Who do you think you are?

Examining long-distance clitic Agreement asymmetries in Welsh A′-movement constructions

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Abstract

Syntactic Agreement occurs when two elements match one another in terms of features. This process may be overtly realized in the form of morphological Agreement, which reflects the transfer of Case, ϕ-, and WH-features between elements. However, the distance between the two elements seeking to enter such syntactic relationships may impact the viability of Agreement, and even prevent it from taking place in full (Chomsky 2000, 2001). In some Welsh dialects, a form of this locality-constrained Agreement surfaces in A′-movement constructions. When a WH-phrase successively-cyclically moves from its base-generated position to [Spec,CP], a proclitic surfaces at the vP phase edge and takes on the ϕ-features of the moving element. However, when the moving element base-generates in an embedded clause, full ϕ-feature Agreement can no longer surface at the matrix vP phase edge (Borsley et al. 2007; Willis 2000, 2011). In this thesis, I introduce data from personal communication with four native speakers of Welsh to shed new light on the behavior of constructions in which full Agreement is unavailable. I build on the proposal by Willis (2011) that these clitics are a spell-out of the verb in movement contexts, but find problems with the implementation of extrinsically ordered lexical insertion rules to account for Agreement patterning. Working within the Relativized Agree framework proposed by Kobayashi (2014, 2020), I ultimately find that ϕ-feature asymmetries in long-distance A′-movement constructions are most likely a reflex of deactivated Agreement. This analysis clarifies the constraints on Welsh clitic Agreement and supports the hypothesis that the Activity Condition is a source of parametric variation (Baker 2008; Preminger 2014).

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1	first person
2	second person
3	third person
ABS	absolutive
ACC	accusative
AO	animate object
AUX	auxiliary
COMP	complementizer
CONJ	conjunct inflection
D	definite
DAT	dative
DECL	declarative
ERG	ergative
F	feminine
FUT	future
IC	initial change (ablaut)
IMPF	imperfect
INT	interrogative
IO	inanimate object
M	masculine
NOM	nominative
NMZ	nominalizer
PART	participle agreement
PL	plural
PRED	predicate
PRES	present
PROG	progressive
PRT	preterite
PST	past
REL	relative
S	singular

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Chapter 1

Introduction

1.1 Successive-cyclic movement at the vP phase edge

The proposal that WH-movement takes place successive-cyclically has significant consequences for Minimalist frameworks, as it assumes that all landing sites must be made available to phenomena such as WH-Agreement, stranding, and pied-piping (Chomsky 1986, 2000). In Phase Theoretic frameworks, whether or not a given phrase can host such operations associated with A′-movement becomes an important diagnostic for adjudicating phase-hood status (Legate 2003; Rackowski and Richards 2005). Data from Irish Gaelic and West Ulster English have shown that complementizer phrases exhibit such properties, indicating that the CP is likely a phase under the current definition, but recently scholars have also turned their attention to the phase status of the vP (McCloskey 2000, 2001).

(1) WH-movement to [Spec,vP] in Hindi-Urdu

Sita-ne ***kis-ko*** *soca: ki Ravi:-ne dekha:?*
Sita-ERG who-ACC thought that Ravi-ERG saw
'Who did Sita think that Ravi saw?' (adapted from Manetta 2010:1)

As suggested by example (1), not all languages exhibit identical movement operations. As is observed in the first line, Hindi-Urdu exhibits a WH-movement operation to [Spec,vP], while

[Spec,CP] plays host to the WH-word in the English gloss in line three. The fact that these two languages exhibit typological differences as to which phase is "responsible" for movement supports the argument that the landing sites available in a given language are a source of parametric variation (Rackowski and Richards 2005). This is to say that successive-cyclic operations necessarily pass through the edges of both the vP and CP, although languages differ as to which copy is spelled out in the PF (Chomsky 2015a; Keyser 2008; Legate 2003).

Given that the vP phase edge can serve as a destination for WH-movement, it is expected that other operations associated with movement should also be able to target this landing site. As shown in (2), this is very much the case: the vP phase edge can serve as a host for stranding, Agreement, and pied-piping in a range of languages.

(2) vP movement effects

a. Stranding in [Spec,vP] in Polish

Jaki *Paweł* ***samochód*** *kupił swojej zonie?*
what Paweł.NOM car.ACC bought his.DAT wife.DAT
'What car did Paweł buy for his wife?'

(adapted from Wiland 2010:335)

b. VP pied-piping with a WH-phrase in Ewe

Núkà dí- *nè-lè bé má-dà?*
what want-PROG 2SG-be.at that 1SG.FUT-prepare
'What do you want me to make?' (adapted from Buell 2012:19)

c. vP Agreement in Passamaquoddy

*Wen-**ik** kisitahatom-on-**ik** keti-naci-wikuwamkom-oc-**ik**?*
who-3PL decide.IO-2CONJ-PART.3PL IC.FUT-go.do-visit.AO-2CONJ-PART.3PL
'Who all did you decide to go visit?'

(adapted from Bruening 2006:34)

As shown in (2a), Polish allows stranding of part of a complex DP, thereby exhibiting Left-Branch Extraction (Wiland 2010). In this example, the nominal *samochód* 'car' is deposited at the vP edge during successive-cyclic WH-movement, while the WH-word *jaki* 'which' moves all the

way up to [Spec,CP].

Similarly, the vP itself is shown to be a target of pied-piping in the Ewe example in (2b). When the WH-word *núkà* 'what' undergoes A′-movement from the subclause in which it base-generates, it passes through the matrix vP and pied-pipes the verb phrase *dí-* to clause-initial position. If movement did not take place successive-cyclically through each subsequent phase head, the moving WH-phrase would pass over the verb, rendering it inaccessible to pied-piping.

Unlike the previous two examples, (2c) features a morphological reflex of movement, whereby the matrix verb takes on the third person plural ϕ-features of the WH-word *wenik* to indicate that movement has taken place. The presence of this parasitic Agreement shows that movement must pass through the matrix vP before reaching its final destination in [Spec,CP] (Bruening 2006; Van Urk 2020). Accordingly, the vP phrase is shown to host the same range of movement phenomena that are expected at the CP phase edge.

1.2 Apparent vP Agreement in Welsh

Much like Passamaquoddy, some Welsh dialects exhibit an apparent form of vP Agreement in WH-movement constructions. As shown in (3), the successive-cyclic movement of a WH-phrase from its base-generated position to [Spec,CP] takes on a morphological reflex in the form of a ϕ-feature-carrying proclitic, which surfaces at the vP phase edge.

(3) vP Agreement in Welsh movement:

Pa ***wraig*** *mae* *'r heddlu wedi* ***'i*** *dal?*
which woman be.PRES.3S D police PERF 3FS catch
'Which woman have the police caught?'

(adapted from Willis 2011:16)

In (3), the movement of the WH-phrase *pa wraig* 'which woman' through the vP triggers the appearance of the preverbal proclitic *'i*, which takes on the third person feminine singular ϕ-features

of the moving DP.[1] The presence of this clitic in preverbal position in these constructions is taken as indication that Welsh overtly marks successive-cyclic movement through the vP phase edge (Willis 2000, 2011).

However, when WH-movement involves extraction of a WH-phrase out of a sub-clause, full ϕ-feature Agreement is rendered unavailable. As seen in (4), the movement of the WH-phrase *pa lyfrau* 'which books' over the non-finite verb *darllen* 'read' triggers the appearance of the fully agreeing third person plural proclitic *eu*. But when the same WH-phrase passes through the matrix vP phase edge, the clitic that surfaces in front of the non-finite verb *meddwl* 'think' is the third person masculine singular *ei*, rather than the third person plural *eu*.

(4) Incomplete vP Agreement in Welsh movement:

Pa lyfrau *wyt ti 'n* ***ei*** *feddwl oedd Megan yn* ***eu*** *darllen?*
which books be.PRES.2S you PROG 3MS think be.IMPF.3S Megan PROG 3PL read
'Which books do you think Megan was reading?' (adapted from Willis 2011:6)

The unavailability of full ϕ-feature Agreement in front of the matrix verb in (4) poses analytical problems, as it deviates from the attested pattern of repeated Agreement observed in the Passamaquoddy example in (2c). This appears to indicate that it is possible for the viability of multiple Agreement in such movement constructions to be subject to parametric variation.

In this thesis, I propose an analysis of this apparent asymmetry in the licensing of Agreement that synthesizes previous accounts of Welsh clitic Agreement with theoretical treatment of long-distance successive-cyclic movement. Specifically, I propose that the pattern observed in (4) can best be accounted for as the result of a parametrization of the Activity Condition that prevents a given set of features from participating in Agreement multiple times (Baker 2008; Preminger 2014).

The remainder of the paper is structured as follows. In Chapter 2, I provide a brief background of the Welsh language, including discussion of the phonemic inventory, orthography, and

[1]Note that *'i* is a reduced form of the third person feminine singular clitic *ei*. See Section 3 for a full discussion of Welsh clitic forms.

phonology. In Chapter 3, I describe the known range of clitic Agreement phenomena in Welsh and previous analyses proposed to account for it. In Chapter 4, I further detail long-distance configurations in which clitic Agreement is rendered unavailable and discuss the merits and deficiencies of previous analyses. In Chapter 5, I introduce my own account of these constructions and discuss its theoretical consequences. In Chapter 6, I conclude.

Chapter 2

Language Background

Welsh (Cymraeg) is a Brythonic language spoken in Wales in the British Isles. Sizable diasporic communities of Welsh speakers are also present in England and Y Wladfa in the Chubut Province of Argentina. The language exhibits a degree of dialectal variation, with phonetic and grammatical differences present between North Walian and South Walian dialects (Hannahs 2013). Although these differences are typically generalized as corresponding solely to a North-South distinction, a higher degree of regional variation is actually present. Hannahs (2013:11) notes that this distinction has traditionally been further subdivided into four regional dialects: *y Wyndodeg* in northwestern Wales, *y Bowyseg* in the northeast, *y Ddyfedeg* in the southeast, and *y Wenhwyseg* in the southeast.

In this section, I present a brief background on the Welsh sound system, orthography, and a phonological process common to Brythonic languages called Initial Consonant Mutation, which surfaces in many of the syntactic environments relevant to this study of Agreement. Note that I present all glossed example sentences in this thesis in the traditional Welsh orthography, rather than IPA. The relevant sound correspondences are given in Section 2.1.

2.1 Welsh phonology and orthography

As shown in Table (2.1), Welsh has a medium-sized consonant inventory. IPA symbols are shown in forward slashes in the left-hand columns, with the corresponding symbols used in Welsh orthography given in angle brackets on the right. For each manner of articulation, voiceless consonants are given on the first line and voiced consonants on the second. Welsh orthography aligns relatively closely to English, with only a handful of exceptions: the voiceless nasal consonants /m̥/, /n̥/, and /ŋ̊/ are represented as <mh>, <nh>, and <ngh>, respectively; the voiceless lateral fricative /ɬ/ is symbolized by the digraph <ll>; the voiceless alveolar tap /r̥/ by the digraph <rh>; the voiceless velar fricative /x/ by <ch>; and the voiced and voiceless dental fricatives /ð/ and /θ/ by <dd> and <th>, respectively.

	LABIAL	DENTAL	ALVEOLAR	PALATAL	DORSAL	GLOTTAL
NASALS	/m̥/ <mh>		/n̥/ <nh>		/ŋ̊/ <ngh>	
	/m/ <m>		/n/ <n>		/ŋ/ <ng>	
STOPS	/p/ <p>		/t/ <t>		/k/ <c>	
	/b/ <b>		/d/ <d>		/g/ <g>	
AFFRICATES				(/tʃ/ <ts>)		
				(/dʒ/ <j>)		
FRICATIVES	/f/ <ff, ph>	/θ/ <th>	/s/ <s>	/ʃ/ <si>	/χ/ <ch>	/h/ <h>
	/v/ <f>	/ð/ <dd>	(/z/ <s>)			
LATERALS			/ɬ/ <ll>			
			/l/ <l>			
RHOTICS			/r̥/ <rh>			
			/r/ <r>			
APPROXIMANTS				/j/ <i>	/w/ <w>	

Table 2.1: Consonant inventory of Welsh (adapted from Liu 2018:5)

Additionally, several sounds in Welsh are limited only to loanwords. These consonants, which are shown in parentheses in (2.1), are the palatal affricates /tʃ/ and /dʒ/, and the voiced fricative /z/. Furthermore, the Northern Welsh dialect exhibits a salient difference from the consonant inventory seen above, in that it lacks phonemic voiceless nasals and the voiceless rhotic (Hannahs 2013).

The Welsh vowel inventory is given in Table (2.2). IPA symbols are shown in forward slashes

in the left-hand column and their orthographic equivalents are given in angle brackets on the right. For each vowel height, short vowels are given on the first line and long vowels on the second. Note that <y> represents the sound /ə/, <u> represents /ɨ/,[1] and <w> represents /ʊ/. Long vowels, which are only contrastive with their short counterparts in monosyllabic words, are differentiated by the circumflex diacritic (Liu 2018).

	FRONT	CENTRAL	BACK
CLOSE	/ɪ/ <i>	/ɨ/ <u>	/ʊ/ <w>
	/iː/ <î,ŷ>	/ɨː/ <û,>	/uː/ <ŵ>
MID	/ɛ/ <e>	/ə/ <y>	/ɔ/ <o>
	/eː/ <ê>		/oː/ <ô>
OPEN		/a/ <a>	
		/aː/ <â>	

Table 2.2: Vowel inventory of Welsh (adapted from Liu 2018:5)

In addition to the monophthongs listed in Table (2.2), Welsh has a range of diphthongs. These are given in Table (2.3). Note that only high vowels may act as off-glides.

	2nd Component:		
1st Component:	FRONT	CENTRAL	BACK
CLOSE	/ʊi/ <wy>	/ʊɨ/ <wy>	/ɨu/ <yw>
			/ɪu/ <iw, yw>
MID	/əi/ <ei>	/əɨ/ <eu>	/əʊ/ <yw>
			/ɛu/ <ew>
	/ɔi/ <oi>	/ɔɨ/ <oe>	
OPEN	/ai/ <ai>	/aɨ/ <au>	/au/ <aw>
		/ɑɨ/ <ae>	

Table 2.3: Welsh diphthongs (adapted from Hannahs 2013:24-25)

[1]Note that his vowel has undergone a merger with /i/ in South Walian (Wmffre 2013). As a result, these dialects have a much more limited set of diphthongs.

