Microvariation in Welsh pronouns and agreement
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1   HISTORICAL DEVELOMENT

Middle Welsh pronouns (part system) > Modern (spoken) Welsh

	1S	2S	3MS	3FS	1P	2P	3P
weak	i	ti/di	ef	hi	ni	ch(w)i	hwy
strong	myfi	tydi	efo/efe	hyhi	nyni	chwychwi	hwyntwy
weakened	fi	ti/di/chdi	fo/fe	hi	ni	chi	nhw

Grammar 1
Gruffydd Robert (born before 1531 prob. *c*. 1522, prob. from Gwynedd (Caernarfonshire)) = NW.
Rhys Prichard (born 1579?, probably Llandovery, Carmarthenshire) = SW.
Ellis Lewis (fl. 1640–61, from Llanuwchllyn, Gwynedd (Meirionnydd)) = NW.
Morgan Llwyd (born 1619, from Maentwrog, Gwynedd (Meirionnydd)) = NW.
Dafydd Maurice (born 1626, from St. Asaph, Denbighshire) = NE.

(A)   … yn   welh   **nath di** …
            PRED   better   than.you
         '… better than you …' (Gruffyd Robert, *Y drych cristianogawl*, 13r, 1595)
(B)   Ped   fawn   i yma **gyda 'th di**   lawer   mis …
         if   be.IMPF.SUBJ.1SG I here with you   many   month
         'If I were to be here with you for many a month …' (Morgan Llwyd, *Llyfr y tri aderyn*, p. 28, 1653)
(C)   Resolfia   rhyngot   **a 'th di** dy hun   pa beth sydd   yw   wneuthur.
         resolve.IMPER.2SG between.2SG and you   yourself what   is.REL   to-3SG   do.INF
         'Resolve between you and yourself what is to be done.' (Jeremias Drexel, *Ystyriaethau Drexelivs ar dragywyddoldeb*, trans. Ellis Lewis, p. 266, 1661)

In second person singular: *â thydi* 'with you' > *â th'di* [grammar 1] > *â chdi*

Grammar 2A
(1)   Rhaid i ti beidio digio wrtha i am ddeydyd ***ythti*** – fedra i ddim deyd *y chwi*, wel-di: mi rydw i'n
           cofio dy daid yn llanc ifanc o'r gore …
         'You mustn't get angry at me for saying *ythti* [informal 'you'] – I can't say *y chwi* [formal 'you'], you see: I remember your grandfather as a young lad all too well …' (William Rees, *Aelwyd f'Ewythr Robert*, p. 7, 1853)

(2)   ["Wel, mi ddalia i chi am beced o datws, mod i chwedi dyallt," ebe Jacki.]
         "**Ythdi**   chwedi   dallt!   y llo   dwl   gin ti?" ebe yr hen   wr.
         you.INDEP PERF   understand.INF the calf stupid with you   said the old   man
         ["ond gâd glowed sut y daru ti ddallt y peth?"]
         '["Well, I'll bet you a peck of potatoes that I've understood," said Jacki. "You understood! the stupid calf that you are?" said the old man; ["but let me hear how you understood it?"]' (William Rees, *Aelwyd f'Ewythr Robert*, p. 38, 1853)

(3) Wel, 'dwi   'n   meddwl y   do   i **hefo 'th di**, os ca   i.
     well be.PRES.1S PROG think.INF COMP come.FUT.1S I with you   if may.PRES.1S I
     'Well, I think I'll come with you, if I may.'" (William Rees, *Aelwyd f'Ewythr Robert*, p. 474, 1853)

(4) cha   i byth mo   'r gair dwaetha **arnat ti**.
     get.PRES.1S I never NEG.DEF the word last   on.2S you
     'I'll never get the last word over you.' (William Rees, *Aelwyd f'Ewythr Robert*, p. 10, 1853)

(5) **Oeddet   ti** 'n   meddwl na   wyddwn   i ddim am hwnw tan 'rŵan?
     be.PAST.2S you PROG think   NEG.COMP know.IMPF.1S I NEG about that until now
     'Did you think that I didn't know about that till now?' (William Rees, *Aelwyd f'Ewythr Robert*, p. 166, 1853)

