were a direct object of an active verb.

Similarly, the Welsh *cael*-passive is included in their analysis of periphrastic passives and is listed under periphrastic passives with a verb of reception as an auxiliary, although, as mentioned above, examples like (2) where the GET-auxiliary may be omitted were not accounted for.

It is commonly found in cross-linguistic studies (Siewierska 1984; Keenan & Dryer 2007) that passivization applies to predicates which have thematic roles other than agent and patient, such as *money was needed by the church*, for example. Keenan and Dryer explain (p.342) that the agent by-phrase does not necessarily have to be an agent, but merely an 'actor'. They claim that this is the syntactic subject of a passive, whilst the direct argument of the VP acts as the semantic subject. This could be used to explain the lack of person agreement on the Welsh IMPS.

It is best to assume that the generalization above in (3) can be made for proto-roles, Proto-Actor and Proto-Patient, where the thematic roles form a continuum from the most agent-like to the most involuntarily affected argument and case is assigned in accordance with this continuum for each specific language. This lends itself well to Hopper & Thompson (1980)'s concept of transitivity as a continuum of affectedness, which predicts that passivization will not apply to those predicates lowest in properties of transitivity, whether they are two-place or one-place as seen in chapter 4. Another advantage of this view on transitivity is that it is one of the few that does not propose the circular test of passivization to determine transitivity. Still, none of these approaches differentiates between the structures of two 'passives' found in Welsh.

7.2 An RRG analysis of IMPS

The framework Role and Reference Grammar (RRG) treats grammatical relations as a language-specific description (of which argument is treated as subject or object etc.) and opts for a construction-by-construction analysis of relations. RRG employs the concept of a privileged syntactic argument (PSA), which is an argument which displays "a restricted neutralization of semantic roles and pragmatic functions for syntactic purposes" (Van Valin & LaPolla 1997). It is an accepted principle in RRG that, in accusative constructions (or languages, here), the highest-ranking macrorole (similar to a proto-role) will be the PSA by default (Van Valin & LaPolla 1997:282) and this is the assumption

that will be made for the purposes of the RRG analysis below. Only arguments which are both controllers – which control predicates with unexpressed arguments – and pivots – which represent the unexpressed arguments of certain coordinated or subordinate predicates – are considered 'privileged' syntactic arguments.

(5) the emu$_i$ kicked my friend and then ___$_i$ ran away

For illustration, (5)'s *the emu* is both the controller of the predicate in the coordinated clause and the pivot or 'missing' syntactic argument (marked by ___$_i$), meaning it is the PSA in RRG terms.

Voice constructions are characterized in two parts in RRG. The two distinguishable features of voice modulation are quoted here for a language with accusative alignment:

(6) a. PSA modulation voice: permits an argument other than the default argument in terms of macroroles to function as the privileged syntactic argument.
   (i) non-actor occurs as pivot/controller (default non-actor = undergoer)
   b. Argument modulation voice: gives non-canonical realization to a macro-role argument.
   (i) actor appears in periphery as object of *by* or is omitted.

(Van Valin & LaPolla 1997:295-302)

As an Indo-European language with accusative alignment, the above statements in (6) should apply to Welsh. These statements characterize an exception to the assumption of the assignment of PSA according to the expected macro-role (hence the modulation of the PSA) and, perhaps less importantly, that a non-privileged argument might be marked somehow. This provides a very broad scope for the realization of argument modulation, which could describe any number of phenomena, even within the same language. This has the advantage of making very few assumptions about the structure of any particular language, with the potential to be applied across all languages which have any kind of argument modulation.

Following Van Valin & LaPolla (1997:294-308), the following canonical Welsh passive appears to behave as the English GET-passive, to which the observations in (6) originally refer:

(7) a. Cawsant eu urddo'n ofydd-ion, ond heb fod
get.PRET.3PL POSS.3PL appoint'PRED ovate-PL, but without MUT\be.INF
yn aelod-au llawn
PRED member-PL full
'[they] are made ovates, but not fully initiated'[1]
https://cy.wikipedia.org/wiki/Goursez_Vreizh

   b. cawsant eu urddo'n ofydd-ion gan y beirdd
get.PRET.3PL POSS.3PL appoint'PRED ovate-PL by ART bard.PL
'they were made ovates by the bards'

[1] translation from English equivalent page: https://en.wikipedia.org/wiki/Goursez_Vreizh

PSA is shown to have modulated as the subordinate clause is controlled by the non-actor (the referent of 3PL in (7a)) and argument modulation is observable as the actor, *beirdd* appears in an agentive adjunct in (7b).

Control of verb agreement would be the most straightforward way to test for a PSA, but the very nature of the impersonal Welsh verb is that the inflection does not agree with any direct core argument. Where a restricted neutralization of the roles does apply, is in the suppressed argument itself, which can be either actor or undergoer (or proto-agent and proto-patient) as the highest ranking macro-roles of the constructions:

(8) *dioddefir* 'it is suffered, one suffers'

(9) *rhedir* 'it is run, one runs'

In other words, IMPS can apply to both verbs with actor and undergoer as the sole argument (unergative and unaccusative, respectively, in RRG terms), as discussed throughout this thesis. This shows that these impersonal verbs suppress the PSA and modulate the argument, as defined by Van Valin & LaPolla (1997:295). According to RRG, grammatical relations only apply where there is a restricted neutralization of semantic or pragmatic roles in order to comply with a syntactic rule and, although this is part of the definition of a PSA, a PSA is also pragmatically motivated. It cannot then be generalized that a PSA will *always* emerge where such a restricted neutralization exists. In order to determine whether there is a PSA, it is therefore necessary to apply tests, as seen in (10).

(10) urdd-wyd y Llydawyr yn ofydd-ion…
appoint-PRET.IMPS ART Breton.PL PRED ovate-PL…
'the Bretons were made ovates…'

a. …ond heb fod yn aelodau llawn
…but without MUT\be.INF PRED member-PL full
'but without being full members'

b. …gan y beirdd
…by ART bard.PL
'by the bards'

According to this analysis, the impersonal seems to share the same function as the canonical 'GET-passive' according to RRG.