2.2 Consonant mutation

Perhaps the most notable phonological property of the Brythonic languages is a form of consonant mutation, a sound change that only affects the realization of the initial consonant in a given word. Although mutation has a phonological reflex, the process itself is almost always triggered by some syntactic or morphological criterion. The three main types of mutation are known in the literature as soft mutation (*treiglad meddal*), nasal mutation (*treiglad trwynol*), and aspirate mutation (*treiglad llaes*) (Borsley et al. 2007).[2] As seen in Table (2.4), these phonological changes have a range of effects on the consonants in the Welsh inventory. Underlying phonemes (called "radicals" in the traditional literature) are given in forward slashes, allophones in square brackets, and their corresponding orthographic symbols in angle brackets.

RADICAL	SOFT	NASAL	ASPIRATE
/p/ <p>	[b] <b>	[m̥] <mh>	[f] <ph>
/t/ <t>	[d] <d>	[n̥] <nh>	[θ] <th>
/k/ <c>	[g] <g>	[ŋ̥] <ngh>	[χ] <ch>
/b/ <b>	[v] <f>	[m] <m>	
/d/ <d>	[ð] <dd>	[n] <n>	
/g/ <g>	[–] <Ø>	[ŋ] <ng>	
/m/ <m>	[v] <f>		
/ɬ/ <ll>	[l] <l>		
/r̥/ <rh>	[r] <r>		

Table 2.4: Welsh mutational allophones (adapted from Borsley et al. 2007:20)

A wide range of morphological and syntactic environments can induce the application of mutation, as seen in the examples in (1). In (1a), the preposition *gan* 'with' triggers a soft mutation on the initial consonant of the following nominal argument, resulting in the realization of *blodau* 'flowers' as *flodau*. Similarly, the preposition *yn* 'in' triggers nasal mutation on the first conso-

[2]Borsley et al. (2007) note that Welsh may also exhibit two other mutative sound changes: a form of fortition, which impacts the transformation of a word such as *teg* 'fair' into *tecaf* 'fairest'; and *h*-prosthesis, which results in the insertion of an epenthetic /h/ in certain syntactic environments. They argue that the fortitive change is a purely phonological process, and thus not a true mutation, but that *h*-prosthesis can perhaps best be understood as a form of aspirate mutation in vowel-initial contexts.

nant of a following nominal, inducing *gogledd* ‘north’ to realize as *ngogledd* in (1b) (note that the preposition *yn* itself takes on the allomorphic realization *yng* because the following noun is velar-initial).

(1) a. Soft mutation: *gan* 'with' + *blodau* 'flowers'

gan ***flodau***
with flowers
'with flowers'

b. Nasal mutation: *yn* 'in' + *Gogledd America* 'North America'

yng ***Ngogledd*** *America*
in North America
'in North America' (adapted from Borsley et al. 2007:21)[3]

Consonant mutation can also indicate a syntactic function. In modern Welsh, the only distinction between declarative statements and questions featuring a finite verb is the presence of soft mutation on the first consonant of said verb (which reaches clause-initial position after V-to-T movement). It has therefore been argued that soft mutation is the phonological realization of a [+Q] feature on the complementizer head (Borsley et al. 2007). The relevant contrast is shown in (2).

(2) a. Declarative with finite verb

Gwnaeth *Emrys ei weld.*
do.PST.3S.DECL Emrys 3MS see
'Emrys saw him.'

b. Question with finite verb

Pwy ***wnaeth*** *Emrys ei weld?*
who do.PST.3S.INT Emrys 3MS see
'Who did Emrys see?' (Borsley et al. 2007:58-59)

As seen in (2a), the finite verb takes on the default form *gwnaeth* (from *gwneud* 'to do, make') in the past tense declarative. However, in (2a) *gwnaeth* undergoes soft mutation to *wnaeth* (recall that the "soft" allophone of /g/ is phonologically null) to mark that the sentence expresses a

[3]Data in this study derive from existing literature on the Welsh language, particularly Borsley et al. (2007) and work by David Willis on Welsh movement (see Willis 2000, 2011). Supplemental example sentences are also drawn from Corpws Cenedlaethol Cymraeg Cyfoes (CorCenCC), the National Corpus of Contemporary Welsh (Knight et al. 2020). Where extant literature on certain intricacies of Welsh clause structure could not be found, I consulted four native speakers for their grammaticality judgments. In what follows, I annotate all data that derive from personal communication with the initials of the speaker who produced that sentence (or judgment), as well as the date it was recorded.

question.[4]

Consonant mutation also surfaces in movement constructions of the sort seen in (4). In these types of sentences, mutation functions as a morphophonological reflex of syntactic Agreement at the vP phase edge. See Sections 3.1 and 3.2 for a more complete discussion of mutation in such constructions.

[4]For a discussion of the complete range of environments in which consonant mutation surfaces in Welsh, see Borsley et al. (2007:Ch.1).

Chapter 3

Agreement phenomena in Welsh

In this chapter, I detail the range of known Agreement phenomena in Welsh declarative and movement constructions. In particular, I describe how the internal structure of lexical and pronominal DPs causes certain Agreement asymmetries, and how this patterning differs between declarative and movement constructions. I also describe the successes and deficiencies of various theoretical frameworks that have been proposed to account for the observed patterns. To achieve a unifying account of the long-distance Agreement asymmetry illustrated in (4), my analysis must remain compatible with proposals regarding Agreement more broadly. This section lays the groundwork for that proposal.

3.1 Agreement: inflection on heads

Full Agreement in Welsh only occurs between heads and pronominal DPs, to the exclusion of overt morphophonological relationships between heads and lexical DPs (Borsley et al. 2007). This patterning surfaces in the subject Agreement constructions observed in (1):

(1) Agreement between finite verb *gweld* 'see' and subject:

a. ***gweles*** *i*
see.PRT.1S I
'I saw'

b. ***gwelest*** *ti*
see.PRT.2S you
'You saw'

c. ***gwelodd*** *e*
see.PRT.3S he
'He saw'

d. ***gwelon*** *nhw*
see.PRT.3PL they
'They saw'

e. ***gwelodd*** *y bachgen/bechgyn*
see.PRT.3S D boy/boys
'The boy/boys saw'

(adapted from Borsley et al. 2007:199, cited by Kobayashi 2020)

As shown in (1), a finite verb in Welsh inflects to agree with the ϕ-features of the subject. In (1a), the verb *gweld* surfaces as *gweles*, taking on the first person singular ϕ-features of the subject *i* 'I'. When the subject is pronominal, the finite verb similarly inflects for second person singular ϕ-features, as seen in (1b); third person masculine singular features, as seen in (1c); and third person plural features, as seen in (1d). However, when the subject is lexical, full ϕ-feature Agreement is no longer possible. As shown in (1e), both the singular noun *bachgen* 'boy' and the plural noun *bechgyn* 'boys' trigger third person *singular* inflection on the finite verb. The plurality of the lexical subject is invisible to Agreement, and the verb surfaces as *gwelodd* in both cases. Kobayashi (2020) argues that this *gwelodd* is distinct from the form that co-occurs with the third person masculine singular pronoun in (1c), and instead a syncretic default form that surfaces when full ϕ-Agreement is unavailable.

This asymmetry between lexical and pronominal DPs is also reflected in all three main constructions in which clitic Agreement surfaces, regardless of the morphological or morphophonological reflex of said Agreement (Kobayashi 2020). As shown in examples (2)-(4), respectively, these three main constructions involve: Agreement between the inflecting preposition and the object; between the possessum and possessor; and between the non-finite verb and the direct object

(Borsley et al. 2007; Kobayashi 2020).

(2) Agreement between preposition *ar* 'on' and direct object:

a. ***arna*** *i*
on.1S me
'on me'

b. ***arnat*** *ti*
on.2S you
'on you'

c. ***ar*** *y bachgen/bechgyn*
on D boy/boys
'on the boy/boys'

(3) Agreement between possessum *tad* 'father' and possessor:

a. *fy* ***nhad*** *(i)*
1S father (me)
'my father'

b. *dy* ***dad*** *(di)*
2S father (you)
'your father'

c. *Ø* ***tad*** *y bachgen/bechgyn*
Ø father D boy/boys
'the boy's/boys' father'

(4) Agreement between non-finite verb *gweld* 'see' and direct object:

a. *Gwnaeth Emrys fy* ***ngweld*** *(i).*
do.PRT.3S Emrys 1S see (me)
'Emrys saw me.'

b. *Gwnaeth Emrys dy* ***weld*** *(di).*
do.PRT.3S Emrys 2S see (you)
'Emrys saw you.'

c. *Gwnaeth Emrys Ø* ***weld*** *y bachgen/bechgyn*
do.PRT.3S Emrys Ø see D boy/boys
'Emrys saw the boy/boys.'

(adapted from Borsley et al. 2007:201-202)

In each of the cases above, the head inflects only for the ϕ-features of the DP when the DP is pronominal, and not when the DP is lexical. In the examples of prepositional Agreement found in (2), the preposition itself takes on inflection for person and number in (2a) and (2b), but surfaces in a default form without ϕ-feature specification in (2c). A similar pattern surfaces in the examples of possessive Agreement and direct object Agreement in (3) and (4), but in these instances Agreement is realized not as direct inflection on the head, but as a preceding proclitic that carries the ϕ-features of the DP argument. These clitics surface only when the DP argument is pronominal, as shown in (3a)-(3b) and (4a)-(4b). A lexical DP, on the other hand, is licensed as an argument without inducing proclisis, as seen in (3c) and (4c). Although the verbal head in (4c) does take on the same surface realization as the argument in (4b), this is merely another instance of syncretism between the third person masculine singular form (which happens to be identical to the second person singular form here) and the "default" form (Kobayashi 2020).[1]

Additionally, an Agreement proclitic induces a phonological change when it docks onto a given head, as seen in (3a-3b) and (4a-4b). This phonological change is the aforementioned Initial Consonant Mutation, which causes the first consonant of the head to undergo one of several possible changes to its phonological features, depending on the specifications of the clitic. For instance, the first-person singular proclitic *fy* induces nasal mutation, resulting in the transformation of *tad* 'father' to *nhad* in (3a). The second-person singular clitic *dy*, on the other hand, induces a soft mutation, which causes the realization of *gweld* 'to see' as *weld* in (4b). In cases in which two clitics happen to possess an identical surface realization, the kind of mutation they induce on the head may be all that distinguishes them. As shown in (5), mutation is all that overtly indicates the distinction between the third-person masculine singular clitic and the third-person feminine singular clitic.

[1]Borsley et al. (2007) propose that the realization of *gweld* in the soft-mutated form *weld* in (3c) is not actually the result of syncretism between the default and third masculine singular, but the instantiation of a process they term "syntactic soft mutation." See Borsley et al. (2007:Ch.7) for a full treatment of this topic.

(5) a. *ei* ***dad*** *(e)*
3MS father (him)
'his father'

b. *ei* ***thad*** *(hi)*
3FS father (her)
'her father' (adapted from Borsley et al. 2007:201-202)

In (5), the third-person masculine singular and third-person feminine singular clitics are seen to have identical realizations—both surface as *ei*. The central morphophonological difference between these two forms, however, lies in the respective mutations they induce on the initial consonant of the head onto which they dock. As seen in (5a), the third-person masculine singular clitic triggers soft mutation on the following head, inducing *tad* 'father' to surface as *dad*. Similarly, the third-person feminine singular clitic in (5b) triggers aspirate mutation on the following head, causing *tad* to realize as *thad*. Thus, mutation is a direct phonological reflex of the syntactic relationship between a head and the clitic associated with its argument.

Mutation likewise surfaces in long-distance vP Agreement constructions. In example (4) from the introduction, for instance, the proclitic *ei* surfaces before the verb *meddwl* 'think'. As a reflex of Agreement, *meddwl* undergoes soft mutation to *feddwl*, indicating that the clitic must be the third masculine singular form, as is also shown in (5). However, as discussed, the third masculine singular forms are also syncretic with "default" Agreement, which is what surfaces in these long-distance constructions (Willis 2011). See Chapter 4 for further discussion of this topic.

Discussion of the pronominal Agreement observed in (3)-(5) has thus far focused on the proclitic that docks onto a given head, but in most instances these proclitics may co-occur with an optional enclitic. In (5a), for instance, this enclitic surfaces as *e* 'he', while in (5b) *hi* 'she' appears. Although the enclitic is not necessary to produce a grammatical construction, the fact that it can co-occur with the proclitic does raise the question of which one is the "true" argument of the head.[2]

[2]Willis (2011) notes that some dialects of colloquial Welsh may also exhibit the opposite patterning, wherein only the enclitic surfaces.

As noted by Borsley et al. (2007), traditional Welsh grammarians typically assume that the proclitic is this "true" form, because it is obligatory. Linguistic literature, on the other hand, has argued the opposite, citing the fact that the enclitics are not only homophonous with subject pronouns, but also are found in the same position as overt lexical DPs in Agreement constructions such as (3c). Furthermore, such enclitics never co-occur with the proclitics that surface at the matrix vP phase edge in long-distance movement constructions. This is entirely logical if the enclitic is treated as the "true" form of the pronoun: in a movement construction, the apparent "enclitic" undergoes successive-cyclic internal Merge to its spell-out position in [Spec,CP], leaving behind the proclitic as a reflex of Agreement. Therefore, this paper will assume that any apparent enclitics are in fact the "true" form of the pronominal DP (Borsley et al. 2007:29).

Borsley et al. (2007) also note that the range of pronominal forms in Welsh is not limited to the aforementioned proclitics and enclitics. To begin with, proclitics can occur in reduced forms, particularly the third person singular masculine and feminine clitics, which may both surface as *'i* instead of *ei*. In such cases, the reduced form still triggers the expected mutation on a following head, and the type of mutation induced again distinguishes the masculine clitic from the feminine clitic.[3] This can be observed in the realization of proclitics in long-distance Agreement constructions as well as pronominal constructions more generally.

Additionally, literary Welsh has a set of reduplicated pronouns, which (Borsley et al. 2007:28) describe as "independent, non-clitic elements," and a set of "conjunctive pronouns," which are primarily used to index a change in topic and are "available in both clitic and non-clitic forms." The usage of these forms is beyond the scope of this paper. For a full discussion of the typology of the Welsh pronominal system, see Borsley et al. (2007); Koopman (1999); Sadler (1998).