(6) … a   mi   rho   i **di**   yn y carchar …
        and PRT put.PRES.1S I you in the prison
     '… I'll put you in prison …' (William Rees, *Aelwyd f'Ewythr Robert*, p. 109, 1853)

(7) Mae   isio naw o **dy ffasiwn di** i neyd   dyn.
     be.PRES.3S want nine of 2S kind   you to make.INF man
     'You need nine of your sort to make a man.' (William Rees, *Aelwyd f'Ewythr Robert*, p. 155, 1853)

(8) Mi   alla   i **dy goelio   di** am y peth cynta ene …
     PRT can.PRES.1S I 2S believe.INF you about the thing first that
     'I can believe you about the first thing there …' (William Rees, *Aelwyd f'Ewythr Robert*, p. 155, 1853)

Grammar 2B

(9) "… Gallaf   fi gyd-ddwyn   pob   baich hefo **'ch di**."
         can.PRES.1S I withstand.INF every burden with you
     "'… I can withstand every burden with you." (Lewis William Lewis, *Huw Huws*, p. 5, 1860)

(10) … ond os **ch'di** geiff   y lle …
        but if you   get.FUT.3SG the place
     '… if it's you that gets the place …' (Lewis William Lewis, *Huw Huws*, p. 15, 1860)
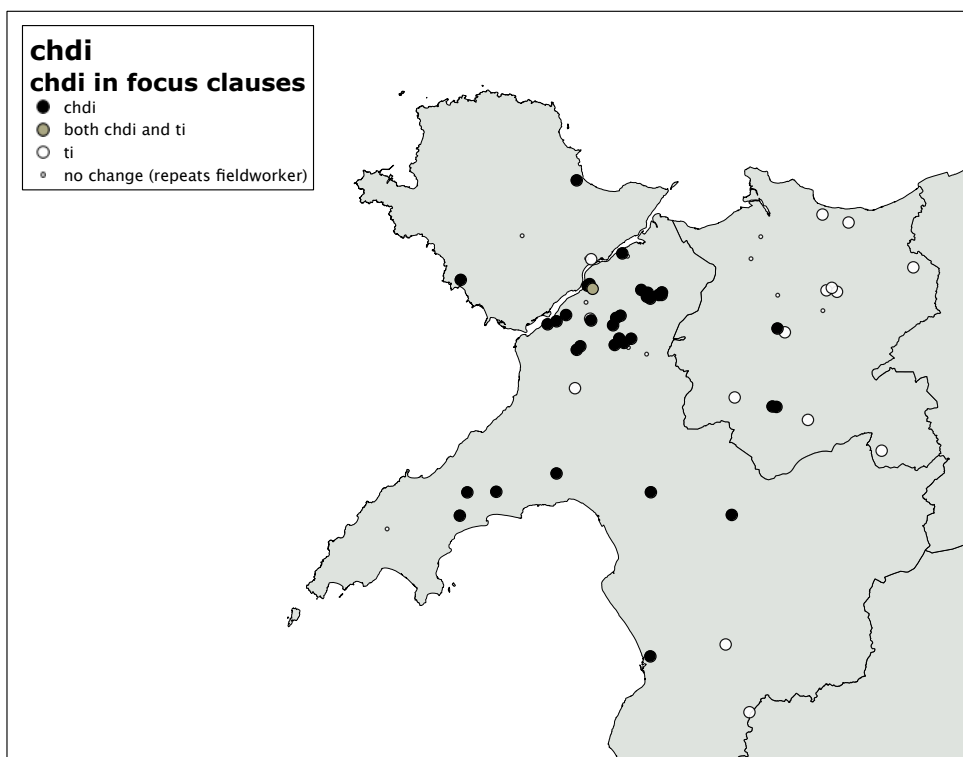
Grammar 3