Additionally, the suppressed arguments of impersonals can control into infinitival clauses, that is, the suppressed argument is the controller of the pivot:

(11) gohir-wyd y gwaith er mwyn $\_\_\__i$ creu cynllun newydd…
postpone-PRET.IMPS ART work for value PIVOT create scheme new…
'the work was postponed in order to create a new scheme…'
http://www.dailypost.co.uk/news/local-news/swyddfa-newydd-y-cynulliad-yn-2756245

To paraphrase, the sentence could be expressed in the 1PL form:

(12) gohiri-asom y gwaith er mwyn i ni allu creu cynllun
postpone-PST.1PL ART work for sake DAT 1PL MUT\be.able.to create scheme
'we have postponed the work in order for us to be able to create a scheme'

Example (12) clarifies that the pivot of (11) must be the suppressed argument of the impersonal. Again, this supports the function of argument modulation only – and not PSA modulation – in impersonal verbs as the actor is suppressed but remains the PSA. The GET-passive also demonstrates this form of voice modulation:

(13) caf-odd y gwaith ei ohirio er mwyn $\_\_\_{i}$ creu cynllun
get-PRET.3SG ART work POSS.3SG M\postpone for value PIVOT create scheme
newydd
new
'the work was postponed in order to create a new scheme'

In (13) the referent$_i$ of the pivot is not the argument expressed in the main clause. It appears that different kinds of control are significant to the analysis of voice in RRG, which approaches analyses on a construction-by-construction basis. In this respect, the impersonal construction and the GET-passive behave identically.

7.2.1 Argument number and nature

Van Valin & LaPolla (1997) see animacy as part of the semantics of the participant roles and as such, the various participant roles proposed will each be more or less associated with properties such as humanness for cognizers, animacy for agents etc. The relation between the animacy of the arguments possible will lie in the semantics associated with a particular verb. This is relevant to the restriction to the impersonal construction, as described in chapter 6, which sees a difference between the restrictions to intransitive verbs in impersonal constructions and transitive impersonals in the form of animacy. The interpretation of the suppressed argument of the intransitive impersonal is restricted to animates (or possibly humans). This perspective predicts that further than restricting the suppressed argument to being simply [+HUMAN] or [+ANIMATE], the argument will be restricted to certain participant roles. In order to determine whether this is the case, a large study of Welsh verbal (or predicate, to be consistent with this particular framework) semantics would need to take place, which is not a resource that exists at present. Nevertheless, this will be referred to as 'animacy' for the remainder of this thesis, for the sake of convenience.

An advantageous perspective provided by this framework's core tenets is the status of the stative measure verbs which fail to impersonalize with the desired semantics. These are the verbs which behave like the verb *costio* 'cost' and are described in Chapter 5:

(14) *cost-wyd pumpunt (gan y ffilm)
cost-PRET.IMPS five.pound (by ART film)

'*was cost five pounds by the film'

In RRG, the nucleus of a clause is considered to be the predicate, which has arguments associated with it to form the clause's 'core'. This nucleus may have no macro-role associated at all in the core, but has a maximum of two macro-roles, allowing the core to represent semantically atransitive verbs, intransitive and transitives. Figure 7.1 illustrates this clausal structure which includes the 'periphery'. The periphery is the 'everything else' of RRG - non-macro-role arguments do not form part of the core and therefore form part of the periphery along with non-core prepositional phrases and adverbials.

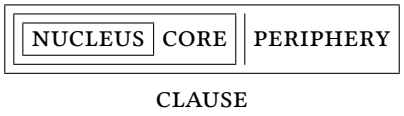

Figure 7.1: Layers of RRG clause structure (Van Valin & LaPolla 1997:26)

Elements of the periphery are referred to as 'adjuncts' in RRG and it is this status that might be proposed for an argument such as *pumpunt* 'five pounds', implying that it is not associated with a macro-role. As suggested in Chapter 5, the *costio*-like verbs seem to consist of the nucleus predicate *costio* and only one macro-role in the core, making them intransitive in RRG's view (or 'one *m*-argument' predicates). The advantage of this framework's clause structure is that the core of *costio* verbs could be analysed as consisting of the same elements as other intransitive verbs. Although Welsh intransitives have been shown to impersonalize, a parallel may be drawn between the proposed 'animacy' restrictions discussed in this section (and elsewhere throughout this work, more detail in Chapter 6). The semantics of the core arguments of certain intransitive verbs like *disgyn* 'fall' are such that the macro-role includes animate and inanimate NPs, as demonstrated once more by (15), but IMPS only allows the impersonalization of animates or requires the semantics of animates (or humans, or a more fine-grained property common to animate nouns as suggested in this section).

(15) disgynnir 'people fall, *trees fall'

Similarly, as intransitive predicates, verbs such as *costio* lack an animate argument and therefore fail to impersonalize:

(16) a. Costi-odd y gwaith adeiladu 22,000
cost-PRET.3SG ART work building.VRB 22000
'The building work cost 22,000
https://cy.wikipedia.org/wiki/Yr_Eglwys_Farmor

b. *costi-wyd 22,000 gan y gwaith adeiladu
cost-PRET.IMPS 22000 by ART work building.VRB
'the building work cost 22,000 / *was cost 22,000'

However, as shown in Chapter 6, a named animate, even humans, may act as the sole argument of the verb *costio* (recall the example *the slaves cost X*) and therefore it is con-

firmed that animacy or humanness alone is too broad a concept for the restriction to the IMPS morphology. Still, the interpretation of *costiwyd pumpunt* of (14) cannot be 'people cost five pounds'.

The analysis of arguments such as *pumpunt* of example (14) as adjuncts - arguments lacking a macro-role - allows the potential for a unified analysis of IMPS and it is, of course, further evidence in support of the special status in language of noun phrases denoting measurable quantities.

Overall, RRG's conceptualization of voice phenomena, as described in this section, treats the Welsh GET-passive and impersonal construction as functionally identical and makes no predictions about the number of the arguments associated with either, so as to confine the GET-passive to predicates with two macro-roles and two core arguments. The framework has the potential to accommodate the restrictions to the IMPS, though as of yet it is unclear as to which participant roles are required to properly describe the argument of intransitives that resist impersonalization with the Welsh morphemes.