Finally, although differences in the structure of lexical and pronominal DPs do impact the availability of full agreement in the aforementioned constructions, this is not to say that the syntactic operation of Agree, the process by which features acquire values, is absent. As articulated

[3]In fast speech, the third masculine singular form in particular may elide entirely, and only the soft mutation it induces will surface (Borsley et al. 2007).

by Kobayashi (2020), the *morphological* reflex of this syntactic Agreement may merely be absent, or even default, as in the case of lexical DPs. For example, not all ϕ-features play a role in determining Agreement in every case: Welsh only makes a morphological distinction in gender in the third person singular; elsewhere, overt morphological agreement on the basis of gender is absent. On the other hand, the default Agreement associated with a lexical DP argument arises when full Agreement is rendered inaccessible (Kobayashi 2020). In such cases, the morphological reflex of the set of default ϕ-features happens to be identical to that associated with the third person masculine singular purely due to syncretism (Borsley et al. 2007).

In the following section, I describe the distribution of full and default clitic Agreement patterns in simple declarative and movement constructions.

3.2 Clitic Agreement in movement constructions

As discussed in the previous section, Welsh pronominal and lexical DPs exhibit an asymmetry in terms of their ability to license full ϕ-feature Agreement. However, as described by Kobayashi (2020), this asymmetry disappears when DPs of both types undergo movement. The apparent contrast is shown in (6).

(6) a. *Mae Megan yn* ***ei*** *fwrw (e).*
be.PRES.3S Megan PROG 3MS hit (him)
'Megan is hitting him.'

b. *Mae Megan yn bwrw 'r cathod.*
be.PRES.3S Megan PROG hit D cats
'Megan is hitting the cats.'

c. *Pwy mae Megan yn* ***ei*** *fwrw?*
who be.PRES.3S Megan PROG 3MS hit
'Who is Megan hitting?'

d. *Pa gathod mae Megan yn* ***eu*** *bwrw?*
which cats be.3S Megan PROG 3PL hit
'Which cats is Megan hitting?' (CB 1/27/25)

As seen in (6a)-(6b), the availability of clitic Agreement in a declarative transitive construction depends on whether the direct object is a lexical or pronominal DP. However, when the direct object undergoes A′-movement to the specifier of the CP, the clitic can surface regardless of whether the DP is lexical or pronominal. As seen in (6c), the proclitic *ei* surfaces in front of the verb *fwrw* 'hit' despite the fact that the argument with which it is co-referent, the [+WH] DP *pwy* 'who', has moved from its base-generated position to the specifier of the clause. The fact that the proclitic takes on a realization syncretic with the third person masculine singular form could be taken as indication that full Agreement is not possible in this construction, but such an analysis is belied by the example in (6d).[4] In (6d), the third person plural proclitic *eu* surfaces in front of the verb, therefore exhibiting full ϕ-feature Agreement with the WH-phrase *pa gathod* 'which cats'. As such, the asymmetry between lexical and pronominal DPs with regard to their ability to license clitic Agreement is seen to disappear in object movement constructions.

This asymmetry in Agreement patterning between declarative and A′-movement constructions persists for the licensing of subject Agreement. Specifically, grammatical subjects that undergo A′-movement lose the ability to control the realization of the inflected verb or auxiliary that they syntactically Agree with—their ϕ-features are no longer accessible to the syntax. As a result, an inflected verb will surface in the same "default" form that co-occurs with lexical DPs, and an auxiliary verb will take on one of two "relative" forms, *sy* in the present tense or *oedd* in the past tense (Borsley et al. 2007; Willis 2011). Examples of these constructions are shown in (7):

(7) Subject dislocation...

a. ...with inflecting lexical verb:

Pa fyfyrwyr ***enillodd*** *y wobr?*
which students win.PRT.3S D prize
'Which students won the prize?' (Kobayashi 2020:40)

[4]This consultant noted that the third person feminine clitic is perfectly licit in the construction seen in (6c) as well. The consultant stated that they wanted to know whether the WH-phrase *pwy* 'who' referenced a masculine or feminine individual, on the grounds that knowing this detail would dictate how they formulated the construction.

b. ...with inflecting auxiliary verb:

Pwy ***sy*** *'n gwybod yr ateb?*
who be.PRES.REL PROG know D answer
'Who knows the answer?' (Willis 2011:15)

As seen in (7a), the inflected verb *ennill* 'to win' surfaces in this construction in the "default" third singular form *enillodd*, despite the fact that the subject with which it entered into an Agree relation is the third person plural *pa fyfyrwyr* 'which students'. Similarly, the auxiliary verb *bod* 'to be' in (7b) surfaces as *sy* regardless of the ϕ-features of the subject (in this case the third singular *pwy* 'who'). As such, full Agreement is disallowed in subject movement constructions by both lexical and pronominal DPs.

The full distribution of default and full Agreement patterning between declarative and A′-movement constructions is summarized in Table (3.1).

	LEXICAL DP		PRONOMINAL DP	
	SUBJECT:	OBJECT:	SUBJECT:	OBJECT:
DECLARATIVE:	default	default	full	full
A′-MOVEMENT:	default	full	default	full

Table 3.1: Typology of clitic Agreement in direct object constructions

As shown in Table (3.1), both lexical and pronominal DPs exhibit non-uniform Agreement patterning. Lexical DPs license default Agreement in every environment except for the direct object position in A′-movement constructions. Pronominal DPs, on the other hand, license full Agreement in every environment except for the subject position in A′-movement constructions. In the following section, I explore a range of theoretical explanations for this asymmetric patterning.

3.3 Accounts of Agreement asymmetries

A number of analyses have been proposed to account for the typology of Welsh Agreement patterns observed in Table (3.1). According to Sadler (1988), the difference in the way lexical and pronominal DPs are licensed derives from an Agreement pattern that runs counter to that observed

in most languages. Specifically, Sadler (1988) argues that Welsh finite verbs enter into the derivation with valued ϕ-features. As a reflex of the Agreement operation, such verbs require a pronoun in the same domain bearing the same ϕ-features. When the finite verb enters into the derivation without ϕ-features, it can no longer license a pronoun, so a lexical DP subject is expected. This explains why lexical DPs only ever co-occur with "basic" or "default" verb forms. Although this analysis does describe the known asymmetry, Kobayashi (2020) notes that Sadler (1988) does not adequately explain why a verb bearing valued ϕ-features specifically requires Agreement with a pronoun. Furthermore, this analysis fails to capture why the Agreement pattern changes in A′-movement environments: it is not clear how subject dislocation should allow a finite verb without valued ϕ-features to license a pronoun instead of a lexical DP.

Roberts (2005) proposes an alternative analysis, arguing that Agreement morphology on a finite verb takes the form of an Agreement clitic that is housed in an AgrP. When the verb moves from the vP up to the AgrP and joins to this Agreement clitic, the clitic becomes a probe and seeks its c-command domain for a DP bearing valued ϕ-features. This DP is then obligatorily spelled out as a pronoun that agrees in ϕ-features with the verbal clitic. As shown in (8), the distinction between a lexical and pronominal DP comes down to Case requirements. Roberts (2005) argues that the pronoun in this construction does not need Case, because it is really just an echo of the Agreement clitic. As seen in (8a), an Agr head containing a clitic can therefore license an Agreeing pronoun. A lexical DP, on the other hand, does need Case, but the clitic probe prevents such a DP from accessing a Case position, because unvalued ϕ-features on the T head act as an intervener. As seen in (8b), this means lexical DPs can only be licensed when the Agreement clitic is not present, i.e. when the finite verb is in its "basic" or "default" form.

(8) a. When a clitic occupies Agr:

$[_{CP}\ C\ [_{AgrP}\ V\text{-}v\text{-}\mathbf{Agr}_{[i\phi]}\ [_{TP}\ t_T\ [_{vP}\ (\mathbf{Pron}_{[u\phi]})\ t_v\ [_{VP}\ t_V\ (Obj...)\ ]]]]]$

b. When a clitic does not occupy Agr:

$[_{CP}\ C\ [_{AgrP}\ V\text{-}v\text{-}T\text{-}Agr\ [_{TP}\ \_\ \boldsymbol{t}_T\ [_{vP}\ \mathbf{LexDP}_{[i\phi][uCase]}\ t_v\ [_{VP}\ t_V\ (Obj...)\ ]]]]]$

(adapted from Roberts 2005, cited by Kobayashi 2020:41)

Borsley et al. (2007) note several problems with this Case-theoretic analysis. To begin with, they raise suspicion at the way in which Roberts (2005) characterizes the differences between lexical and pronominal DPs. The analysis proposed by Roberts (2005) is focused on the behavior of pronouns in literary Welsh, which can be dropped when redundantly co-indicated by verbal Agreement. But Borsley et al. (2007) observe that pronouns cannot be dropped with any regularity in colloquial Welsh, which makes their treatment as "echoes" of a verbal Agreement clitic unusual. As articulated by Kobayashi (2020:41), "As far as colloquial Welsh is concerned, we have no reason to regard pronouns as expletive items without a Case requirement."

Kobayashi (2020) also describes a case in which the analysis proposed by Roberts (2005) makes incorrect predictions about the behavior of Welsh. As shown in (9a), so-called "expletive" subject pronouns are syncretic with object pronouns. Because object pronouns do not control verbal Agreement, Kobayashi (2020) argues that they have a Case requirement and therefore cannot be an expletive of a clitic.

(9) a. *Gadawaist ti* ***nhw*** *ar y llawr disgo.*
leave.PRT.2S you them on D floor disco
'You left them on the disco floor.' (CorCenCC)

b. **Gwelodd* ***nhw*** *geffyl.*
see.PRT.3S them horse
Intended: 'They saw a horse.'

(Borsley et al. 2007:206, cited by Kobayashi 2020:41)

Accordingly, Kobayashi (2020) hypothesizes that it should be possible to move and license this same, non-expletive pronoun as the subject if no clitic appears in the Agr head. However, as shown in (9b), this is not the case: when the verb is in "default" form (i.e. if no clitic is present), raising the non-expletive pronoun to subject position is ungrammatical. Kobayashi (2020) argues that the analysis put forth by Roberts (2005) therefore incorrectly predicts that (9b) should be grammatical.

Another common proposal used to explain the observed asymmetry is that Agreement morphology derives from the incorporation of part of the DP into the verb. Accordingly, the difference between lexical and pronominal DPs arises because part of the pronoun undergoes verb incorpora-

tion as a reflex of Agreement, while a lexical DP does not (Koopman 1999; Rouveret 1991).

According to Koopman (1999), for example, the viability of Agreement specifically depends upon the behavior of the NumP in a complex DP. In the case of pronominal DPs, the NumP moves to [Spec,Agr] to license Agreement. NumPs in lexical DPs, however, cannot escape from the DP and license Agreement because the N head moves to Agr via head movement instead. As a result, [Spec,Agr] does not attract a lexical NumP, explaining why lexical DPs in subject or object position never exhibit Agreement with a verb. Thus, "the Agreement asymmetry directly falls out from the different internal structure of pronominal and lexical DPs" (Koopman 1999:28).

However, several problems surface with regard to this analysis. To begin with, it is not clear how an incorporation analysis can explain the disappearance of the asymmetry between lexical and pronominal DPs in movement constructions. The proposal made by Koopman (1999), for example, cannot adequately account for why NumP incorporation becomes available to lexical DPs in object position when they have undergone A′-movement, as is seen in (6d). It may be possible to argue that a DP bearing a WH-feature exhibits a different internal structure that renders incorporation viable, but this is difficult to account for without changing the analysis proposed by Koopman (1999).

More pressingly, Borsley (2009) identifies a problem with all analyses that posit incorporation as an explanation for the ability of pronominal DPs to license full Agreement. Accounts such as that proposed by Koopman (1999) struggle to explain phenomena such as First Conjunct Agreement (FCA), wherein a verb only agrees with the first of some number of coordinated subjects, as shown in (10):

(10) First Conjunct Agreement:

Rwyt *ti a fi 'n Frythoniaid.*
be.PRES.2S you and I PRED Brythons
'You and I are Brythons.' (CorCenCC)

In this example, the auxiliary verb *bod* 'to be' surfaces in the second person singular form *rwyt*, despite the fact that the subject *ti a fi* 'you and I' is coordinated. Borsley (2009) argues that any

analysis that takes pronominal Agreement as a reflex of incorporation would have to assume that some part of the pronoun *ti* adjoins to the verb in (10). However, incorporating only the NumP of *ti* into the verb would directly violate the Coordinate Structure Constraint.

To that end, Kobayashi (2020) proposes an alternative analysis that does not make overt reference to the internal structure of lexical and pronominal DPs, but rather modifies Agreement to account for the observed asymmetry. Specifically, Kobayashi (2020) builds on a framework called Relativized Agree, as first formulated in Kobayashi (2014). This theoretical apparatus relies on the three basic assumptions seen in (11):

(11) Relativized Agree:

- No label is assigned to an output of Merge
- Labeling takes place at the phase level, as part of the Transfer operation (Chomsky 2015b)
- Minimal search is not available in syntax (Kobayashi 2020:44)

These assumptions ensure that the Agree operation can only apply to relations between heads (Kobayashi 2014). Kobayashi (2020) argues that subject Agreement in sentences with VSO word order falls out nicely from this theory, because the T head probe (assuming the verb has undergone v-to-T movement) can search its c-command domain and easily Agree with the head of the subject DP.