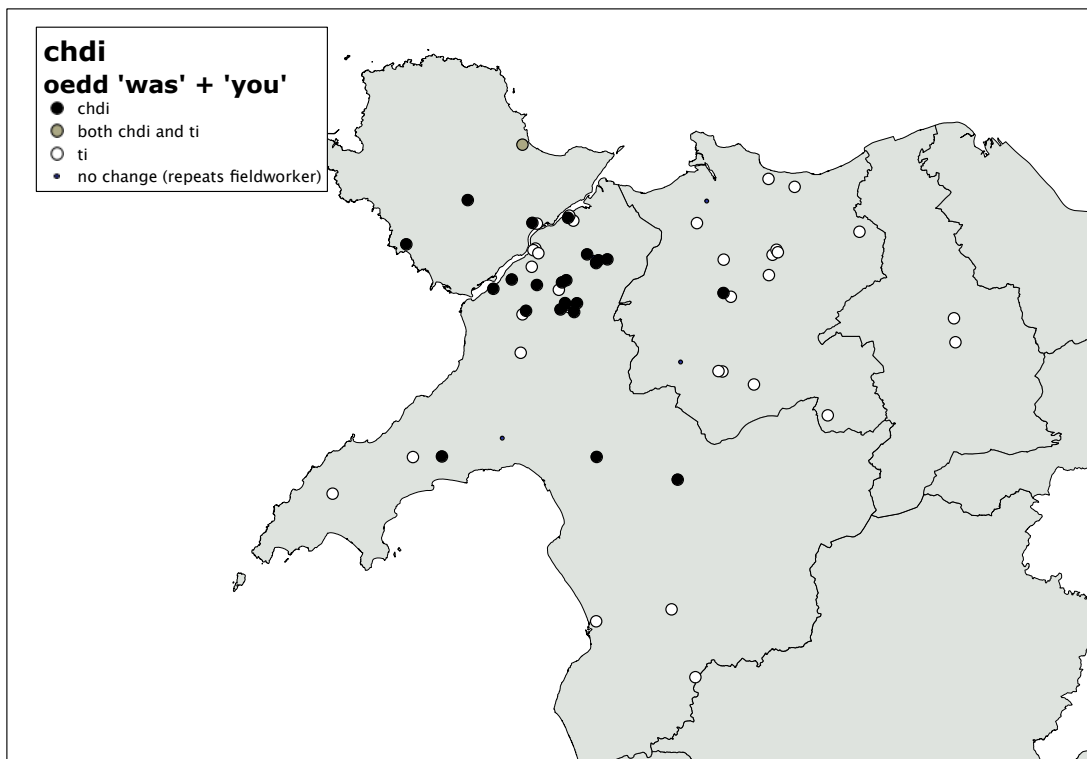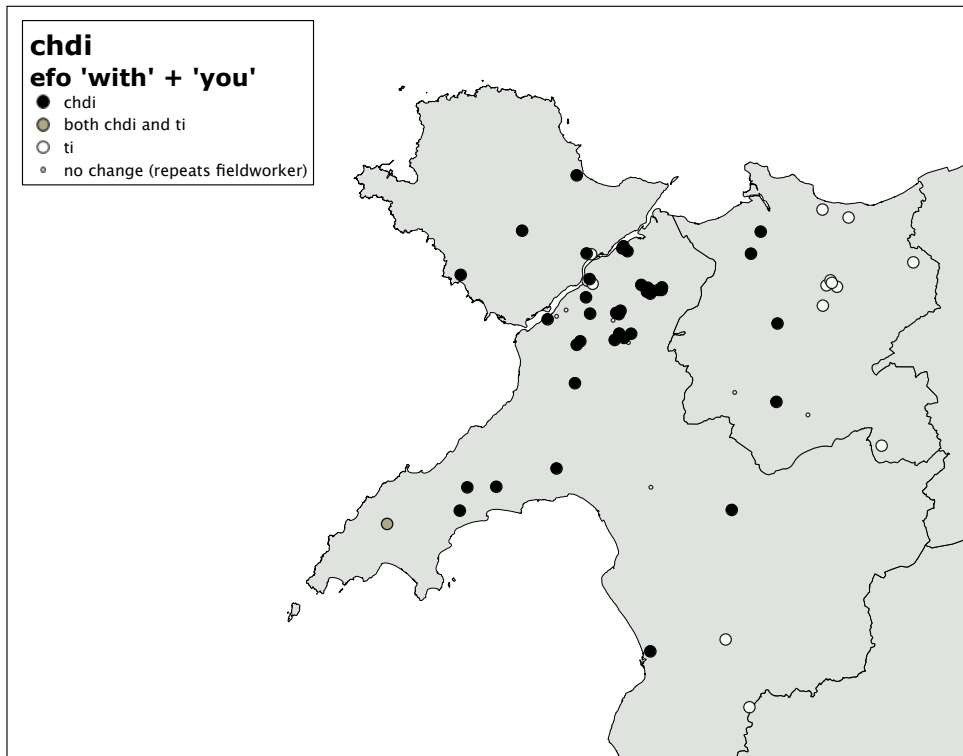(11) Mae   o 'n   beth rhyfedd iawn dy fod   **chdi** 'n priodi   rwan.
     be.PRES.3S it PRED thing strange very 2S be.INF you   PROG marry.INF now
     'It's a very strange thing that you're getting married now.' (Kate Roberts, *Traed mewn cyffion*, p. 108, 1936)