7.3 Passive in LFG

According to Lexical Functional Grammar (LFG; Bresnan 1982), a lexical predicate can be shared by two different lexical entries (which make up the lexicon), as grammatical functions are applied on the surface and are language-specific. A form like

$$\text{`}\mathbf{kiss}\left\langle\left(\text{SUBJ}\right)\left(\text{OBJ}\right)\right\rangle\text{'}$$

Figure 7.2: A lexical predicate (*kiss*) in LFG

can represent both *kiss* with an agent subject and a patient object and *kiss* with a patient subject and an agentive adjunct. The grammatical functions are assigned at some point by the argument structure of the predicate, meaning that grammatical functions like subject and object are lexically encoded for each entry in the lexicon and these are associated with thematic roles such as agent, patient. Unlike Transformational Grammar and its related approaches, there is no default position for grammatical functions and thematic roles, resulting in no need to explain phenomena such as verb alternations and passivization through NP movement and 'trace' (Bresnan 1982:1:5). However, accounting for voice alternations still poses problems for LFG.

Early versions of LFG include lexical rules which can operate on items in the lexicon, but later models of the framework reject these 'rules' due in part to their apparent reformulation of Transformations (Dalrymple 2001:201) . The original passive rule proposed in LFG is represented as in Figure 7.3.

Figure 7.3 essentially represents two rules which apply simultaneously, featuring the familiar concepts of 'promotion' to subject and suppression/deletion/demotion to adjunct. This lexical rule would eliminate the need to analyze the surface form of the

(SUBJ) → OBL/ø
(OBJ) → SUBJ

Effect on L form	L((SUBJ),(OBJ))	→	L((OBL)/ø,(SUBJ))
	AGENT THEME		AGENT THEME

Figure 7.3: Lexical rule for passivization (Bresnan 1982:1:9)

post-verbal argument in Welsh as either subject or object as both parts of the rule apply equally, though it fails to capture a separation between the GET-passive and the IMPS construction.

Whilst both the GET-passive and IMPS morphology might apply to transitive verbs in the way depicted in 7.3, the 'promotion to subject' rule cannot apply to impersonally inflected one-place predicates in Welsh as there is no remaining argument in these sentences.

(17) rhed-ir yno ??(gan blant)
run-PRS.IMPS there ??(by MUT\children)
'[people] run there' but ??'[children] run there'

It is also unclear as to whether the object is promoted in transitive impersonals, as supported by the potentially object marked non-finite verb of an impersonalized auxiliary suggests in section 6.7 of the previous chapter. The GET-passive requires two arguments (core arguments such as subject and object), whereas the impersonal only requires that the verb have one argument, as a minimum. Zero-place predicates may exist in Welsh in the form of predicates and clauses with an expletive subject, but it seems that these predicates do not impersonalize unless they are transitive.Example (17) displays the impersonal morphology used with the verb *rhedeg* 'run', resulting in a generic 'people' interpretation, but here additionally has a locative expression. The locative merely gives context in this case and the example *rhedir* would be perfectly grammatical without it, but not without context entirely, unlike a personal verb such as *rhedais* 'I ran', which fares better as a complete statement, without any apparent context. The reasons for this difference of completeness are unclear, whether semantic or pragmatic, and remain outside the scope of this thesis, although

Other than applying to both transitive and intransitive verbs, an additional fact about impersonal morphology that will need to be captured by LFG, or indeed any framework, is its sensitivity to animacy:

(18) Disgynnir yma yn flynydd-ol
fall;PRS.IMPS here PRED annually-ADJ
Intended: # (Trees) fall here every year.'

This restriction of the morphology applies only to impersonal intransitive verbs, as demonstrated in (18), where the interpretation of *disgynnir* is restricted to animates

(only humans have been tested, so the restriction may be [+human] or [+animate]) and the interpretation of an inanimate suppressed argument is unlicensed in example (18), as indicated by the # in the translation. As previously demonstrated, this restriction does not hold of impersonal transitive verbs.

(19) Cynhyrf-wyd y cylch gan amryw o ddadl-eu-on diwin-ydd-ol.
excite-PST.IMPS ART circle by various GEN dispute-VRB?-PL divine-AG-ADJ
'The circle [of multidenominational chapel members] was excited/disturbed by several theological disputes/debates.'

P.37; Gibbard, N. (1969) Rhai o nodweddion Annibynwyr Llanedi, Llanelli, a Chwm Gwendraeth, 1700-1830. *Y Cofiadur (sef cylchgrawn Cymdeithas Hanes Annibynwyr Cymru)* [Journal] 36, pp. 26-40

(20) Cynhyrf-wyd nifer [...] gan sylwad-au beirniad-ol am y Plough...
excite-PST.IMPS several [...] by comment-PL judge-ADJ about ART Plough...
'[Simpson's article] [...] ruffled a few feathers with critical comments about the Plough[2]'

Brecon Grammar School Old Boys' Association Newsletter, March 2012.
http://www.brecongrammar.org/newsletters/BreconGrammarOBA_Newsletter_March_2012.pdf

Examples (19) and (20) express inanimate 'demoted' arguments as by-phrase adjunct, exemplifying that the [+human] restriction cannot apply to transitives.

In some languages, the agentive argument must remain in the utterance as an obligatory adjunct or as a case-marked argument. Siewierska (1984:35-37) cites data from Kota (Dravidian), Palauan and Indonesian (Austronesian) to demonstrate passives with obligatory agent phrases and, like Welsh, these languages have a more 'canonical' and well-behaved passive in addition. How LFG might be able to accommodate this data is an essential question for the framework, as the rules proposed above are not sufficient in describing argument suppression or promotion with any greater subtleties or distinctions at work (which is likely most languages). Whether both forms in each language mentioned should be considered passive is a matter of terminology.