However, Kobayashi (2020) goes on to show that this framework struggles to account for Agreement patterning in sentences with SVO word order, because the head of a complex DP cannot c-command a lower verb, and the lower verb cannot c-command the DP either. The derivation should stop at this point due to the fact that neither head can successfully establish a relationship the other for the purpose of feature valuation, but Kobayashi (2014) proposes the rescue operation seen in (12):

(12) Transfer operation:

Transfer applies to a phase in full if the derivation stops otherwise (Kobayashi 2020:45)

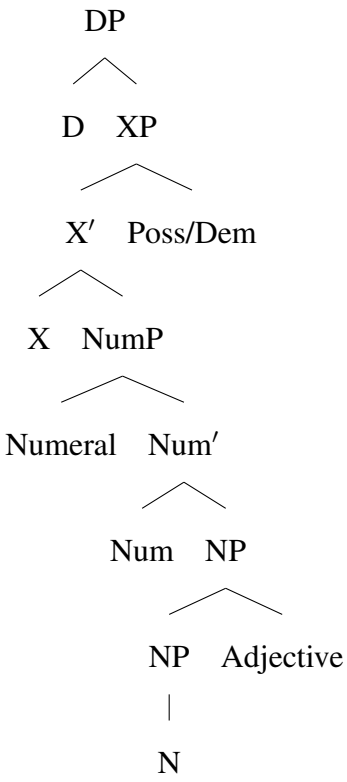
During transfer, labeling takes place. As part of the labeling operation, a Labeling Algorithm examines the content of the terms in a DP. The algorithm then assigns the features associated with these terms to the new label through feature percolation (Cole et al. 1993; Lieber 1989, cited by Kobayashi 2020). The items that have undergone transfer, i.e. the terms within the DP, are now invisible to the derivation, but Kobayashi (2014, 2020) argues that the label itself stays behind. Because the label contains the same information as the head of the DP, and it is high enough in the structure to access its sister node, it becomes a probe (Chomsky 2004, cited by Kobayashi 2020). The label of the transferred DP therefore then searches its c-command domain to find an available goal bearing a valued Case feature, with which it subsequently enters into an Agree relation.

This Relativized Agree framework applies aptly to Welsh, as it ensures that Agreement can still take place even though only heads are assumed to participate in the formation of such dependencies. Constraining Agreement to relationships between heads is necessary, as it allows Kobayashi (2020) to successfully derive the asymmetry between lexical and pronominal DPs without running into the same problems as previous analyses.

Kobayashi (2020) assumes that lexical DPs in Welsh have the structure seen in (13), which is adapted with minimal modification from the analysis proposed by Borsley et al. (2007).[5]

[5]See Kobayashi (2020:48-51) for a description of the motivation behind these modifications.

(13) Lexical DP Structure:



The head of the structure seen in (13) is D, which Kobayashi (2020) argues must bear number and gender, but not person features. Motivation for this analysis derives from the behavior of the Welsh definite article *y(r)*. This article triggers soft mutation on a following adjective when the nominal that the adjective modifies is feminine, as seen in (14a), but not when it is masculine, as seen in (14b). Kobayashi (2020) argues that the nominal alone cannot control whether or not the mutation occurs on a preceding adjective; therefore, the number and gender features of the noun must be passed up to the D head.

(14) a. Feminine noun:

y ***d****rydedd daith*
D third trip
'the third trip'

b. Masculine noun:

y trydedd safle
D third stop
'the third stop' (CorCenCC)

This has implications for Relativized Agreement: if Agreement is an operation between heads, then a higher T head probe will only be able to access the ϕ-features carried in the D head of a lexical DP subject. Thus, the formation of an Agreement relation will take place as seen in (15):

(15) Relativized Agreement with lexical DP:

$[_{\text{AgrP}}$ V-v-**T**-Agr$_{[u\phi]}$ $[_{\text{TP}}$ $[_{\text{DP}}$ **D**$_{[\text{Gr, Nr}]}$ ...$]_i$ t_T $[_{\text{vP}}$ t_i t_v ...$]]]$

(adapted from Kobayashi 2020:53)

Given that only the number and gender features, and not the person feature, are present in the D head, full ϕ-feature Agreement is rendered unavailable.[6] Therefore, to derive the "default" Agreement observed with lexical DPs, Kobayashi (2020) argues that partially valued [uϕ] in Welsh spells out according to the lexical insertion rule seen in (16). This "all or nothing" spell-out rule ensures that a lexical DP in a declarative construction can only ever license default Agreement on an Agreeing verb.

(16) Lexical insertion rule for Welsh [uϕ]:

Assign no Agreement morphology to partially-valued [uϕ]

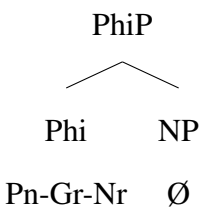
(Kobayashi 2020:53)

To account for the behavior of pronominal DPs, which always license full Agreement, Kobayashi (2020) argues that the head of such DPs in Welsh must bear all associated ϕ-features. Kobayashi (2020) borrows from a typology of pronominal structures outlined by Déchaine and Wiltschko (2002), arguing that the Welsh simple pronoun is a PhiP, bearing the structure seen in (17):[7]

[6]See Kobayashi (2014) for an explanation of why a T probe cannot access the person feature of a lexical DP.

[7]For a description of how the typology proposed by Déchaine and Wiltschko (2002) can account for the structure of other Welsh pronouns, such as the contrastive and focal forms, see Kobayashi (2020).

(17) Structure of a simple pronoun:



The ϕ-features associated with the pronoun are all located in the head of the PhiP, which Kobayashi (2020) does not decompose into NumberP, PersonP, and GenderP for the sake of minimality. This ensures that a Welsh pronoun will always be able to license full Agreement within the stated Relativized Agreement framework, as is shown in (18):

(18) Relativized Agreement with pronominal DP:

$[_{\text{AgrP}}$ V-v-T-**Agr**$_{[u\phi]}$ $[_{\text{TP}}$ $[_{\text{PhiP}}$ **Phi**$_{[\text{Pn,Gr,Nr}]}$ $[_{\text{NP}}$ N]] t_{T} ...]]

(adapted from Kobayashi 2020:59)

Elegantly, the Relativized Agree framework proposed by Kobayashi (2020) automatically also captures the observation that full Agreement is always licensed in object movement constructions in Welsh, regardless of whether the dislocated DP is lexical or pronominal. As described above, movement of a DP higher than its goal will render Agreement unavailable, as the D head is too low in the structure of the DP to access the necessary c-command domain. In this instance, the rescue operation transfers the head of the DP to its label, feature percolation takes place, and Agreement can occur in full. Thus, Kobayashi (2020)'s analysis successfully captures both the asymmetry between lexical and pronominal DPs in declarative constructions and the disappearance of said asymmetry in A′-movement configurations built on direct object dependencies.

One problematic case still remains, however: the complete disappearance of full Agreement when a subject is dislocated across a finite or auxiliary verb. Kobayashi (2020) posits that even this can be accounted for if the Welsh C head is argued to bear defective ϕ-features. These defective features are hypothesized to intervene when a dislocated subject housed in [Spec,CP] probes its c-command domain. Because the C head is more local, it blocks the DP from being able to control Agreement on the auxiliary or finite verb housed in T, as seen in (19).

(19) Relativized Agreement with defective C head:

[$_{CP}$ Subject$_{[i\phi]}$ [$_{C'}$ C$_{[def\phi]}$ [$_{AgrP}$ V-v-T-Agr$_{[u\phi]}$ [$_{TP}$ t_{Subj}...]]]

(adapted from Kobayashi 2020:62)

Therefore, the T head cannot acquire full ϕ-feature valuation, which means it must obligatorily spell out with default features according to the lexical insertion rule articulated in (16). Thus, the analysis proposed by Kobayashi (2020) fully accounts for the entire range of Welsh Agreement phenomena seen in Table (3.1).

Chapter 4

The puzzle: Agreement is unavailable in long-distance A′-movement constructions

As discussed in the previous chapter, the asymmetries in Agreement patterning can be accounted for as the result of differences in the internal structure of lexical and pronominal DPs and defective intervention by a C head carrying default ϕ-features. However, one further Agreement asymmetry is observed in long-distance A′-movement constructions in which a WH-phrase base-generates in an embedded clause but relocates to the matrix CP specifier position.

In this section, I describe this asymmetric construction and explore the successes and deficiencies of the explanatory account proposed by Willis (2011). I follow Awbery (1976); Rouveret (1991); Willis (2000); Borsley et al. (2007); Kobayashi (2020) in assuming the following structures for transitive clauses containing auxiliary and finite verbs, as shown in (1). Elements that participate in Agreement are marked in bold.

(1) Welsh transitive clause structures

a. VSO clause:

$[_{CP}$ C $[_{ArgP}$ V-v-T-**Agr** $[_{TP}$ **Subj**$_i$ t_T $[_{vP}$ t_i t_v $[_{VP}$ t_V (Obj ...)]]]]

b. AuxSVO clause:

[$_{CP}$ C [$_{ArgP}$ Aux-T-**Agr** [$_{TP}$ **Subj**$_i$ t_T [$_{AuxP}$ t_{Aux} [$_{vP}$ t_i V-**v** [$_{VP}$ t_V (**Obj** ...)]]]]

(adapted from Kobayashi 2020:35)

The salient difference between these two transitive clause structures is how Agreement licensing takes place. In the construction seen in (1a), Agreement is assumed to take place both between the object and the verb, and the subject and the T head (to which the verb adjoins after undergoing v-to-T raising). The verb takes overt Agreement morphology to match the ϕ-features of the subject, but no morphological reflex of Agreement between the direct object and the verb surfaces. In the construction seen in (1b), however, an auxiliary verb takes over the role of subject Agreement from the lexical verb, allowing the verb to instead surface in an uninflected base form that Rouveret (1991) calls a "verbnoun." As discussed in the previous section, this verbnoun takes overt clitic Agreement morphology to match the ϕ-features of the direct object. Thus, the VSO construction features overt Agreement morphology only between subject and verb, while the AuxSVO construction features overt Agreement morphology between both subject and auxiliary and object and verbnoun.

4.1 Default clitic Agreement in the matrix vP

It has been shown that the asymmetry between lexical and pronominal DPs disappears in object movement constructions, wherein a fully agreeing proclitic surfaces at the vP phase edge. As shown in (2), a similar proclitic surfaces at the edge of the matrix vP phase in comparable long-distance A′-movement constructions, but universally fails to surface in corresponding declaratives.

(2) a. Declarative with embedded clause

*Mae Megan yn (***ei**) dweud eu bod nhw 'n mynd i 'r siop.*
be.PRES.3S Megan PROG (3MS) say 3PL be they PROG go to D shop
'Megan says they are going to the shop.' (CB: 1/27/30)

b. A′-movement construction with embedded clause

Pa rai ohonyn nhw mae Megan yn ***ei*** *ddweud sy 'n*
which ones of.3PL them be.PRES.3S Megan PROG 3MS say be.PRES.REL PROG
mynd i 'r siop?
go to D shop
'Which (ones) of them does Megan say are going to the shop?'

(CB: 1/30/25)

As seen in (2a), no proclitic can be licensed in the matrix vP before the verb *dweud* 'to say'. However, in the corresponding A′-movement construction in (2b), the proclitic *ei* surfaces before the verb, triggering a soft mutation that causes *dweud* to surface as *ddweud*. Unusually, this proclitic surfaces in the third masculine singular, despite the fact that the WH-phrase undergoing movement in the sentence is the third person plural *pa rai ohonyn nhw* 'which ones of them.' This is unexpected because number and gender are normally visible to Agreement in WH-movement constructions, as discussed in the previous section. Note that there is no fully-agreeing proclitic in the embedded clause in (2b) because the A′-dependency is built on the subject of the clause, rather than the object.

Furthermore, it is not merely the number feature of the WH-phrase that is invisible to clitic Agreement in this type of construction. As shown in (3), the third masculine singular clitic surfaces regardless of the ϕ-features possessed by the WH-phrase.

(3) Long-distance movement constructions featuring...

a. Feminine WH-phrase:

Pa wraig *mae Megan yn* ***ei*** *feddwl mae e 'n ei*
which woman be.PRES.3S Megan PROG 3MS think be.PRES.3S he PROG 3FS
bwrw?
hit
'Which woman does Megan think he is hitting?' (CB: 1/27/30)

b. ϕ-unspecified WH-phrase:

Pwy *wyt ti 'n* ***ei*** *feddwl wyt ti?*
who be.PRES.2S you PROG 3MS think be.PRES.2S you
'Who do you think you are?' (Willis 2011:6)

c. Non-nominal WH-phrase:

Ble *wyt ti 'n* ***ei*** *feddwl mae e 'n mynd?*
where be.PRES.2S you PROG 3MS think be.PRES.3S he PROG go
'Where do you think he's going?' (Willis 2011:6)

As seen in (3a), the proclitic in the matrix vP surfaces as the third masculine singular *ei* despite the fact that the fronted WH-phrase is the obligatorily feminine *pa wraig* 'which woman.' This proclitic takes the same form even when the WH-phrase is ϕ-unspecified, like *pwy* 'who' in (3b), or non-nominal, like *ble* 'where' in (3c). Note that in all three cases, the matrix verb *meddwl* 'to think' undergoes soft mutation to *feddwl*.

Full ϕ-feature Agreement is not possible higher in the derivation either. As shown in (4), it is not available for a WH-phrase undergoing A′-movement to license full Agreement in a doubly embedded clause, then default Agreement in a subsequent embedded clause, but full Agreement again in the matrix clause. Instead, default Agreement is expected in every clause save the embedded one in which the WH-phrase base-generates.

(4) *Pa lyfrau mae Megan yn* ***ei*** */* ****eu*** *ddweud, ei bod hi 'n* ***ei*** */*
which books be.PRES.3S Megan PROG 3MS / 3PL say 3FS be she PROG 3MS /
****eu*** *gredu, ei fod e wedi* ***eu*** *prynu?*
3PL believe 3MS be he PERF 3PL buy
'Which books does Megan say [she believes [he has bought?]]' (EP: 11/8/24)

The plural WH-phrase *pa lyfrau* 'which books' in (4) licenses the third person plural clitic *eu* in the lowest embedded clause, but the corresponding clitics in both higher clauses surface as the default *ei*. Willis (2011) argues that the distribution of fully agreeing and default proclitics reflects the observation that full clitic Agreement is only possible on the verb which the WH-phrase is the direct object of.

Aside from the apparent asymmetry in the form the clitic must take between the embedded clause and the matrix clause, these data show that Welsh clitic Agreement occurs in all clauses in Welsh movement constructions. As argued by Willis (2000, 2011), this repeated availability offers support for the claim that A′-movement takes place successive-cyclically, in that it shows that WH-

phrases leave behind a "trail" of Agreement morphemes as they travel from their base-generated position to the matrix [Spec, CP]. Furthermore, all proclitics are observed to adjoin to the vP edge in these constructions, in similar fashion to the Passamaquoddy example from Bruening (2006), as seen in Chapter 1. Therefore, Willis (2000, 2011) argues the Welsh data further substantiate the proposal that the vP passes the diagnostics for phasehood.