(12) … yn lle   dy fod   **chdi** 'n   llusgo   'r clocsiau mawr yna.
        instead 2S be.INF you   PROG drag.INF the clogs   big   those
     '… instead of your dragging those big clogs around.' (Kate Roberts, *Te yn y grug*, 1959)

(13) Pwy sy   'n   ffonio   chdi?
     who be.REL PROG phone.INF you
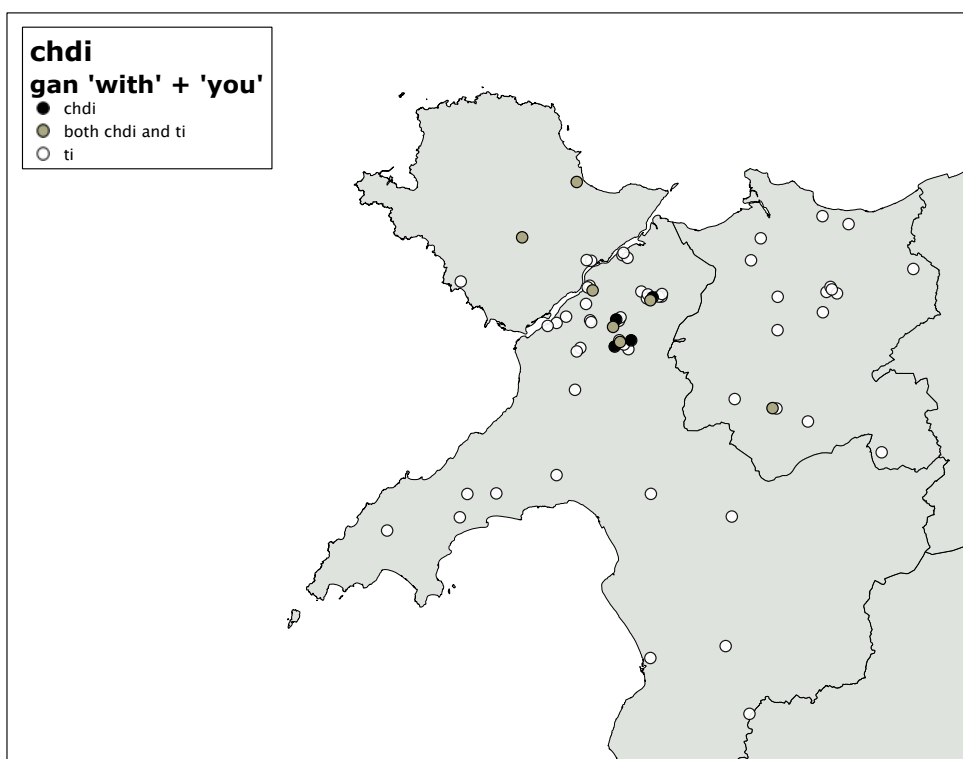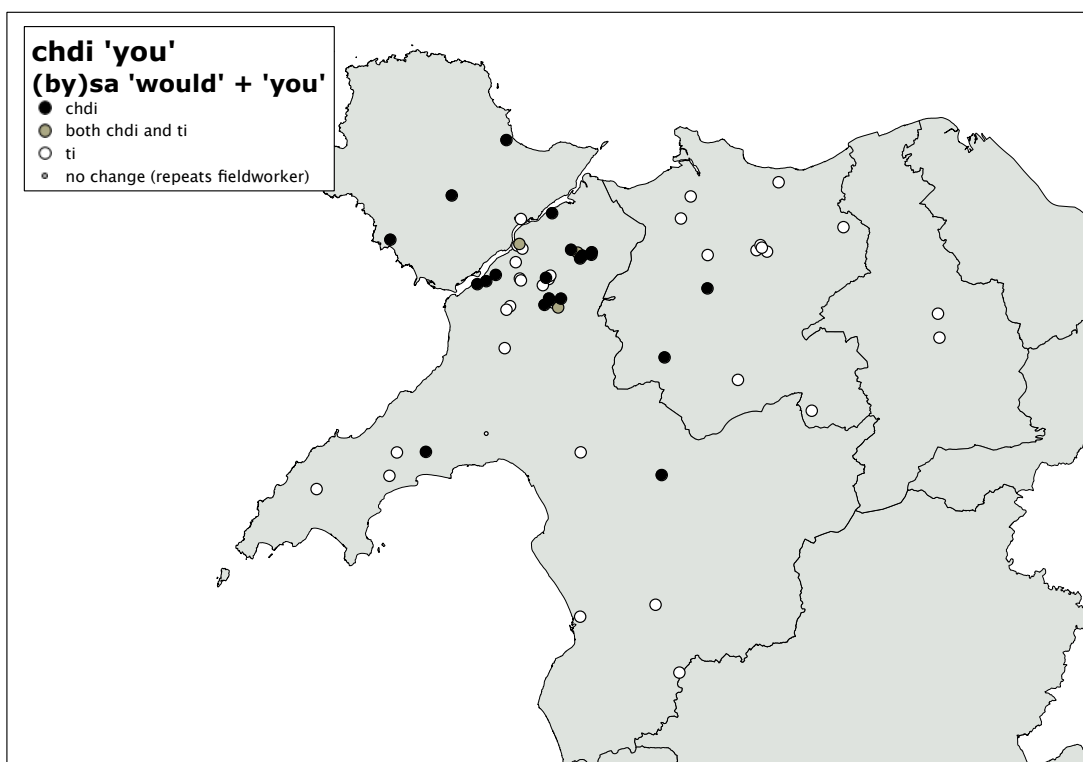   'Who's phoning you?' (Siarad corpus, davies9)