The question remains as to whether LFG can account for the less canonical passives at all. If the passive rule as laid out by Bresnan (1982) can apply sequentially as two separate lexical rules, either simultaneously or completely independently of one another, it may be possible to account for different outputs. If both the promotion of the patient argument and demotion of the agent could apply to the IMPS, but only one of these to the GET-passive, then it would be possible to differentiate the two and possibly predict which verbs would allow the IMPS but not the get passive. Unfortunately, the GET-passive is restricted from both the unergative and unaccusative one place predicate, so it seems that this account of lexical passive rules cannot be based on the thematic roles of agent and patient and the predicate without any further specification.

[2]Translation taken from the original bilingual newsletter

7.3.1 LFG and Mapping Theory

Proposals have been made as to the appropriate way to deal with alternations and valency changes within LFG's framework, of course, besides these lexical rules in their most simplistic form in Figure 7.3, and one potentially fruitful proposal will be outlined in this section.

As LFG is composed of different layers or 'structures' which are all enacted simultaneously, the options for dealing with valency or grammatical function alternations are either to store lexical rules as originally proposed by Bresnan (1982) (as figure 7.2) or to develop a linking theory between its various structural representations that allows the correct thematic roles to be assigned to the surface forms. As LFG assumes an important role for a well-organised lexicon, mutliple entries for the same stem are possible, but these lexical entries should not contain reference to the surface configuration of their potential arguments. As suggested by Figure 7.2, semantic roles are not encoded in the lexical entries within LFG, therefore between the lexicon and the surface representation, the role of the subject (and any objects present) must be specified and this linking has to accommodate different configurations of thematic role to grammatical relation, so that outputs such as passive constructions are accounted for.

LFG uses separate structures to represent its conceptualization of generative grammar, with one for functional categories, one for argument structure and another one for surface syntax: f-structure represents the functional structure and c-structure for constituent structure. A-structure has also been proposed to represent 'argument structure' or mapping from f-structure to c-structure to arrive at the appropriate surface forms, although this may also fall under (Lexical) Mapping Theory (Asudeh & Giorgolo 2012), a mapping between structures which is conceptualized as a separate structure of its own (Falk 2001:96).

Semantic functions are present at f-structure in LFG and although there is a clear idea of what f-structure can potentially represent in terms of semantic functions (lexical entry of the predicate including its a-structure, the f-structure of the predicate's grammatical function or functions if the top predicate has more than one argument, the tense information of the predicate in question), it is as yet unclear exactly what the limits of f-structure are. For example, whether f-structure contains a separate entry for the feature HUMAN is uncertain as it is only required in some languages, in some cases, and the existence of empty categories is questionable. The principles which allow LFG to maintain an internally-consistent structure with regards to f-structure are as follows:

- Every entry of f-structure - an 'attribute' of grammar - is unique
- *All* the functions of a single predicate must be represented in its f-structure
- Every argument has its own f-structure

Principles of f-structure (Bresnan & Kaplan 1982)

This view of semantic functions yields representations such as Figure 7.4 which exemplifies the f-structure of the sentence *Emma kisses Andrew* and includes the entries

$$\begin{bmatrix} \textsc{pred} & \text{`kiss}\langle \_\,, \_ \rangle\text{'} \\ \textsc{tense} & \textsc{pres} \\ \textsc{subj} & \begin{bmatrix} \textsc{pred} & \text{`Emma'} \end{bmatrix} \\ \textsc{obj} & \begin{bmatrix} \textsc{pred} & \text{`Andrew'} \end{bmatrix} \end{bmatrix}$$

Figure 7.4: f-structure of *Emma kisses Andrew*

PRED, TENSE, SUBJ, OBJ which are all proposed (and the most widely accepted) attributes of f-structure. These attributes all have values and cannot be repeated at the same level of representation, giving us separate embedded f-structures for SUBJ and OBJ, all of which derives from the principles of f-structure paraphrased above. What is unclear in LFG is the number and nature of all of these attributes. For example, presumably, a voice attribute is possible at f-structure. If such an attribute is necessary, what might its potential values be?

Despite these questions, LFG makes a strong claim of what is universal to the architecture of language, in these attributes. A-structure is proposed to represent the thematic roles (AGENT, PATIENT and so on) of the arguments of a predicate, which are the another essential element to relate predicates to their various voice alternations in any language. Whether this level of representation is necessary or not (Findlay 2014), the need for relating or linking these roles to the grammatical functions of the predicate is still necessary. LFG's *Principle of Direct Syntactic Encoding* states that "no rule of syntax may replace one function by another" (Bresnan & Kaplan 1982), therefore in order to accommodate an output such as *Andrew was kissed by Emma* for the same lexical predicate *kiss*, a mapping theory is required.

The 'standard' mapping theory that has served LFG for the past two decades relies on grammatical functions (SUBJ, OBJ, etc.) being decomposable into categorical features (Bresnan & Kanerva 1989). The 'Grammatical Features' proposed to build these functions are 'Restricted' and 'Object', which represent the intrinsic classification of grammatical functions and are given the following descriptions:

±R (Restricted) – semantically (un)restricted functions
±O (Object) – object-like (usually not an external argument)

Grammatical Features (Bresnan & Kanerva 1989:57)

In addition to their intrinsic classifications of ±R and ±O, Bresnan & Kanerva (1989) incorporate a thematic hierarchy into their mapping theory by way of the default classification of grammatical features. The hierarchy is based on the usual relative ranking of thematic roles, from Agent at the 'higher' end to Patient and then locative at the 'lower' end of the hierarchy, based on previous works on thematic roles (Jackendoff 1972, 1983; Givón 1984; Foley & Van Valin 1984; Kiparsky 1987). The role highest on the hierarchy is associated with the feature [-R] on the principle that this will be the source of resolution

when the intrinsic classifications of grammatical functions do not clearly associate those functions with one thematic function over another, as [-R] alone could apply to either the AGENT or PATIENT roles.

The lexical predicate *kiss* would therefore have arguments with the features as described in Figure 7.5.

	kiss ⟨ AGENT	, PATIENT ⟩
instrinsic	[-O]	[-R]
default	[-R]	

Figure 7.5: Grammatical Features of the arguments of *kiss* with its a-structure

As AGENT has the intrinsic classification of [-O] and PATIENT [-R], but SUBJECT and object are both unrestricted functions in terms of which thematic roles can fill these positions, a predicate like *kiss* with a SUBJ and OBJ function has an AGENT SUBJECT due to the [-O] being the only feature in need of satisfying between the two thematic roles.