However, the inconsistency in the availability of full ϕ-feature Agreement between embedded and matrix clauses also poses analytical challenges, as it is not clear if it can be captured by the Relativized Agree framework proposed by Kobayashi (2014, 2020). The posited differences in the internal structure of lexical and pronominal DPs cannot resolve this issue, because the type of DP undergoing movement has no effect on the realization of the proclitic found at the matrix vP phase edge. Furthermore, the proposal that the lack of full Agreement in cases of subject movement can be attributed to intervention by a C head bearing defective ϕ-features also struggles to explain this patterning. As shown in (5), a DP undergoing A′-movement must have already successive-cyclically traveled to [Spec,CP] in the embedded clause when the matrix *v* head searches its c-command domain for an available goal. Elements that participate in Agreement are in bold.

(5) No defective intervention in matrix vP Agreement:

[... [$\mathbf{v}_{[u\phi]}$ [V [$\mathbf{DP}_{[\phi]}$ [$C_{[def]}$ [...]]]]]]

Because the DP is higher in the derivation than the C head, it will get targeted for Agreement, and defective intervention will not occur. Given this fact, it is difficult to reconcile how default Agreement still manages to surface as a reflex of Agreement with the matrix vP. In the following section, I examine a proposal by Willis (2011) that seeks to account for this inconsistency.

4.2 Previous accounts and their problems

In his general explanation for Agreement patterning in A′-movement constructions, Willis (2011) assumes that WH-movement is triggered by an uninterpretable WH-feature on a phase head. In subject extraction constructions of the sort seen in (7a), an uninterpretable WH-feature on a C

head becomes a probe when it enters the derivation, searching its C-command domain for a goal bearing a corresponding interpretable feature. Interpretable WH-features are borne by WH-phrases such as *pa* 'which' in (4), rendering them available to serve as goals. Agreement then takes place between the probe and the goal, valuing the uninterpretable WH-feature and allowing movement of the WH-phrase to the specifier of the phase head (Willis 2011:15).

To facilitate long-distance WH-extraction, Willis (2011) proposes that every intervening phase head bears its own uninterpretable WH-feature. This ensures that successive-cyclic movement across multiple phase boundaries does not violate the Phase Impenetrability Condition, which would otherwise prevent the Agree operation from accessing material located in the complement of the subsequent phase head Chomsky (2000, 2001). Therefore, Willis (2011) argues that the Welsh *v* head also enters the derivation bearing a WH-feature in movement contexts. Thus, when successive-cyclic movement takes place, a given WH-phrase must check a corresponding WH-feature as it passes through each phase edge.

To account for the asymmetry in clitic Agreement patterning between vP phases in embedded and matrix clauses, Willis (2011) proposes two lexical spell-out rules. When the wh-phrase base-generates in the vP of an embedded clause, it gets licensed as a direct object through Case-based Agreement. This Agreement process results in the valuation of the verb's ϕ-features by the WH-phrase, thereby ensuring that the proclitic that surfaces on this non-finite verb always agrees with the ϕ-features of the moving WH-phrase. Accordingly, Willis (2011) argues that the proclitic in the *v* head can spell out as illustrated in (6). Note that "AM" stands for Aspirate Mutation and "SM" stands for Soft Mutation.

(6) Spell-out of *v* for...

a. *Pa wraig* 'which woman'

[uWH+]

[uCase: ACC] => spells out as *ei*^{AM}

[uϕ: 3FS]

b. *Pa lyfrau* 'which books'

[uWH+]

[uCase: ACC] => spells out as *eu*

[uϕ: 3PL]

The *v* head in other, higher clauses cannot receive ϕ-features, because it has no reason to have undergone Case-based Agreement with the WH-phrase. Therefore, Willis (2011) argues that a clitic in a higher *v* head will spell out as the default *ei*, as seen in (7):

(7) Default spell-out of *v*

[uWH+] => spells out as *ei*^{SM} or ^{SM1}

Because the first rule is more specific than the second, Willis (2011) argues that it takes precedence where it applies. The default spell-out seen in (7) is the elsewhere case that surfaces in vPs that did not play a role in the valuation of the WH-phrase's Case feature. In this sense, the spell-out rules must be extrinsically ordered (albeit on the basis of specificity) in order to apply correctly.

While the analysis proposed by Willis (2011) does capture the patterns observed in the data, it cannot easily account for other observations about Welsh Agreement. To begin with, Willis (2011) is forced to make the caveat that the Welsh *v* must spell out as T[FIN-] in the movement constructions typified by (3). This proviso is necessary to distinguish auxiliary constructions from those that feature inflected "finite" verbs, thus ensuring that the known difference between VSO and AuxVSO constructions is accounted for—namely, that the observed clitic-based WH-Agreement only surfaces in AuxSVO, and not VSO constructions.

However, it is not precisely accurate to argue that the difference between a verbnoun and an inflected verb is a matter of finiteness. Although it is true that a verbnoun in an auxiliary construction cannot "spell out as finite" because an auxiliary occupies the T head, thereby eliminating the need for the vP to bear a tense feature itself, this does not mean that all auxiliary constructions

[1] As previously stated, Welsh clitics often reduce in fast speech to an elided form or merely mutation (Borsley et al. 2007).

are obligatorily non-finite. Taking a T feature as the salient difference between the two transitive clause structures therefore misrepresents where finiteness is encoded in the clause. I propose that it is instead possible to derive the desired distinction more freely using other analytical frameworks.

Furthermore, the analysis proposed by Willis (2011) struggles to describe how the patterns observed in WH-movement constructions fit into the larger typology of Welsh clitic Agreement phenomena. Calling the preverbal clitic a reflex of Agreement with a WH-feature ignores the fact that identical clitics occur in declarative constructions that do not contain WH-features, as discussed in the previous section.

In what follows, I present an alternative account of long-distance clitic Agreement that attempts to synthesize an analysis of these constructions within the full typology of Welsh Agreement phenomena. Specifically, I borrow the Relativized Agree framework formulated by Kobayashi (2014, 2020) to unify long-distance Agreement configurations with extant analyses of comparable declarative and A′-movement constructions. To explain how Agreement becomes unavailable in higher clauses in long-distance constructions, I argue for a parametrization of the Activity Condition for Welsh that permits a given set of features to parasitically participate in Agreement multiple times (Baker 2008; Preminger 2014).

Chapter 5

A potential solution: deactivated Agreement

The analysis put forth by Willis (2011) assumes that long-distance A′-movement is driven by WH-features. As discussed above, this makes it difficult to incorporate his proposal with the account pursued by Kobayashi (2020), which derives the observed Agreement asymmetries entirely from the behavior of ϕ-feature-driven Agreement. In order to synthesize the behavior of long-distance Agreement with Kobayashi (2020)'s account, it is therefore necessary to posit an alternative explanation for the conditional availability of Agreement clitics at the vP phase edge. In this section, I argue that the Activity Condition presents a feasible and fruitful recourse.

5.1 The Activity Condition

The notion of feature activation was first characterized as one of four primary criteria that must be met in order for the Agree operation to be available in the syntax (Chomsky 2000, 2001). These conditions are formalized as follows:

(1) A functional head F agrees with XP, where XP is a maximal projection, if and only if:
- F c-commands XP (the C-command Condition)
- There is no YP such that F c-commands YP, YP c-commands XP, and YP has ϕ-features (the Intervention Condition)

- F and XP are contained in all the same phases (the Phase Condition)

- XP is made active for Agreement by having an unchecked case feature (the Activity Condition)

  (adapted from Chomsky 2000:108,122-123, cited by Baker 2008)

Activity is therefore defined here as a property of a given syntactic element. As defined by Chomsky (2000), uninterpretable ϕ-features render a case feature *active*, and the presence of active features is a prerequisite for the implementation of the syntactic operations Merge and Agree. Furthermore, Chomsky (2000, 2001) predicts that defective intervention can arise when the Activity Condition is not met: a given goal with inactive features should still be the target of Agreement, even if an alternative, lower goal bearing active features is present.

Although this account of Activity does make strong predictions about the stipulations that must hold for Agreement to be successful, Preminger (2014) notes that the Chomskyan formalization needs additional specification. Specifically, Preminger (2014) argues that "having inactive ϕ-features must be syntactically distinguishable from having no ϕ-features at all... Activity is essentially a diacritic: ϕ-features begin the derivation with this diacritic set to 'on' and the first Agreement relation they enter into switches it to 'off"' (Preminger 2014:134).

In this understanding of Activity, feature valuation can *only* take place when the Activity diacritic is "on," and once feature valuation has taken place the diacritic *must* immediately switch "off." However, Preminger (2014) cites evidence from Tsez (Northeast Caucasian) that suggests that the same set of features may be involved in the Agreement operation multiple times.

Polinsky and Potsdam (2001) show that Tsez absolutive arguments in an embedded clause can undergo Agreement both with the embedded lexical verb and a matrix verb. Multiple Agreement is visible in particular in constructions featuring an embedded topic in a subordinate clause, as is seen in (2):

(2) Multiple Agreement in Tsez:

eni-r *[už-ā* ***magalu*** ***b****-āc-ru-łi]* ***b****-iy-xo.*
mother-DAT boy-ERG bread.III.ABS III-eat-PST.PART-NMZ III-know-PRES
'The mother knows that as for the bread, the boy ate it.'

(adapted from Polinsky and Potsdam 2001:606, cited by Preminger 2014:135)

As seen in (2), the absolutive noun *magalu* 'bread' agrees fully with the embedded verb 'eat' and the matrix verb 'know', which both bear the noun class Agreement prefix *b-*. The existence of examples such as (2) leads Preminger (2014) to argue that the Chomskyan formulation of Activity as a condition cannot apply universally to all languages. Therefore, he proposes that Activity should be treated as a parameter. Under this analysis, an Activity diacritic must be "on" for Agreement to take place, but whether or not the diacritic then switches "off" once feature valuation occurs is subject to language-specific variation. The Tsez data suggest that a given set of features may trigger Agreement multiple times in some languages. Therefore, it may be said that the Activity *parameter* for this language keeps Activity diacritics "on" (i.e. "active") even after Agreement has taken place.

A similar analysis may be used to explain the multiple Agreement pattern seen in the Passamaquoddy example from Chapter 1, restated below in (3) for convenience:

(3) Multiple Agreement in Passamaquoddy:

*Wen-****ik*** *kisitahatom-on-****ik*** *keti-naci-wikuwamkom-oc-****ik****?*
who-3PL decide.IO-2CONJ-PART.3PL IC.FUT-go.do-visit.AO-2CONJ-PART.3PL
'Who all did you decide to go visit?'

(adapted from Bruening 2006:34)

As seen in (3), the WH-phrase *wenik* 'who' triggers ϕ-feature Agreement both on the verb in the embedded clause in which it base-generates and the matrix verb. This multiple parasitic Agreement cannot be accounted for if the Chomskyan definition of Activity is assumed. Rather, Activity in Passamaquoddy must be parametrized to permit a given set of features to participate in Agreement multiple times without causing the diacritic to "shut off."

Unlike Passamaquoddy and Tsez, it is more challenging to immediately evaluate the parametriza-

tion of Activity in Welsh. As shown in (4), Welsh does not appear to allow a given set of ϕ-features to license Agreement multiple times. As previously discussed, Welsh can license only the default Agreement clitic *ei* in any clause higher than the one in which the extracted WH-phrase base-generates. This appears to indicate that the Activity Parameter for Welsh must be such that Activity diacritics do "shut off" access to features after they have participated in Agreement once.

(4) Unavailable multiple vP Agreement:

Pa* ***lyfrau* *mae* *Megan yn* ***eu*** *dweud ei* *fod e* *wedi* ***eu*** *prynu?*
which books be.PRES.3S Megan PROG 3PL say 3MS be 3MS PERF 3PL buy
'Which books does Megan say he has bought?'

(CB: 5/12/24)

That said, assuming this parametrization of Activity is not necessary to account for the appearance of a default Agreement proclitic at the matrix vP phase edge when the WH-phrase undergoing movement is lexical. In the Relativized Agree framework proposed by Kobayashi (2020), Agreement can only take place between heads, which causes certain asymmetries to surface: when lexical DPs are in probe position, a labeling algorithm allows feature percolation to transfer all ϕ-specification to the label, thereby rendering full ϕ-feature Agreement available. But when lexical DPs are in a goal position, only the number and gender features housed in the D head are visible to the probe, enabling only a partial feature valuation and forcing the probe to spell out with default Agreement.

This asymmetric Agreement pattern explains the behavior of lexical WH-phrase long-distance movement configurations regardless of the parametrization of Activity. When a WH-phrase base-generates in object position in an embedded clause, it must move to [Spec,vP] to acquire Case. When the WH-phrase moves to the the specifier, it becomes a probe and searches its c-command domain for a viable goal, which it finds in the form of the *v* head. An Agree relation forms, and because the lexical WH-phrase is higher in the derivation, transfer and labeling ensure that the WH-phrase values all the ϕ-features on the *v* head. But later in the derivation, when the matrix *v* head merges with the embedded CP, the WH-phrase is located lower in the derivation in [Spec,CP] and

thus can become the goal. As the probe, the matrix *v* head searches its c-command domain and finds the WH-phrase. When the WH-phrase is lexical, only the person and number features will be visible in the head, leading to a partial valuation of the probe's features. The lexical insertion rule defined by Kobayashi (2020) will then apply, spelling out the partially valued [uϕ] with default Agreement morphology.

Problems arise, however, when the WH-phrase is pronominal. As described previously, pronominal WH-phrases in Welsh are entirely capable of licensing full ϕ-feature Agreement regardless of the configuration (the only exception being subject extraction constructions). At the matrix vP edge, however, full ϕ-feature Agreement can never occur: only the default Agreement clitic *ei* is ever observed. Therefore, pronominal WH-phrases must be blocked from being able to license full ϕ-feature Agreement—I argue that this is best motivated by a parametrization of Activity in Welsh to delete ϕ-features after participation in Agreement once.

Given, therefore, that Welsh has this parametrization of Activity, it is surprising that even a default Agreement proclitic should be able to surface in the matrix vP in (4). The ϕ-features associated with the WH-phrase *pa lyfrau* 'which books' should have been deleted by an Activity diacritic as soon as they entered into an Agree relation with the embedded *v* head *prynu* 'to buy' to value its unvalued features (the reflex of this valuation being the fully-agreeing preverbal proclitic *eu*). As a result, the WH-phrase bearing deleted ϕ-features should be entirely invisible to Agreement with a subsequent *v* head. So what allows default Agreement to still occur?