Grammars 4–10

(14) a.   Wnes   i ddeud 'tha chdi am … y bobl   'na …
           do.PAST.1S I say.INF to   you about the people those
           'I told you about those people …' (Siarad corpus, robert2)

     b.   achos   mae   gynna chdi spellchecker Cymraeg   arno   fo.
           because be.PRES.3S with   you spellchecker Welsh   on.3MS it
           'because you've got a Welsh spellchecker on it.' (Siarad corpus, robert2)

(15) Gig cynta **chdi** efo   Gwil?
     gig   first you with Gwil
     'Your first gig with Gwil?' (Siarad corpus, davies9)

(16) Sa   **chdi** byth   deud …
     be.COND you   never   say.INF
     'You'd never say …' (Siarad corpus, davies7)

(17) Oedda   **chdi** 'na?
     be.PAST you   there
     'Were you there?' (Siarad corpus, davies7)

(18) Hei, be   dach   **chdi** 'n   ddeud?
     hey what be.PRES.2S you PROG   say.INF
     'Hey, what are you saying?' (B. M. Jones 1990: 58)

2   SYNCHRONIC DIALECT DISTRIBUTION (SPEAKERS BORN 1930S ONWARDS)

chdi
efo 'with' + 'you'
- ● chdi
- ● both chdi and ti
- ○ ti
- · no change (repeats fieldworker)

chdi
oedd 'was' + 'you'
- ● chdi
- ● both chdi and ti
- ○ ti
- · no change (repeats fieldworker)

chdi 'you'
(by)sa 'would' + 'you'
● chdi
◉ both chdi and ti
○ ti
· no change (repeats fieldworker)

chdi
gan 'with' + 'you'
● chdi
◉ both chdi and ti
○ ti

3   FORMAL ANALYSIS

In grammar 1a (up to 16th century), the language had a weak pronominal form *ti/di* 'you' and a strong form *tydi*. *Tydi* becomes *thydi* by aspirate mutation (indicated by [A]), a regular morphosyntactic

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alternation, after *â*^A 'with', *efo*^A 'with' and *na*^A 'than'. A further purely phonological change leads to grammar 1b (16–18th centuries), where the vowel is lost in the strong form after these same prepositions (hence *â thydi* > *â th'di* 'with you'), while *tydi* remains in other contexts.