The passive 'rule' can be formulated in these terms, as seen in Figure 7.6, where passivization suppresses the argument highest on the thematic hierarchy (that would otherwise have a default classification of [-R]).

	$\text{kiss}_{\text{passive}}$ ⟨ AGENT	, PATIENT ⟩
instrinsic	Ø	[-R]
default		

Figure 7.6: Grammatical Features of a lexical passive rule

This Grammatical Features passivization has the usual outcome of AGENT suppression and the remaining argument must be linked to the SUBJECT function, according to Bresnan & Kanerva (1989), because of the subject condition (Baker 1983). The subject condition is simply that a lexical predicate must have the grammatical function of SUBJECT, if no other.

Lexical Mapping Theory (Bresnan & Kanerva 1989) as described above has been subject to revision to account for the original Chichewa data more accurately (Alsina & Mchombo 1993) and, more broadly, to account for argument linking in unaccusative verbs Bresnan & Zaenen's (1990) (the default classification of grammatical functions is unnecessary for an analysis of unaccusative verbs), but the core principle of decomposable grammatical functions and the categories of 'restricted' and 'object-like' remain its central innovation.

This version of (lexical) mapping theory could describe the GET-passive as well as the impersonal in Welsh, but of course this rule cannot capture the restrictions on the intransitive verbs that can impersonalize. The impersonal morphology would require a an intransitive counterpart (in addition to a transitive application sharing the Grammatical Features as described in 7.6) which could also unlink a grammatical function from its features, but in addition it would have to apply only to intransitive verbs with animate subjects. This is not a feature available in the above version of mapping theory

stemming from Bresnan & Kanerva (1989). A broader critique of Bresnan & Kanerva's (1989) Lexical Mapping Theory includes the arguments that basing features on the notion of thematic hierarchies is flawed as no universal thematic hierarchy has been shown to exist (Newmeyer 2002) and a hierarchy based on all generalisations in the previous literature is impossible (Levin & Rappaport Hovav 2005:Ch.6).

Later mapping theories acknowledge and attempt to take these difficulties into account, in addition to the issue of argument reducing or increasing processes. A Dowtyian (Dowty 1991) approach to 'higher' and 'lower' thematic roles, in the form of more-Proto-Agent-like and more-Proto-Patient-like, is also compatible with mapping theory, but this kind of gradient distinction lacks the ability to deal with overt case marking without alteration of the entailments originally hypothesized (Butt 2006:100), a strategy adopted by Zaenen (1993) as applied to Dutch unaccusatives.

A current approach to mapping theory in LFG, proposed by Kibort (2007, 2014), has the potential to be applied to the Welsh data, to successfully differentiate between the semantically similar IMPS construction and the GET-passive, and is outlined in section 7.3.2.

7.3.2 Kibort's Mapping Theory

Kibort (2007) proposes five modifications to the mapping theory (MT) described above in 7.3.1, to take into account constructions, such as causatives, which had previously lacked a satisfactory analysis in LFG, and to formally clarify assumptions which had been made in analysing structures, such as empty thematic roles in raising verbs (Zaenen & Engdahl 1994). Kibort's mapping theory (Kibort 2001, 2007, 2014) argues for the importance of the separation of a-structure and thematic roles, which, as alluded to in section 7.3.1, is not a clear assumption in all analyses employing LFG. The following is a summary of Kibort's MT.

Separating a-structure (argument positions, under Kibort's MT) from the assignment of thematic roles is supported by four arguments (Kibort 2007:253-255):

(i) verb alternations (as exemplified widely by Levin 1993) preserve the thematic roles whilst altering the syntactic positions of the arguments

(ii) argument positions may not be associated with thematic roles; empty semantic arguments, such as dummy subjects in raising verbs, demonstrate a filled argument position associated with no thematic roles

(iii) syntactic phenomena such as passivization can be characterized on a structural basis and a structural basis alone as a semantic generalization is not possible to account for the behaviour of unergative verbs, for example (Rosen 1984).

(iv) thematic roles may be affected seperately from argument positions; Ackerman & Moore (2001) discuss types of causativization in the world's languages that do

not create an additional argument position for arguments which are semantically present (and argue in favour of separating argument positions from thematic roles within argument structure)

This separation of structural position ($\langle$ arg_1 , arg_2 , arg_3 , etc. $\rangle$) from semantic association ($\langle$ AGENT , PATIENT , INSTR , etc. $\rangle$) paves the way for the unexpressed arguments of the GET-passive and IMPS to be represented as thematic roles but unexpressed syntactically.

As previously stated in section 7.3.1, there is no uniform thematic hierarchy of thematic roles to use as a coherent basis for MT (Ackerman & Moore 2001; Levin & Rappaport Hovav 2005; Kibort 2007) and Kibort's MT adopts the Dowtyian view of arguments consisting of predicate entailments. These predicate entailments are either more proto-Agentive or proto-Patientive (Ackerman & Moore 2001:44-45) in such a way that the entailments can be identified along this continuum of properties used to replace the role of the thematic hierarchy in this MT. Kibort (2007:256) interprets these entailments (or the proto-properties associated with them) as being the source of alternation in some verbs' arguments, such as, for example, the locative alternation *Oliver loaded the hay onto the wagon* or *Oliver loaded the wagon with hay*. The participants differ, albeit very slightly, in their set of predicate entailments, although the participants still consist of the appropriate entailments for the thematic roles of the verbs in question.

The next modification to MT is the association of Grammatical Functions ([$\pm$R] and [$\pm$O]) to fixed argument positions. This has the benefit of dealing with verb alternations by having arguments 'compete' for certain argument positions when their Grammatical Functions bear enough similarity. This modification can also account for morphosemantic phenomena such as the English dative alternation without positing any additional stipulations on argument structure (Kibort 2007:262), by interpreting these double object datives as instances of valency increase from the prepositional ditransitive verbs. The increase in transitivity from a sentence like *Tara handed a drink to Nicholas* to *Tara handed Nicholas a drink* causes the two objects of the verb *to hand* to compete for the arg_2 position (which has the grammatical function [-R] associated with it), whereas the prepositionally marked beneficiary occupied the arg_4 position ([-O])(2007:259-260). The resolution of this competition is now left to the semantics of the predicate entailment properties of the participants.