Recall the assertion by Preminger (2014) that inactive ϕ-features and the complete absence of ϕ-features must be syntactically distinguishable. This nuanced difference is significant to the current problem: even though the ϕ-features borne by the WH-phrase *pa lyfrau* can no longer engage in feature valuation, the deactivated ϕ-feature *specification* is still visible to the syntax. Clearly, the presence of *a* ϕ-feature specification, even an inactive one, is important in Welsh. As previously stated, Kobayashi (2020) argues that partially-valued [uϕ] spells out as default—this explains the inability of lexical DPs to license full Agreement in declarative constructions. I argue that a similar lexical insertion rule applies when an inactive ϕ-feature specification is targeted for

Agreement. I formalize this rule along similar lines to the conceptualization of default Agreement assumed by Ruys (2010) and Schäfer (2012), as stated in (5).

(5) Default Agreement:

In the absence of any appropriate nominal category, the ϕ-features on an unvalued probe undergo default valuation [3rd person, singular]. (Schäfer 2012:243)

This definition of default Agreement holds for Schäfer (2012)'s analysis of the passives of reflexive verbs in German and Ruys (2010)'s account of Dutch expletive selection. However, default Agreement appears to operate slightly differently in Welsh. As observed by Kobayashi (2020), Welsh differs from Dutch and German in that default Agreement does not surface when a probe has wholly unvalued ϕ-features. Instead, a probe receives a default valuation when its ϕ-features are partially valued or when it attempts to Agree with an element bearing deactivated ϕ-features. Accordingly, I propose a slightly different formalization of this rule that specifically accounts for the behavior of default Agreement in Welsh, as shown in (6):

(6) Default Agreement in Welsh:

For a given probe, Agreement with a goal bearing partially-valued or deactivated ϕ-features triggers default valuation [3rd person, singular] and the assignment of default Agreement morphology.

This lexical insertion rule ensures that, despite the deletion of features by the activation diacritic, a form of default Agreement can still take place. Thus, the clitic in a matrix vP will always only be able to surface as the default *ei*. Importantly, this lexical insertion rule applies regardless of whether the WH-phrase is pronominal or lexical, despite the fact that a lexical WH-phrase would trigger default Agreement at the matrix vP phase edge regardless. This universal application is again due to the parametrization of Activity in Welsh to prevent a given set of ϕ-features from participating in Agreement more than one time.

An additional proviso is necessary here to differentiate declarative sentences containing embedded clauses from comparable long-distance A′-movement constructions. The apparent issue is

that a matrix vP bears unvalued ϕ-features in either instance. Given that the ϕ-features on a matrix vP in a declarative clause must stay unvalued, since there is no WH-phrase in the c-command domain of the *v* head, what stops them from receiving default valuation and spelling out with default Agreement morphology according to the lexical insertion rule seen in (6)?

To answer this question, I refer again to Preminger (2014)'s distinction between inactive ϕ-features and no ϕ-features. I propose that when the matrix *v* head enters into an Agree relation with a WH-phrase whose ϕ-features have been deactivated, the inactive ϕ-feature specification is still visible to the syntax. The presence of this specification, despite the fact that it is inactive, is enough to establish an Agree relation and trigger the application of the lexical insertion rule seen in (6). However, if the matrix *v* head searches its c-command domain and finds no heads bearing ϕ-features at all, then no such Agree relation can be established and no lexical insertion rule can be triggered.[1] In this case, the ϕ-features on the *v* head are not merely unvalued, but *unvaluable*. Given that no ϕ-feature specification exists in the *v* head's c-command domain in these declarative constructions, the unvalued ϕ-features simply get deleted so that the derivation can continue (Preminger 2014). This therefore explains why a proclitic never surfaces in a matrix vP in a declarative sentence.

Furthermore, there is some dialectal variation with regard to the appearance of default Agreement clitics in the matrix vP in A′-movement constructions. Of the four speakers interviewed, two produced the clitics with regularity, one recognized them as "proper" but did not use them herself, and one did not produce them at all. This last consultant, CD, speaks the Carmarthenshire dialect, which has some idiosyncrasies that distinguish it from other Welsh dialects. As seen in (7), CD found the presence of default clitics in a matrix vP ungrammatical.

[1]Note that the default Agreement rule assumed by Ruys (2010) and Schäfer (2012) would predict that an unvalued probe in such a declarative construction would received default valuation. That this does not occur in Welsh evinces the need for a distinct formalization of default Agreement for this language.

(7) *Ble mae Megan yn (*ei) dweud ei bod hi 'n (*ei) meddwl fod e*
where be.PRES.3S Megan PROG (3MS) say 3FS be she PROG (3MS) think be he
wedi mynd?
PERF go
Intended: 'Where does Megan say she thinks he has gone?' (CD: 11/24/24)

To account for this variation, it is possible that Carmarthenshire Welsh, or at very least CD's specific idiolect, differs from other dialects with respect to its lexical insertion rules. Whereas other dialects draw a morphological distinction between unvalued ϕ-features and no ϕ-features, Carmarthenshire Welsh appears to pronounce these ϕ-specifications identically: namely, with no overt morphological reflex. Accordingly, it is possible that Carmarthenshire Welsh deletes [uϕ] valued with deactivated ϕ-features, rather than spelling it out with default Agreement morphology. Such a lexical insertion rule would account for the symmetry in default Agreement patterning between declarative and A′-movement constructions in this dialect.

5.2 Implementing the Activity Condition in Welsh

In this section, I present two derivations: one of a declarative sentence containing an embedded clause, and one of an A′-movement construction featuring extraction of an embedded direct object.

For this analysis, I make several theoretical assumptions about the structure of the Welsh sentence. Like Kobayashi (2020), I follow from Awbery (1976); Rouveret (1991); Willis (2000); and Borsley et al. (2007) in assigning different clause structures to Welsh VSO and AuxSVO sentences, restated in (8) for convenience:

(8) Welsh transitive clause structures

a. VSO clause:

$[_{CP}$ C $[_{AgrP}$ V-v-T-**Agr** $[_{TP}$ **Subj**$_i$ t_T $[_{vP}$ t_i t_v $[_{VP}$ t_V (Obj ...)]]]]

b. AuxSVO clause:

$[_{CP}$ C $[_{AgrP}$ Aux-T-**Agr** $[_{TP}$ **Subj**$_i$ t_T $[_{AuxP}$ t_{Aux} $[_{vP}$ t_i V-**v** $[_{VP}$ t_V (**Obj** ...)]]]]

(adapted from Kobayashi 2020:35)

I also assume the Relativized Agree framework proposed by Kobayashi (2014, 2020), wherein Agreement is only available as an operation between heads, transfer applies in full if the derivation would otherwise stop, and a labeling algorithm percolates features contained within a given element to the label of the phrase so that Agreement can take place in full. This theoretical apparatus builds upon a minimalist conceptualization of Agreement formalized by Chomsky (2004, 2015b). I leave to future research the question of whether the Welsh data can be accounted for using other theories of Agreement, such as Deal (2015, 2023)'s Interaction and Satisfaction model, the Feature gluttony framework posited by Coon and Keine (2021), or the Cyclic Agree apparatus developed by Béjar and Rezac (2009).

I make several original assumptions about the behavior of Welsh as well. First, I deviate from the proposal by Willis (2011) that Welsh A′-movement is driven by an uninterpretable WH-feature present at all phase heads. Under Willis (2011)'s analysis, a WH-phrase bears an interpretable WH-feature, allowing it to value a corresponding uninterpretable feature at each subsequent phase edge. However, the parametrization of Activity that deletes ϕ-features once they have participated in Agreement should prevent this valuation from taking place.

As such, I assume for the purposes of this analysis that intermediate WH-features are not present in the syntax. Instead, I argue that movement is driven by an interpretable WH-feature found on the matrix C head, which indicates that a question has been selected for and thus helps build out the scope position for the WH-phrase undergoing extraction. This draws from the argument by Chomsky (2000) that WH-movement takes place in order to situate a given WH-phrase within the checking domain of a [+WH] C head.[2] I also follow from Chomsky (2015b) in assuming that Merge is freely driven within successive-cyclic movement.

Second, I assume that all Activity diacritics delete the ϕ-features in their feature bundles after they have participated in Agreement. However, as described in the previous section, I make the further caveat that Welsh syntax draws a distinction between a deactivated feature specification and

[2]See Simpson (2000) and Adger and Svenonius (2011) for more on whether WH-movement is driven by intermediate WH-Agreement or ϕ-Agreement.

an unvalued specification. The former will spell out according to the same lexical insertion rule that applies to partially valued [uϕ], which forces the realization of default Agreement marking. The latter, on the other hand, will not spell out at all and simply be deleted from the derivation.

In the following sections, I derive two sentences to illustrate the implementation of this proposed parametrization of the Activity Condition within long-distance Agreement constructions. The first derivation demonstrates what occurs in an A′-movement construction, and the latter describes the internal syntax of a corresponding declarative sentence featuring an embedded clause.

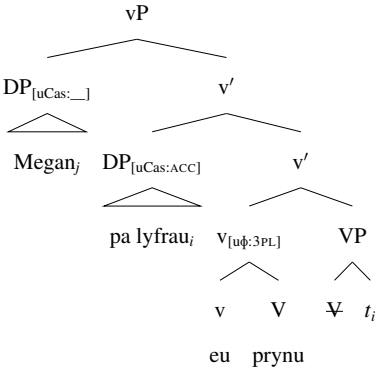
5.2.1 Derivation of a long-distance A′-movement construction

As shown in (9), successive-cyclic movement of a WH-phrase through a matrix clause triggers default Agreement on the matrix vP. The derivation of this construction is shown in (10)-(13):

(9) Incomplete vP Agreement in Welsh movement:

Pa ***lyfrau*** *wyt* *ti* *'n* ***ei*** *feddwl* *oedd* *Megan* *yn* ***eu*** *darllen?*
which books be.PRES.2S you PROG 3MS think be.IMPF.3S Megan PROG 3PL read
'Which books do you think Megan was reading?' (adapted from Willis 2011:6)

(10) Derivation of embedded vP in (9):



As shown in (10), the derivation of (9) begins with the DP *pa lyfrau* 'which books' entering the derivation. This DP bears an unvalued Case feature and valued [3PL] ϕ-features. Next, the V head *prynu* enters the derivation and merges with *pa lyfrau*, forming a VP.

Subsequently, a *v* head enters the derivation. This *v* head bears a valued Case feature [Cas:ACC] and unvalued ϕ-features. The V head *prynu* undergoes V-to-*v* movement, merging internally with

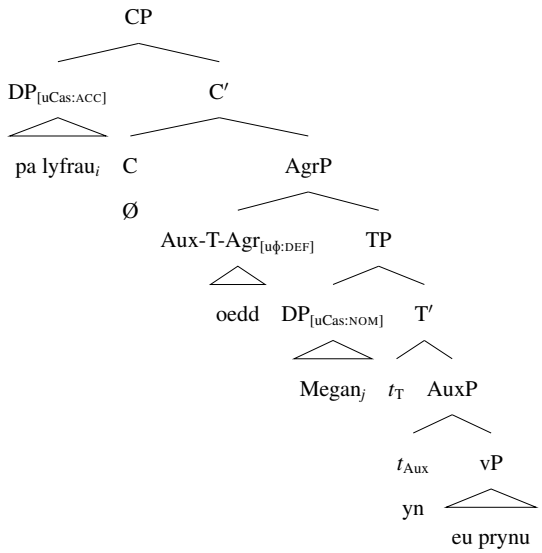
v. The *v* head also bears two EPP features, which project two specifier positions. One of these specifiers attracts the DP *pa lyfrau*, which moves up so that it can acquire Case.

After undergoing internal merge to [Spec,vP], this DP tries to become a probe because of its unvalued Case feature. However, because Agreement is assumed only to take place between heads, it is not able to. Here, the rescue operation proposed by Kobayashi (2020) applies, causing Transfer to take place in full. During Transfer, a Labeling Algorithm percolates the features contained in the DP *pa lyfrau* to its label. This allows the DP to search its c-command domain and find a suitable goal in the *v* head.

The DP *pa lyfrau* then enters into an Agreement relation with the *v* head. The DP receives the Case assignment [uCas:ACC], and the unvalued ϕ-features on the *v* head are valued as [uϕ:3PL]. As a reflex of this valuation, the third person plural agreeing proclitic *eu* surfaces in the *v* head.

Finally, the DP *Megan* enters into the derivation in the higher specifier. This DP bears an unvalued Case feature and [3FS] ϕ-features.

(11) Derivation of embedded CP in (9):



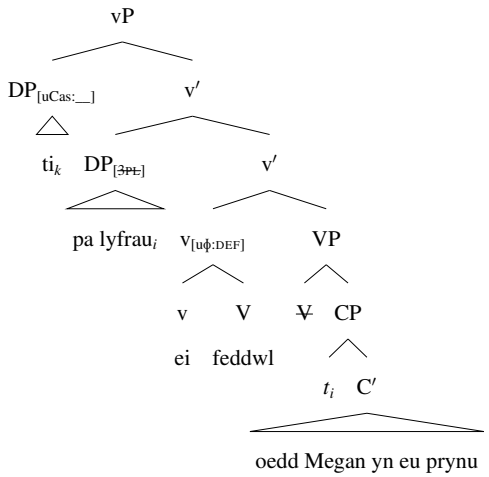
As shown in (11), the next element to enter the derivation of (9) is an Auxiliary head, which merges with the vP to form an AuxP. Next, a T head bearing an EPP feature enters the derivation and merges with the AuxP to form a TP. The EPP feature projects a specifier.

Next, an Agr head enters the derivation and merges with the TP to form an AgrP. The Aux and T heads undergo head movement to the Agr head. The Agr head has the valued Case feature [Cas:NOM] and unvalued ϕ-features. Due to its unvalued ϕ-features, the Agr head becomes a probe and searches its c-command domain for a goal. It finds the DP *Megan*, which is located in the higher specifier of the vP.

To acquire Case, the DP *Megan* undergoes internal merge to [Spec,TP]. Next, it enters into an Agree relation with the Agr head. The DP receives the Case assignment [uCas:NOM]. However, due to the internal structure of the DP, only its number and gender features are visible to the Agreement probe. As a result, the Agr head receives a partial ϕ-feature valuation, which spells out with default Agreement as *oedd*.