From the outset, agreeing contexts require a weak pronoun, while non-agreeing contexts allow either (depending perhaps on pragmatic factors). I assume that the weak pronoun in agreeing contexts results from surface-level readjustment along the lines of pronoun incorporation analyses of Celtic agreement, via a morphological readjustment rule as with the allomorphy rules of Ackema and Neeleman (2004), or via some similar mechanism (Anderson 1982, Doron 1988, Rouveret 1991, Adger 2000). In (1), the preposition *â*^A 'with', morphologically incapable of agreeing with a pronominal object, allows both strong and weak pronouns after it, while *am* 'about', which has inflected forms such as *amdanat* 'about.2SG', allows only the weak pronoun *ti*:

(19) â th(y)di   *amdanat tydi   strong
     â thi   amdanat ti   weak
     'with you'   'about you'

Similarly, with verbs in (20), the third person singular, often assumed to be a default form manifesting complete absence of agreement, allows either strong or weak forms, while other persons and numbers allow only weak forms:

(20)   buasai efo   *buaset tydi   strong
       buasai ef   buaset ti   weak
       'he would be' 'you would be'

This follows from the following lexical specification of the items in question (a full implementation needs φ-features to be split into speaker, hearer, number and gender features to deal with specific issues omitted here for simplicity):

(21) am   be.COND   â^A   D   D
      [uφ: ___]   [uφ: ___]   [pro: +]   [pro: +]
      [upro: ___]   [upro: ___]   [φ: 2SG]   [φ: ø]
      'about'   'would be'   'with' 'you'   'he'

Uninterpretable φ-features are valued by Agree with the φ-features of their complements:

(22)   PP
          ┌──────────┐
          P   DP/D
      [uφ: 2SG]   [pro: +]
      [upro: +]   [φ: 2SG]

Allomorphy spellout rules regulate the surface realization of these combinations:
(23) [uφ: 2SG]   [pro: +]   >   agreement morphology + *ti*
      [upro: +]   [φ: 2SG]
(24) *am*   [pro: +]   >   *amdanat ti* 'about you'
      [uφ: 2SG]   [φ: 2SG]
      [upro: +]
(25) be.COND   [pro: +]   >   *buaset ti* 'you would'
      [uφ: 2SG]   [φ: 2SG]
      [upro: +]

All other combinations are spelled out word for word:

(26) âᴬ   [pro: +]   >   â thi
              [φ: 2SG]
(27) âᴬ   [pro: +]   >   â th'di
              [φ: 2SG]
              [FOCUS: +]
(28) be.COND   [pro: +]   >   buasai ef / buasai efo (as above)
      [uφ: ∅]   [φ: ∅]
      [upro: ±]

In (26) and (27), the aspirate mutation diacritic ᴬ is interpreted by the phonology as an instruction to implement aspirate mutation on *ti* /ti/ > /θi/ and *tydi* /tədi/ > /θədi/. Reduction of /θədi/ to /θdi/ is also dealt with by the phonetics or phonology.

     Later (grammar 2a), learners fail to relate *th'di* to its baseform *tydi*; that is, they fail to treat it as the result of phonological processes and encode it directly in the (morphological component of the) grammar. They create a new spellout rule:

(29) D   >   /θdi/ *thdi*
      [u-pro: +]
      [φ: 2SG]
      [FOCUS: +]

The form of the pronoun is therefore no longer conditioned by mutation, the presence of the initial /θ/ thus being determined by the morphology rather than the phonology. The spellout rule in (29) reflects grammar 2a. Some acquirers falsely posit assimilation in /θdi/ *thdi*, taking /θ/ to be the result of assimilation of an underlying /χ/ to the following dental, cf. 'hyper-correction' in the technical sense of Ohala (1981, 1992: 22–32). This yields grammar 2b, identical to grammar 2a, except that the spellout rule gives a slightly different output:

(30) D   >   /χdi/ *chdi*
      [pro: +]
      [φ: 2SG]
      [FOCUS: +]

The result of the shift from grammar 1 to grammar 2 is that occurrence of *chdi* is not dependent on the presence of a preposition or other element that triggers aspirate mutation; hence, it spreads to any non-agreeing environment, notably to fronted focus position, as in (31).