The fourth revision to LFG's MT concerns the Mapping Principles (Bresnan & Zaenen 1990) and serves to erase the need for the Subject Condition:

(21) Mapping Principle
The ordered arguments are mapped onto the highest (i.e. least marked) compatible function on the markedness hierarchy. (Kibort 2007:265)

This simplified principle has the advantage of also writing out the redundancies of

	-R	+R
-O	SUBJ	OBL_θ
+O	OBJ	OBJ_θ

Figure 7.7: Cross-classification of Grammatical Functions

the previous Mapping Principles which restated the hierarchy of Grammatical Functions due to the lack of consistency in the thematic hierarchy they relied upon. Mapping the ordered arguments to the highest function means that the Arg_1 or subject position will be filled when the Grammatical Functions are compatible with this position, accounting for the subjects of unaccusative verbs in languages like English.

The final innovation to MT brings this summary back to the central problem of passivization in the form of subject suppression. Following the impact of the above revisions to MT summarized above, Kibort finds that the only remaining level of representation which can be affected by a morphosyntactic operation such as passivization is the assignment of grammatical functions to arguments and the options available to describe this operation must lie in the modification the restrictions of the Grammatical Functions (2007:266-267). Kibort introduces a "mechanism of increasing markedness" (2007:267) in order to limit morphosyntactic operations to only add 'marked' features, which are deemed to be [+R] and [+O], although the basis for this markedness scale is unclear. Only a [+R] feature can be assigned to a [±O]-featured argument and a [+O] to a [-R]-featured argument, due to the principle of monotonicity preventing [-R] being able to affect a [+R] argument and [-O] to affect [+O] and vice versa. Passivization therefore involves the addition of the feature [+R] to a subject which had the feature [-O], producing the appropriate features for the grammatical function of oblique (see Figure 7.7).

The cumulative results of these revisions to LFG's mapping theory are a passivization operation consisting of the grammatical feature [+R] which applies to the position arg_1 of the predicate in question.

$$\textit{verb}_{\text{PASSIVE}} \quad \langle \quad \begin{matrix} x \\ | \\ \text{arg}_1 \\ [\text{-O}] \\ [\text{+R}] \\ \text{OBL}_\theta \end{matrix} \quad \begin{matrix} y \\ | \\ \text{arg}_2 \\ [\text{-R}] \\ \\ \text{SUBJ} \end{matrix} \quad \rangle$$

Figure 7.8: A passivized transitive verb with the grammatical features of its arguments (Kibort 2007:267)

The passivized transitive verb in Figure 7.8 shows x, arg_1, to have been restricted to the semantics of an oblique. This leaves y, arg_2, as an unrestricted argument and therefore compatible with the function of SUBJ, due to SUBJ being the least marked compatible function, according to the Mapping Principle in (21).

As this operation affects only the first argument position, that of the highest the-

matic role, it readily captures the impersonal morphology's behaviour, affecting both transitive and intransitive predicates. However, the GET-passive's behaviour now escapes description. In order to capture the difference between the Welsh impersonal and the GET-passive, there has to be a specification which means that the GET-passive can only use transitive verbs in its construction. Moreover, a handful of transitive verbs are known not to GET-passivize, therefore their incompatibility also needs to be accounted for in the form of the Grammatical Features of their arguments.

7.3.3 Accommodating the Welsh data

If the verbs *gwybod* 'know', *gallu, medru* 'be able to' and *ymddigrifo mewn* 'be entertained by/in' all fail to GET-passivize but are able to undergo impersonalization, there must be a difference at some level of representation. In addition, to account for the differences in transitivity between the GET-passive and IMPS, the GET-passive must have some differentiating restricting feature. If the Kibort model of passive given above in Figure 7.8 is to be taken as the basic kind, the only additional Grammatical Feature available for the a-structure of the GET-passive, according to Kibort (2007:267), is [+O], if we assume that arg_2 already has the feature [-R]. This would result in the GET-passive – presumably any passive that applies only to transitive predicates – suppressing the subject but preserving the object ('object preservation' as seen in Polish personal actives Kibort 2004:368-372). Whilst this is not immediately obviously a problem for Welsh with its lack of subject marking (see 2), the sole argument of a GET-passive corresponds to the agreement marking on the GET verb *cael* and, therefore, null subjects are possible in this construction, suggesting it is associated with the privileged function of SUBJ. Preserving the objecthood of arg_2 under passivization is a problem for other languages too, such as English passives, where arg_2 is clearly mapped onto the SUBJ grammatical function due to the syntactic position of the argument, resulting in the ungrammatical (22b).

(22) a. Jill got soaked
b. *got soaked Jill

Although Kibort (2007, 2012, 2014) reasons that only the addition of [+R] or [+O] should be possible (see 7.3.2), the only feature left for passivization to affect arg_2 produces a result that is at odds with well-known data. Assuming that imposing a negative feature on a previously featureless argument does not violate monotonicity and therefore partly ignoring the fifth revision to MT ("mechanism of increasing markedness") provides three additional options:

(23) a. adding [-R] to a [-O] argument, resulting in a SUBJ
b. adding [-O] to a [+R] argument, resulting in an OBL_θ
c. adding [-O] to a [-R] argument, resulting in a SUBJ again

The assumption behind this proposal is that morphosyntactic operations are not limited to marked Grammatical Features. The negative consequences of predictions made by the existence of these additional operations are not addressed by Kibort (2007, 2012, 2014) and could potentially provide a passive operation which affects two arguments simultaneously, as in Figure 7.9.