Next, a C head bearing an EPP feature enters the derivation and merges with the TP to form a CP. The EPP feature projects a specifier, which attracts the DP *pa lyfrau*. This DP undergoes internal merge from the lower specifier of the vP to [Spec,CP].

(12) Derivation of matrix vP in (9):



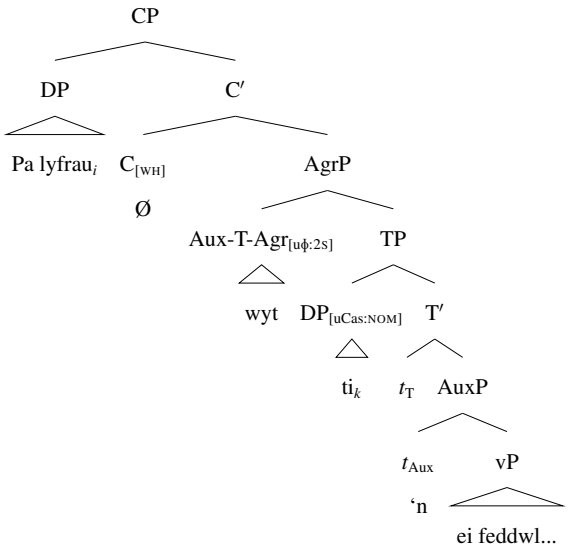
As shown in (12), the next element to enter the derivation of (9) is the V head *meddwl* 'think.' This head merges with the CP *oedd Megan yn eu prynu* to form a VP.

Next, a *v* head bearing two EPP features enters the derivation and merges with the VP to form a vP. This *v* head also bears a valued Case feature [Cas:ACC] and unvalued ϕ-features. The V head *meddwl* undergoes V-to-*v* movement, merging internally with *v*.

Because the *v* head has unvalued ϕ-features, it becomes an Agreement probe and searches its c-command domain for a suitable goal. It finds the DP *pa lyfrau* in the specifier of the embedded CP. The *v* head attempts to enter into an Agree relation with the DP, but the DP's ϕ-features have been deactivated due to the fact that they already engaged in Agreement in the embedded clause. However, the inactive feature specification remains visible to the syntax, so Agreement still take place. The inactive feature specification values the ϕ-features on the *v* head as default. As a reflex of this valuation, the default agreeing proclitic *ei* surfaces in the *v* head.

One of the two EPP features on the *v* head attracts the DP *pa lyfrau*, and the phrase undergoes internal merge to [Spec,vP]. Finally, the DP *ti* 'you' enters the derivation and merges into the higher [Spec,vP].

(13) Derivation of matrix CP in (9):



As shown in (13), the next element to enter the derivation of (9) is an Auxiliary head, which merges with the vP to form an AuxP. Next, a T head bearing an EPP feature enters the derivation and merges with the AuxP to form a TP. The EPP feature projects a specifier.

Next, an Agr head enters the derivation and merges with the TP to form an AgrP. The Aux and T heads undergo head movement to the Agr head. The Agr head has the valued Case feature [Cas:NOM] and unvalued ϕ-features. Due to its unvalued ϕ-features, the Agr head becomes a probe and searches its c-command domain for a goal. It finds the DP *ti*, which is located in the higher

specifier of the vP.

To acquire Case, the DP *ti* undergoes internal merge to [Spec,TP]. Next, it enters into an Agree relation with the Agr head. The DP receives the Case assignment [uCas:NOM]. Because the DP *ti* is pronominal, rather than lexical, all of its ϕ-features are visible to the Agreement probe. As a result, the Agr head receives full ϕ-feature valuation, causing it to spell out as the second personal singular auxiliary *wyt*.

Next, a C head bearing an EPP feature and a WH-feature enters the derivation and merges with the AgrP to produce a CP. The EPP feature projects a specifier, which attracts the DP *pa lyfrau*. This DP undergoes internal merge from the lower specifier of the vP to [Spec,CP]. The WH-feature establishes [Spec,CP] as an interpretable scope position, which allows the DP to spell out here as *pa lyfrau*.

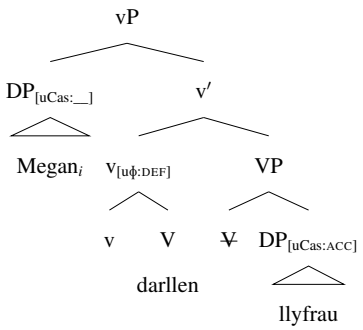
5.2.2 Derivation of declarative construction featuring an embedded clause

As shown in (14), the matrix vP in a declarative construction featuring an embedded clause does not contain a default Agreement clitic, nor any Agreement clitic at all. The derivation of this construction is shown in (15)-(18):

(14) Welsh declarative featuring an embedded clause:

Wyt ti 'n ***meddwl*** *oedd Megan yn darllen llyfrau.*
be.PRES.2S you PROG think be.IMPF.3S Megan PROG read books
'You think Megan has read books.' (CB: 1/27/25)

(15) Derivation of embedded vP in (14):

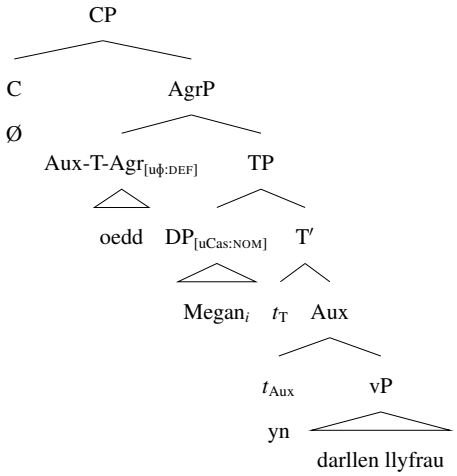


As shown in (15), the first element to enter the derivation of (14) is the DP *llyfrau*, which bears an unvalued Case feature and [3PL] ϕ-features. Next, the V head *darllen* enters the derivation and merges with the DP *llyfrau* to produce a VP.

Subsequently, a *v* head bearing an EPP feature enters the derivation. The *v* head also has unvalued ϕ-features and a valued Case feature [Cas:ACC]. The V head *darllen* undergoes V-to-*v* movement and merges with *v*. Due to its unvalued ϕ-features, the *v* head becomes a probe and searches its c-command domain for an available goal. It finds the DP *llyfrau* and attempts to enter into an Agree relation with it. However, because this DP is lexical, not pronominal, only its number and gender features are available to the Agreement probe. As a result, although the DP can successfully receive the Case assignment [uCas:ACC], the unvalued ϕ-features on the *v* head can only be partially valued. The partially valued ϕ-features on the *v* head spell out in the default form, which in this case has null morphology.

Finally, the EPP feature on the *v* head projects a specifier. The DP *Megan*, which bears an unvalued Case feature and [3FS] ϕ-features enter the derivation and merges into [Spec,vP].

(16) Derivation of embedded CP in (14):

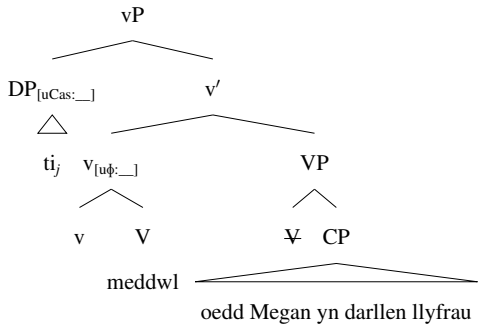


As shown in (16), the next element to enter the derivation of (14) is an Auxiliary head, which merges with the vP *darllen llyfrau* to produce an AuxP. Next a T head bearing an EPP feature merges with the AuxP to produce a TP. The EPP feature projects a specifier.

Next, an Agr head enters the derivation and merges with the TP to form an AgrP. The Aux and T heads undergo head movement to the Agr head. The Agr head has the valued Case feature [Cas:NOM] and unvalued ϕ-features. Due to its unvalued ϕ-features, the Agr head becomes a probe and searches its c-command domain for a goal. It finds the DP *Megan*, which is located in the specifier of the vP.

To acquire Case, the DP *Megan* undergoes internal merge to [Spec,TP]. Next, it enters into an Agree relation with the Agr head. The DP receives the Case assignment [uCas:NOM]. Because the DP *Megan* is lexical, rather than pronominal, only its number and gender ϕ-features are visible to the Agreement probe. As a result, the Agr head receives partial ϕ-feature valuation, which spells out as the default *oedd*. Finally, a C head enters the derivation and merges with the AgrP to form a CP.

(17) Derivation of matrix vP in (14):

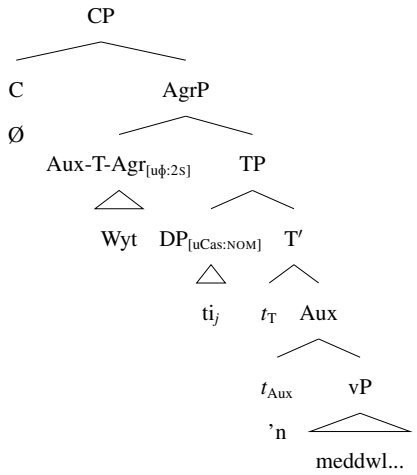


As shown in (17), the next element to enter the derivation of (14) is the V head *meddwl*, which merges with the CP to form a VP. Next, a *v* head bearing a Case feature [Cas:ACC], unvalued ϕ-features, and an EPP feature enters the derivation. The V head undergoes V-to-*v* movement, merging internally to *v*, and the EPP feature projects a specifier.

Because the *v* head has unvalued ϕ-features, it becomes an Agreement probe, and searches its c-command domain for a viable goal. No goal bearing valued ϕ-features of any kind can be found within its c-command domain, so the unvalued ϕ-features on the *v* head must remain unvalued. To stop the derivation from crashing, these unvalued features simply get deleted.

Finally, the DP *ti* enters into the derivation and merges into [Spec,vP]. The DP bears an unvalued Case feature and second person singular ϕ-features.

(18) Derivation of matrix CP in (14):



As seen in (18), the next element to enter the derivation of (14) is an Auxiliary head, which

merges with the vP to produce an AuxP. Next, a T head bearing an EPP feature merges with the AuxP, producing a TP. The EPP feature then projects a specifier.

Subsequently, an Agr head enters the derivation and merges with the TP to form an AgrP. The T head and the Aux head undergo head movement to the Agr head. The Agr head bears a case feature [Cas:NOM] and unvalued ϕ-features. The unvalued features render the Agr head an Agreement probe, so it searches its c-command domain for an available goal. It finds the DP *ti*, which is located in the specifier of the vP.

To acquire Case, the DP *ti* undergoes internal merge to [Spec,TP]. Next, it enters into an Agree relation with the Agr head. The DP receives the Case assignment [uCas:NOM]. Because the DP *ti* is pronominal, rather than lexical, all of its ϕ-features are visible to the Agreement probe. As a result, the Agr head receives full ϕ-feature valuation, allowing it to spell out as the second personal singular auxiliary *wyt*. Finally, the C head enters the derivation and merges with the AgrP to produce a CP.

5.3 Discussion

This analysis demonstrates that it is possible to synthesize the long-distance Agreement asymmetry described by Willis (2011) within the Relativized Agree framework proposed by Kobayashi (2014, 2020). This synthesis makes the disappearance of full Agreement in these A′-movement constructions less of an anomalous property of the language, but rather a neat consequence of how Welsh handles partially valued and unvalued ϕ-features. Furthermore, Relativized Agree enables the derivation of A′-movement fully as a reflex of ϕ-Agreement, rendering intermediate uninterpretable WH-features unnecessary.

This analysis also makes interesting predictions about the nature of Activity. Unlike Tsez and Passamaquoddy, Welsh does not permit multiple parasitic Agreement involving the same set of ϕ-features. That languages should vary with regard to their ability to license multiple Agreement lends further credence to the proposals by Preminger (2014) and Baker (2008) that deactivation is

a parameter, not a condition for Agreement.

Finally, this analysis offers descriptive support for the claim that syntax treats deactivated ϕ-features and the absence of ϕ-features differently (Preminger 2014). In Welsh, these specifications clearly result in distinct spell-outs. If the syntax did not draw a distinction between these two valuations, a matrix vP clitic would be expected to spell out identically (or not spell out at all) in both long-distance declarative and A′-movement constructions.

This account of ϕ-feature deactivation as the cause for a clitic Agreement asymmetry has implications for other phenomena within Welsh. To begin with, Borsley et al. (2007) note that preverbal clitics bearing default Agreement marking can surface in comparative constructions as well as movement constructions, as seen in (19). Note that in this example, the default clitic *ei* surfaces in the reduced form *'i*.

(19) Comparative construction featuring a default clitic:

Roedd hi 'n dipyn hŷn nag o'n i wedi ***'i*** *feddwl i ddechrau arni.*
be.IMPF.3S she PROG a.little older than be.IMPF.1S I PERF 3MS think to start on.3FS
'She was a bit older than I'd thought to start with.' (Borsley et al. 2007:150)

As seen in (19), the default clitic *'i* surfaces in preverbal position in the complement of the comparative. Given that this default preverbal clitic is understood to be a reflex of successive-cyclic movement at the vP phase edge, its presence here appears to indicate that the pronominal DP *hi* 'she'[3] base-generated in an embedded, though phonologically null sub-clause, but traveled up through the vP to its current position.

These data join independent evidence from some dialects of American English, as exemplified by the construction seen in (20), that comparatives must bear structural similarity to A′-movement constructions.

(20) Mary isn't taller than what she was five years ago. (Chomsky 1977:88)

[3]Note that the clitic does not agree with this pronominal DP in terms of ϕ-features: this pronoun bears feminine third singular features, while the clitic surfaces in the "default" form syncretic with the third masculine singular.

As Chomsky (1977) proposes for sentences such as (20), the A′-dependency in question is formed on a silent WH-word. This null operator undergoes A′-movement from where it base-generates to an interpretable scope position. Unlike (20), the Welsh example features wholly covert movement, with no overt WH-element surfacing in the scope position, and only the default Agreement proclitic hinting at the presence of the null operator. These data indicate that languages vary with regard to whether A′-movement in comparative constructions is overt or covert.[4]

Although this analysis is successful in its ability to explain the full range of Agreement phenomena in Welsh in a unifying account, several notable issues do arise. To begin with, this proposal does not address the absence of object clitic Agreement when the matrix clause has VSO, rather than AuxSVO structure. As seen in (21), a default clitic never appears before an inflected matrix verb in object movement constructions.