(31) … ond os **ch'di** geiff   y   lle …
     but if   you   get.FUT.3SG the   place
    '…if it's you that gets the place…' (L. W. Lewis, *Huw Huws* 15, 1860)

The relationship between *ti* and *chdi* as strong forms presumably also resolves itself at this point too. In stage 2 grammars, *ti* and *chdi* differ in that, although both are possible manifestations of the pronoun when it is spelled out as a single word, only the latter spells out the feature [FOCUS: +]. Learners fail to acquire this distinction, treating both as possible spellouts of an undifferentiated strong (that is, non-

agreeing) pronoun. The free variation between the two forms is quickly resolved in favour of *chdi*, hence the lexical entry for *chdi* becomes:

(32) D   >   /χdi/ *chdi*
      [pro: +]
      [φ: 2SG]

        At this point, a number of different innovations begin to develop, broadly classifiable as extension of agreement and loss of agreement.

3.1   Extension of agreement

Under extension of agreement, some learners fail to establish that *chdi* is the spellout only of the strong, non-agreeing pronoun. A look at the entire pronominal paradigm in Table 1 makes clear why this should be an attractive hypothesis. Throughout the plural, and in the third person singular feminine, each weak form is paired with a homophonous strong form: differences are purely phonological.

Table 1. Pronominal paradigms in northern spoken Welsh.

	strong		weak	
first person	fi	ni	i	ni
second person	chdi	chi	ti/di	chi
third person	fo (m.)	nhw	o (m.)	nhw
	hi (f.)		hi (f.)	

Learners extend this pattern to the second person singular, treating *chdi* as forming a homophonous weak–strong pair, analogous to the other cases of this in the paradigm. As a weak form, it can participate in agreement in cases where morphological spellout allows this; that is, individual additions to the agreement allomorphy rule in (23) may emerge. Two specific new rules emerge. The first innovation (grammar 3a), in speakers born in the 1880s, allows *chdi* as the subject of nonfinite *bod* 'be', an agreement environment:

(33)   CP
                    ┌────────┴────────┐
                    C   TP
                  'be'   ┌──────┴──────┐
               ┌────┴────┐   DP/D
               C   T   [φ: 2SG]
         [force: SUB] [uφ: 2SG]
                       [tense: PRES]

(34) 'be'
   [u-pro: +]   [pro: +]   >   *dy fo(d) chdi*
       [uφ: 2SG]   [φ: 2SG]
       [tense: PRES]
       [force: SUB]

(35) Mae   o 'n   beth rhyfedd iawn **dy   fod   chdi** 'n   priodi   rwan.
      be.3SG it PRED thing strange very   2SG be.INF you PROG marry.INF now
      'It's a very strange thing that you're getting married now.' (Kate Roberts, *Traed mewn cyffion*, p. 108, 1936)

     A broadly parallel but probably later innovation introduces special forms of auxiliaries in tag questions. In northern dialects, tags to affirmative clauses are near obligatorily null-subject tags. For concreteness, we can assume that tags are CPs right-adjoined to their host clause and truncated below the CP level. Where a dialect has a new *chdi*-based tag form, then, it has created new agreeing forms of the tag auxiliaries, such as (36), which creates *chdi*-based forms such as the imperfect tag auxiliary (*yn*)*do'chd* (full form (*yn*)*doeddachd*), replacing (*yn*)*do't* (full form (*yn*)*doeddat*).

(36) [force: TAG]   [uφ: 2SG]   >   *do'chd*
      [u-polarity: AFF]   [tense: IMPF]

An illustrative derivation is given in (37) for the tag in (38).