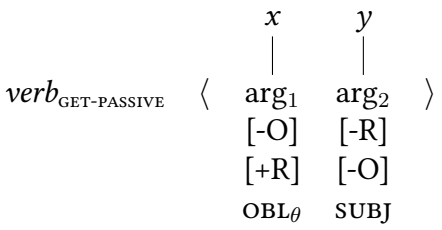

Figure 7.9: Grammatical features of a Welsh GET-passive predicate

The additional specification of [-O] serves to associate the argument more definitely with the function SUBJ, a little redundantly as the Mapping Principle has the same affect: the affect of an operation as seen in Figure 7.9 on a Welsh transitive verb is the same as that of the proposed passive in Figure 7.8. However, this passive that specifies a Grammatical Feature for two arguments has the advantage of explicitly requiring two arguments in order to operate. In addition, it predicts that the second argument cannot have the feature [±O]. It follows, then, that the operation would be unable to operate on the verbs *gwybod, gallu, medru* and *ymddigrifo mewn* as their second argument (not arg_2 position, but the second argument of a transitive verb) has the specification [+O] or [-O].

(24) medrai'r cwbl i gyd
be.able.IMPF.3SG'ART all DAT joint
'[he/she/it] was able to do them all' (original meaning: 'he knew them all')
P.58; J. Glyn Davies (1952) Edward Wood a'r dadgeiniaid. *Lleufer: cylchgrawn Cymdeithas Addysg y Gweithwyr yng Nghymru* [Journal] 8:2, pp. 57-65

(25) a. *cafodd y delyn ei mhedru (gan Eldra)
get.PST.3SG ART F\harp POSS.3SG F\be.able (by Eldra)
intended meaning: Eldra played the harp / the harp was mastered by Eldra

b. *mae hyn yn cael ei ymddigrifo mewn (gan Eryl)
be.3SG this.ABST PROG get POSS.3SG be.entertained in (by Eryl)
intended meaning: this is found to be entertaining by Eryl

The type IV verb data (introduced in chapter 3) shows that the object of the verb *medru* 'to be able to' in (24) must have the Grammatical Feature [+O] or [-O] as these predicates fail to GET-passivize, as shown in (25a) and (25b).

This solution makes the assumption that the number of arguments affected by the operation must correspond to the number of arguments of the predicate, which is not strictly necessary in LFG. In fact, to account for the difference in restrictions to passivized arg_1 in the transitive and intransitive impersonals, two different f-structures must be

$$\begin{bmatrix} PRED & \text{`}czytano < \text{SUBJ, OBJ} >' \\ TENSE & PAST \\ SUBJ & \begin{bmatrix} PRED & \text{`}PRO' \\ HUMAN & + \\ NUM & PL \\ GEND & VIR \end{bmatrix} \\ OBJ & \begin{bmatrix} \vdots \end{bmatrix} \end{bmatrix}$$

Figure 7.10: f-structure AVM for Polish impersonal *czytano coś* (Kibort 2008:269)

$$\begin{bmatrix} PRED & \text{`}disgynnir < \text{SUBJ} >' \\ TENSE & PRES \\ SUBJ & \begin{bmatrix} PRED & \text{`}PRO' \\ HUMAN & + \end{bmatrix} \end{bmatrix}$$

Figure 7.11: Potential f-structure AVM for Welsh intransitive impersonal *disgynnir*

associated with the transitive and intransitive respectively. As the restriction to the intransitive impersonal was most obviously animacy (or humanness), this is a feature that has to be introduced in the f-structure of the intransitive impersonal but not the general impersonal (Figure 7.8) as a requirement of its subject.

As mentioned above in 7.3.1, the attributes included as semantic functions at f-structure should be finite, but the precise number and kind of these attributes is not yet clear. Incorporating an animacy feature into f-structure is not unusual and this solution has been adopted in dealing with animacy restrictions in Polish subjectless constructions (Kibort 2008), where the subject is represented at f-structure with the attribute [HUMAN], as seen in Figure 7.10 for *czytano coś* 'read.IMPS something'.

Kibort (2008) uses the value 'PRO' – that of a pronominal anaphor – for the attribute PRED which has its own f-structure associated with it. This 'PRO', which is the SUBJ of *czytano* 'read.IMPS', then has the attributes HUMAN, NUMBER and GENDER. It is this same structure that can be given to the suppressed subject of Welsh impersonal constructions.

The Welsh intransitive impersonal would therefore have an f-structure as depicted in Figure 7.11, differing from the transitive impersonals which lack the HUMAN attribute (or lack a specification for it). The HUMAN attribute must therefore be specified by the IMPS morphology and passed up to the f-structure.

7.3.4 Summary of an exercise in LFG

What section 7.3 demonstrates is that, as a framework, LFG is descriptively flexible enough to accommodate the conditions of the Welsh impersonal constructions. Adopting the most recent versions of the framework (namely its mapping theory) proves advantageous in the analysis of the facts of IMPS as described by this thesis. Although there are several issues left to be addressed to give a complete view of Welsh IMPS in

LFG, notably the permissibility of agentive phrases headed by *gan* (by-phrases), LFG has the potential to cover the structural requirements whilst allowing the possibility of different structures for separate argument suppressing processes, as represented by their respective Grammatical Features (section 7.3.2).

7.4 Review of approaches to the passive used

Extensive typological work in the area of syntax that affects passives has provided several challenges for linguistic frameworks past and present and the syntax-semantics interface remains the source of continuous reanalysis as more data emerges. Changes to argument structure, or multiple argument structures per predicate are essential for advances in the field either in terms of description, to facilitate machine translation and our interactions with technologies on a practical level, but also to complete a working model of grammar. As seen in this chapter, the challenge to theories of passive and voice phenomena in general is to be flexible enough to accommodate known data, which continue to expand with descriptions of languages such as the one provided by this thesis, whilst providing enough structure to produce testable predictions. Typological studies of passives, as summarized in section 7.1 include data which potentially cover a wide-variety of phenomena subsumed under the label 'passive' and, whilst being a simplification of the facts that does not accurately reflect the diversity of the data, such studies draw attention to the variety of structures that any linguistic framework must accommodate, whether assuming universal structure on some level or simply for descriptive purposes.