(21) Lack of default clitic Agreement before inflected matrix verb:

Pa lyfrau ****ei*** *ddwedodd Megan ei fod e wedi eu prynu?*
which books 3MS say.PRT.3S Megan 3MS be he PERF 3PL buy
'Which books did Megan say she believed he had bought?' (EP: 11/8/2024)

The unavailability of Agreement before an inflected verb seems to run counter to the assertion that unvalued ϕ-features spell out with default Agreement, rather than no Agreement. However, this patterning is consistent with the behavior of inflecting verbs in monoclausal constructions. Clitics do not surface at the vP edge in these sentences either, despite the fact that the clitic is a reflex of object Agreement. I therefore propose that a given verb in a VSO construction cannot be expected to exhibit Agreement with both the subject and the object. This is not an issue in AuxSVO constructions, as the auxiliary verb takes on the role of subject Agreement, while the lower "verbnoun" marks Agreement with the object through cliticization. I argue that this apparent discrepancy can best be accounted for by a constraint against complex heads, which I formalize in (22).

[4]See Donati (2006) for further examination of this phenomenon in Italian and Romanian.

(22) Complex Head Constraint:

If a given head bears complex Agreement morphology, all morphology embedded deeper than the first daughter node cannot be pronounced.

As shown in (23), Agreement does take place both between the direct object and the *v* head and between the subject and the T head. However, because the *v* head has undergone *v*-to-T movement, forming a complex head at Agr, both instances of Agreement cannot surface in the morphology. The Complex Head Constraint intercedes, ignoring the V and *v* heads and spelling out only the first daughter. As a result, the inflected verb in this construction appears to only agree with the subject, and not the object.

(23) Unavailability of *v* Agreement in object movement across an inflected verb:

$[_{CP}$ **Obj**$_i$ C $[_{AgrP}$ ~~V-v-~~T-**Agr** $[_{TP}$ **Subj**$_j$ t_T $[_{vP}$ t_j **t**$_i$ **t**$_v$ $[_{VP}$ t_V (t_i ...)]]]]]

As such, the Complex Head Constraint explains why Agreement between a direct object and a verb is not expected to spell out when the verb also agrees with a higher subject. This recourse avoids the need to revise the lexical insertion rules that govern the spell-out of unvalued versus deactivated ϕ-feature specifications.

Of concern to the syntactic distinction between deleted and absent ϕ-feature specifications is the satellite question of whether an embedded C head in Welsh truly lacks ϕ-feature specification entirely. The argument that a C head bears defective ϕ-features is an integral part of Kobayashi (2020)'s analysis, as it ensures that the C head can act as a necessary intervener between a WH-phrase in matrix [Spec,CP] and an inflected verb in a lower T head, thereby forcing the realization of default Agreement in subject extraction constructions regardless of whether the WH-phrase is lexical or pronominal. This assumption poses an issue for my proposal, as ϕ-feature specification on an embedded C head in a declarative construction would give a matrix vP probe access to valued ϕ-features within its c-command domain. The presence of ϕ-feature specification on the embedded C head would therefore cause an unattested default clitic to surface at the matrix vP edge.

To solve this problem, I propose that the Welsh C head does not universally bear default ϕ-

features. Kobayashi (2020) presents compelling evidence for the treatment of a matrix C head as a locus of ϕ-features, citing in particular the fact that the overt affirmative complementizer *fe* seen in (24) is syncretic with the third masculine singular personal pronoun.

(24) Affirmative complementizer in matrix clause:

Fe *brynodd* *Elin dorth a fara.*
COMP buy.PRT.3SG Elin loaf of bread
'Elin bought a loaf of bread.'

(adapted from Borsley et al. 2007:11, cited by Kobayashi 2020:62)

However, this affirmative complementizer does not occur in embedded clauses, as observed by Borsley et al. (2007). This suggests that an embedded C head may have a different ϕ-feature specification than a C head found in a root clause. Accordingly, I propose that an embedded complementizer carries no ϕ-feature specification, thus ensuring that the analysis described above still holds.

This proposal is also relevant to the analysis of Welsh control verb constructions. Welsh control verbs appear to take a bare verbal complement, as seen in (25). In a declarative V1V2 construction, no default clitic surfaces in the higher vP containing the control verb, although a typical, fully-Agreeing object clitic does occur in the lower vP when the direct object is pronominal. This patterning is seen in (25a). In a comparable control verb construction featuring A′-movement, two clitics surface: a full-Agreeing object clitic in the lower vP and a default Agreement clitic in the higher control vP. This structure is seen in (25b).

(25) Welsh control verb configurations

a. Declarative control verb construction:

Dw *i 'n* *bwriadu ei* *archebu.*
be.PRES.1S I PROG intend 3MS request
'I intend to request it.' (CorCenCC)

b. Control verb construction featuring A′-movement:

Beth wyt ti 'n ***ei*** *fwriadu ei wneud?*
what be.PRES.2S you PROG 3MS intend 3MS do
'What do you intend to do?' (adapted from Willis 2011:7)

It is expected that a default Agreement proclitic should surface at the V1 phase edge in (25b), as movement of the WH-phase *beth* 'what' past the verb triggers default Agreement as a result of the element's deactivated ϕ-features. However, for no clitic to surface in the corresponding position in (25a), the c-command domain of the *v* head in the higher vP with unvalued ϕ-features must lack any available goals, even those bearing deactivated features. This is only possible if the lower vP lies outside the c-command domain of the higher *v* head, indicating that an additional phase boundary must intervene between the two verbs in a control construction. Accordingly, the Welsh data obey the typological assumption that control verbs take a CP complement (Landau 2013).

One final construction—the Welsh passive—poses a significant challenge to the proposed parametrization of the Activity Condition. As described by Borsley et al. (2007:275), passive formation in Welsh is a valency-changing operation that "involve[s] the demotion or deletion of a subject and the promotion of an object." The basic structure of these constructions is shown in (26).

(26) Basic passive construction:

Ces i fy arestio.
get.PRT.1S I 1S arrest
'I was arrested.' (CorCenCC)

As seen in (26), the Welsh passive exhibits the AuxSVO clause structure, featuring the auxiliary verb *cael* 'to get', followed by the subject, an object clitic, and a nonfinite verb. Borsley et al. (2007) note that unlike typical AuxSVO declarative sentences, the passive construction cannot license an overt pronominal object, as shown in (27).

(27) *Cafodd Emrys ei daro (*o).*
get.PRT.3S Emrys 3MS hit (him)
Intended: 'Emrys was hit.' (Borsley et al. 2007:275)

The unavailability of (27) indicates that the proclitic in these constructions must be associated with movement, which lends credence to the proposal by Borsley et al. (2007) that this structure surfaces as a result of the promotion of the grammatical object to subject position. Accordingly, *i* and *fy* in (26) must be co-referential: the clitic surfaces when *i* undergoes movement across the nonfinite verb to its specifier, and subsequently to [Spec,TP]. This means that *i* is permitted to Agree with both the nonfinite verb *arestio* and the auxiliary verb *cael* (Kobayashi 2020).

This should not be possible according to the proposed parametrization of Agreement, which prevents a given set of ϕ-features, such as those belonging to *i*, from taking part in Agreement multiple times. As such, the auxiliary verb *cael* is expected to surface in the default third singular form *cafodd*, but it instead surfaces in the fully agreeing first person singular form *ces*. Why, then, is multiple full Agreement possible in the passive construction?

Recall that Preminger (2014) rejects the validity of the Activity Condition on the grounds that languages like Tsez permit a single set of features to participate in Agreement multiple times. In Preminger (2014)'s conceptualization of Activity, ϕ-features enter the derivation bearing an activity diacritic, and the first Agree relation that set of ϕ-features enters into switches the diacritic from "on" to "off", which clearly does not occur in Tsez. However, Preminger (2014) fails to address precisely *when* in the derivation the diacritic switches from "on" to "off." The timing of this operation has the potential to impact the availability of Agreement.

I therefore propose that feature deactivation does not take place immediately after entrance into an Agree relation, but rather at Spell-Out of the phase in which the Agreement took place. In a Phase-Theoretic framework, Spell-Out of a given phase is assumed to take place upon completion of the derivation of the subsequent phase Chomsky (2000).[5] Accordingly, I argue that all features, even those that have already engaged in Agreement, remain fully active until the phase in which they participated in Agreement is sent to Spell-Out.

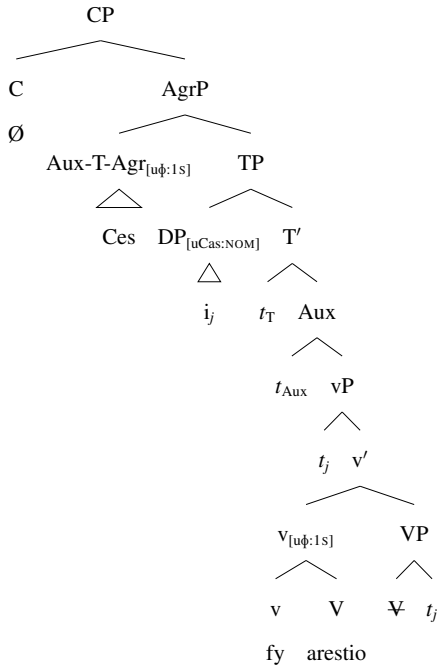
The assumption that feature deactivation takes place at Spell-Out is not incompatible with the

[5]I make no claims about precisely which form of the Phase Impenetrability Condition best accounts for the behavior of Activity in Welsh (Chomsky 2000, 2001). That question is left for future research.

conceptualization of Activity described thus far. In long-distance movement constructions, WH-phrases first undergo Agreement with the *v* head in the embedded vP phase. The WH-phrase then successive-cyclically moves to the specifier of the embedded CP. At this time, the derivation of the CP is complete, allowing the embedded vP to spell out and feature deactivation to occur. Thus, when the matrix *v* head attempts to Agree with the extracted WH-phrase, the ϕ-features on the WH-phrase are no longer active. A similar analysis can be presumed for control verb constructions.

In a simple passive construction on the other hand, no such intervening layer of structure is present to separate the vP in which Agreement first occurs from the higher CP. Therefore, as shown in (28), the subject's ϕ-features are still active when it Agrees with the auxiliary verb in the CP.

(28) Derivation of passive construction in (26):



As shown in (28), the DP *i* first participates in Agreement with the *v* head. The DP receives the case assignment [uCas:ACC], and the *v* head's ϕ-features are valued as [uϕ:1S]. This valuation is realized morphologically as the preverbal proclitic *fy*. Although both the *v* head and the DP have undergone Agreement, their ϕ-features remain active, as the phase in which the Agreement operation took place has not yet been spelled out.

After successive-cyclically moving into the CP, the DP *i* next enters into an Agree relation with the auxiliary verb *cael* housed in an Agr head, which has unvalued ϕ-features. At this stage in the derivation, the ϕ-features on the DP are still visible, so the auxiliary verb is able to receive the full feature valuation [uϕ:1S]. Finally, after the C head merges with the AgrP to form a CP, the derivation of the CP is complete, allowing the lower vP to spell out in full and deactivating all features that participated in Agreement operations within the vP phase. As such, the Welsh passive can be accounted for within this proposed analysis as well.

The argument that feature deactivation takes place at phase Spell-Out does not necessitate revision of Preminger (2014)'s assertion that Activity need be a parameter, and not a condition. Consider, for instance, the Passamaquoddy example from Bruening (2006), in which full Agree-

ment with an extracted WH-phrase is marked at the phase edge of both the embedded vP and the matrix vP. Given that these phases are separated by an intervening layer of structure, namely a CP, it might be expected that full Agreement could not surface on the higher vP if Passamaquoddy had the same parametrization of Activity as Welsh. That full Agreement does occur here indicates Passamaquoddy must allow a given set of ϕ-features to participate in Agreement multiple times. Thus Preminger (2014)'s argument that Activity should be parametrized continues to hold.

This proposal partially supports the argument by Adger and Svenonius (2011) that phases impose locality constraints on the formation of Agree relations. This is borne out in the Welsh data: feature deactivation, which I take as a reflex of Agreement, is seen to occur only at phase Spell-Out. On the other hand, the Passamaquoddy data make no such predictions about the locality constraints on Agreement, as feature deactivation is not parametrized to occur, even at Spell-Out. As such, it is not clear if Passamaquoddy is subject to the same phasal locality restrictions on Agreement as Welsh. I leave to future research the question of whether the Passamaquoddy data are wholly compatible with a Phase Theoretic account of Agreement, or if they better support Hornstein (2009)'s proposal that Agreement should be constrained to checking domains not distinguished by phases.

Chapter 6

Conclusion

In this thesis, I explored the typology of Welsh Agreement phenomena and proposed an original account of default clitic Agreement in long-distance A′-movement constructions. To synthesize these data with the larger typology of Welsh Agreement patterns, I adapted the Relativized Agree framework proposed by Kobayashi (2014, 2020). I then proposed an analysis based upon the argument that Activity is parametrized in Welsh such that a given set of ϕ-features can only participate in Agreement once before undergoing deletion. To explain the distinction in *v* head Agreement marking between declarative and A′-movement constructions featuring embedded clauses, I proposed that Welsh makes a morphological distinction between ϕ-probes valued by deactivated features and unvalued ϕ-probes. I then demonstrated how this proposal can be used to explain other Agreement patterns within the language, including comparative, control verb, and passive constructions.

This analysis supports the proposal by Preminger (2014) that syntax makes a distinction between unvalued ϕ-features and no ϕ-features by demonstrating that morphology can overtly realize this distinction. Furthermore, I show that it is possible to derive successive-cyclic movement in Welsh by making reference only to ϕ-features, without the need for overt WH-Agreement driven by intermediate uninterpretable WH-features. Finally, my proposal that feature deactivation takes place at phase Spell-Out makes it possible to synthesize the Activity Parameter within a Phase Theoretic framework, thus supporting the argument that Phases may contribute to locality con-

straints on the Agree relation. Overall, this thesis contributes to the literature on successive-cyclic movement by building the typology of Agreement patterns that can be licensed in A′-dependencies.

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