(37)
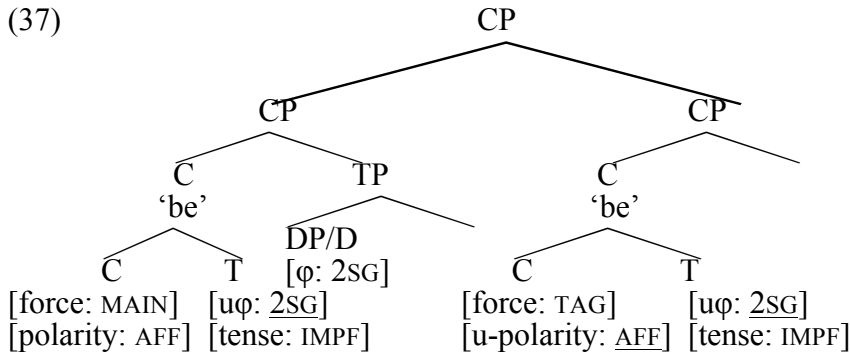
spellout: *o'dda chdi ...*   *do'chd*

(38) O'dda   chdi dal   i   ffwrdd, do'chd?
      be.IMPF you still to   away,   TAG.IMPF.2SG
      'You were away, weren't you?' (conwy_14)

3.2   Loss of agreement

A countervailing set of developments concerns the spread of *chdi* via changes in the agreement system itself, with various evidence suggesting that Welsh is losing subject–verb agreement and object–preposition agreement. This change is formalized via a restructuring of the morphological component. The agreeing form fails to be acquired; that is, agreeing heads no longer bear φ-features. Consequently, the morphological spellout rules that make reference to those features are not acquired either. The lexical entry for the preposition *am*, after loss of agreement, becomes:

(39) AM
      [u-pro: ___]
      'about'

When adjacent to a pronoun, the two simply spell out separately. If the [u-pro] feature is valued positively, then *am* spells out as *amdana*, previously the stem of the inflected form of the preposition. If it is valued negatively, then the form is *am*, as required with a lexical object. The effect of this in the second person singular is that the pronoun is spelled out as *chdi*, by the spellout rule in (32), since no more specific rule applies:

(40) AM   [pro: +]
      [u-pro: ±]   [φ: 2SG]
      > *amdana*   > *chdi*

The loss of φ-features is a separate development with each individual lexical item, hence individual speakers may vary in terms of which of the heads have lost agreement and therefore switched to using *chdi* as their argument. As well as *amdana chdi* 'about you', we find *basa chdi* 'you would' in place of *basat ti*, *bydda chdi* 'you will be' in place of *byddi di*, *oedda chdi* 'you were' in place of *oeddat ti*, *dylia chdi* 'you should' in place of *dylat ti*, *gynna chdi* 'with you' in place of *gin ti* etc. Type 4 grammars of this type have emerged in speakers born since the 1930s, with their fullest implementation in the youngest speakers today.

3.3   Why is there no auxiliary drop with *chdi?*

The final question to consider is why auxiliary drop structure always use *ti* and never *chdi*. All northern speakers produced auxiliary-drop sentences in the second person singular. Responses such as the following were typical:

(41) Pam   ti   'n   cerddad   mor gyflym?
      why ø.AUX you   PROG   walk.INF   so   fast
      'Why are you walking so fast?' (gwynedd_03, qu. 11)

No speakers used *chdi* in this environment. The reason is clear once the entirely paradigm of the auxiliary is considered. The typical northern paradigm for auxiliary 'be' is given in Table 2.

Table 2. Typical paradigm for present tense of *bod* 'be' in northern varieties.

	sing.	plur.
first pers.	dw (i)	da (ni)
second pers.	ø (ti)	da (chi)
third pers.	mae/di (o)	mae/da (nhw)

Within this paradigm, the auxiliary drop of the second person singular is a unique form, and is therefore a spellout of an auxiliary with a φ-feature:

(42)   'be'
        [u-pro: +]   [pro: +]   >   *ti*
        [uφ: 2SG]   [φ: 2SG]
        [tense: PRES]

In order for *chdi* to be possible, this feature would have to have been lost.

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