RRG finds the IMPS and GET-passive to be structurally identical as voice constructions, although making no statement about their differences. This lack of predictive power is due to the framework's focus on the central role of the PSA for analysis and is internally consistent with the principles of the theory involved. In principle, the framework has the descriptive breadth to accommodate the Welsh data once a consistent description of the participant roles needed for the impersonal morphology to apply has been mapped out. Should this prove impossible, synchronically at least, it is unclear how impersonals would be represented in RRG terms.

LFG has the potential to accommodate both the GET-passive and transitive IMPS within the current view of Kibort's mapping theory, but treats the intransitive IMPS as a separate entity, which is consistent with the framework's claims. Of the approaches treated in this chapter, LFG's current mapping theory is the most suited to framing the Welsh data. As the mapping theory in question has been built with the Polish impersonal in mind, it could be that its well-suitedness to the Welsh data can be attributed to their relatedness as European languages, due to whatever structural or historical commonality, it could be argued. Cross-linguistic analyses of similar argument-reducing phenomena may shed light on the subject, although much of the current scholarly investigation of impersonals in particular focuses on European languages still.

CHAPTER

EIGHT

CONCLUSION

As promised in chapter 1, this thesis has not labelled the impersonal construction as either 'passive' or 'not passive', but instead has explored the semantic and structural differences of the impersonal construction and the analytic Welsh passive.

Chapter 2 summarized the known diagnostics for the two phenomena and provided new data thought to negate a previous generalization. The impersonal was previously known, based on a synthesis of previous work on Welsh, to apply to any verb, whether transitive or intransitive. The data of chapters 5 and 6 showed that this generalization was only partly true. Data was presented which suggested that Awbery's (1976) generalization – that an impersonal and GET-passive could not co-occur – was disproved, but this data was shown in chapter 6 to be a more straightforward case of impersonalization on the auxiliary *cael* 'get'. Chapter 2 also provided a detailed analysis of the prerequisites for an analytic passive to occur in Welsh in sections 2.2.2 and 2.2.3.

The thesis also responded to claims that the impersonal is impervious to either unergative or unaccusative verbs by attempting to establish diagnostics for unaccusativity in Modern Welsh (chapter 4) with some success. This led to the comparison of derived subjects in transitives from chapter 3 with intransitive unaccusatives, with no correlation found. However, the structures of the Welsh causative construction and reflexivization were applied in ways that will benefit future research on them. Similarly, a set of prefixes previously alleged to be reflexive was explored and found not to be reflexive[1] and also to cause behaviour not seen in other verb types, according to other syntactic diagnostics.

Other deviations from the impersonal data have proved fruitful, with possessive constructions being observed as predication for property concepts other than psych-verb in chapter 3 – previously undescribed relations.

Chapters 5 and 6 uncovered fresh datasets, according to verb class, which were designed to discover new restrictions to the impersonal morphology. These were largely successful in identifying restrictions to intransitive impersonals. Siewierska (1984) and Blevins (2003)'s observations proved useful in refining this restriction to include only

[1] Thanks to Dr Pavel Iosad for information on the literature on this subject and for helpful discussion

'unspecified' or 'generic' human (and potentially other higher animates) subjects. No restrictions were found to the impersonalization of transitive verbs, however, as explained by section 6.6. This section also acknowledged the remaining problematic data of *by*-phrase adjuncts, which will need to be the topic of future investigation.

The last chapter set the Welsh data in the context of linguistic theory on passives, in order to justify the benefit of a broad descriptive study of a single phenomenon in one language, such as the one undertaken here. The theoretical literature benefits from the additional knowledge on the Welsh constructions, which serves to highlight gaps in the passive as conceptualized by the frameworks studied. Clearly, more frameworks could be included in future research, with Chomskyan theories notably absent. Approaches such as Baker, Johnson & Roberts (1989), in which the feature passive is assigned to a single morpheme, may well work for the impersonal, but will have to be explored in future work. Equally, Alexiadou & Doron's (2012) theory of two voice sub-heads may capture the difference between the impersonal and the analytic passive in Welsh, but time limits the present investigation.

Providing a more thorough account of the Welsh data than seen previously allows for such research to be done more accurately and this thesis provides a basis for this kind of theoretical inquiry as well as more generally providing new data on Welsh verbs classes – groundwork for more research on Welsh.

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APPENDIX

A

LIST OF MIDDLE WELSH *O*-MARKED VERBS

Middle Welsh	Modern Welsh	Translation
but	bod	be
marw	marw	die
llithraw	llithro	slip
diangk	dianc	escape
dygwydaw	(disgyn)	fall
mynet	mynd	go
dyuot	dod	come
kyuaruot	cyfarfod	meet

Table A.1: List of intransitive O-marking verbs from Manning (1995)

Middle Welsh	Modern Welsh	Translation
eisted	eistedd	sit
ymwahanu	ymwahanu	separate
kerdet	cerdded	walk
redec	rhedeg	run
crwydraw	crwydro	wander
llauuryaw	llafurio	labor
ymlad	ymladd	fight
pregethu	pregethu	preach
bwyta	bwyta	eat
studyaw	astudio	study
gwylyaw	gwylio	watch
ryuedu	rhyfeddu	wonder
gwedyaw	gweddio	pray
ymbaratoi	ymbaratoi	prepare self
ymwasgu	ymwasgu	embrace e. other
ymrodi	ymroddi	devote self
ymchoelut	(dychwelyd)	return
esgynnu	esgynnu	mount
ymdidan	sgwrsio	converse
pechu	pechu	sin
ymgroessi	ymgroesi	cross self

Table A.2: List of intransitive A-marking verbs from Manning (1995)

APPENDIX

B

LEVIN'S (1993) MEASURE VERB CLASSES

The 'measure' verbs as included in Levin's (1993) verb classes:

(1) **"measure" verbs:** measure read register total weigh (Levin 1993: Section 54.1)

(2) **"cost" verbs:** carry cost last take (Section 54.2)

(3) **"fit" verbs:** carry contain feed fit hold house seat serve sleep store take use (Section 54.3)

(4) **"price" verbs:** appraise assess estimate fix peg price rate value (Section 54.4)

(5) **Location Subject Alternation** carry contain feed fit hold house seat serve sleep store take use (Section 3.6)