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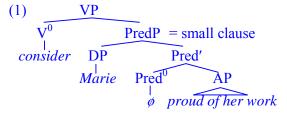
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1. INTRODUCTION: THE SYNTACTIC THEORY OF MEDIATED PREDICATION

Bowers 1993, 2001: all predication must be mediated by a functional head Pred⁰ (originally, Pr°). The small clause is a projection of this head (PredP).



Empirical evidence: predicate case-marking (Bailyn and Rubin 1991, Bailyn and Citko 1999, Bailyn 2001, 2002) and copular particles, as well as some finer details of small-clause syntax

The semantic function of Pred is to create a predicate out of an entity-correlate (or some such construct): APs, NPs and PPs are hypothesized to not denote predicates, and therefore require conversion into predicates (Bowers 1993 citing Chierchia 1985, Chierchia and Turner 1988) NB: Both Bowers 1993, 2001 and den Dikken 2006 take the extreme position, though for different reasons: verbal predication must also be mediated by a functional head. We will not address this complication here.

Bowers 1993, Baker 2003: the Welsh particle yn is an overt realization of Pred°

2. WELSH COPULAR PARTICLE

Initial confirmation: yn clearly appears in small clauses

Primary predication:

- (2) a. Mae Siôn *(yn) ddedwydd. is Siôn PRT happy Siôn is happy.
 - b. Y mae Siôn *(yn) feddyg.

 PRT is Siôn PRT doctor

 Siôn is a doctor.

Secondary predication: ECM, resultatives and depictives:

- (3) Rydw i'n ystyried [Siôn yn niwsans]. am I+PROG consider John PRED nuisance *I consider John a nuisance*.
- (4) a. Peintia'r petryal bach yn goch. paint-IMP+the rectangle small PRED red *Paint the small triangle red.*

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Zaring 1996

Rouveret 1996:128

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b. Dw i'n licio cwrw yn oer. be-1sg I+prog like beer pred cold I like beer cold. Bob Morris Jones, p.c.

Absolute constructions (cf. Chung and McCloskey 1987 for Irish):

(5) A mi yn ofnus, ni ddywedais ddim. and I PRED shy NEG said nothing Since I am shy, I said nothing.

Rouveret 1996

NP-internal reduced relatives (Willis 2006):

(6) buddsoddi ym mhensaernïaeth fy ngwlad, yn hen ac yn newydd invest.VN in architecture my country PRED old and PRED new to invest in the architecture of my country, old and new.

To the best of my knowledge, scholars working on Welsh haven't investigated the hypothesis that *yn* is Pred°:

- Hendrick 1984, 1996: the predicative *yn* is Asp°, just like the progressive *yn* and the perfective *wedi* (homophonous with the prepositions 'in' and 'after'; as noted by Awbery 1976, Sproat 1985 and Fife 1990:368-386, 422-442, among others, the predicative, progressive and propositional *yn* all induce different mutations)
- Rouveret 1996: the predicative *yn*, the progressive *yn* and the perfective *wedi* all introduce stage-level predicates (but see Zaring 1996 for the demonstration that individual-level and stage-level adjectives retain their properties with *yn*)
- Gensler 2002: the predicative yn is the same item as the adverbializing yn (which is, alas, not very explanatory)

Historically, the structure with yn is an innovation, spreading from the depictive use (Gensler 2002, Borsley, Tallerman and Willis 2007)

Crucially for us, in some environments *yn* is conspicuously absent:

- when the predicate is a PP
- when the predicate is moved to [Spec, CP]
- before equative and intensive (so, such) degree operators

What are the consequences of this distribution for the hypothesis that the *yn* is Pred°?

3. PP AND ASPP PREDICATES

PP predicates and AspPs when *be* functions as an auxiliary **disallow** *yn* (Jones and Thomas 1977:47, Jones 2009):

- (7) a. Mae Siôn (*yn) yn Lludain /o flaen y tŷ. Zaring 1996 is Siôn PRT in London of foremost the house Siôn is in London/in front of the house.
 - b. A hwy yn yr eglwys, ysbeiliwyd eu tŷ. Rouveret 1996 and them in the church was-looted their house *While they were in the church, their house was looted.*
- (8) a. Y mae'r ffermwr wedi cau y glwyd.

 PRT is-the farmer PERF shut the gate

 The farmer has shut the gate.

 Rouveret 1996
 - b. Mae dyn yn siarad efo Mair. is man PROG speak to Mair *A man is speaking to Mair.*

This is completely consistent with cross-linguistic lexicalization patterns for copular particles and copular verbs (Hengeveld 1992, Stassen 1997, Pustet 2005):

- (i) No lexicalization with VPs, unless they are derivationally converted into nouns or adjectives
- (ii) No copular particles with PPs; a special copular or stance verb is often required
- (iii) Lexicalization with APs only if lexicalization with NPs. The copular particle may be the same (Welsh) or it may be different (Edo)

A good theory of Pred° should **explain these patterns**. Doing so requires going beyond the simple assertion that Pred° mediates predication and providing it with a proper role.

My hypothesis: the correlation in (iii) has to do with the fact that in different languages or within the same language adjectives can be "more verbal" or "more nominal" -- it is the latter category that may require an overt mediator in the predicative position

4. WELSH ADJECTIVES AS NOUNS

I'm only aware of two languages demonstrably using a copular particle with AP predicates: Edo and Welsh. With NP predicates this is considerably more frequent. Why?

Proposal: Welsh adjectives are close to nouns and, like nouns, require support to appear in the predicate position.

Support: The distributional properties of Welsh adjectives bring them close to nouns.

4.1. Nominal adjectives

Cross-linguistically, adjectives may be more or less nominal/verbal (contra Baker 2003).

Japanese adjectives are divided into "verbal" and "nominal" (cf. Kageyama 1982, Miyagawa 1987, Kubo 1992, Nishiyama 1999, etc.), of which only the latter require an overt copula:

(9) Canonical ("verbal") adjectives

Japanese

- a. yama-ga takai. mountain-NOM high.PRES The mountain is high.
- b. yama-ga takakatta. mountain-NOM high.PAST The mountain was high.

(10) Nominal adjectives

- a. yoru-ga sizuka-da. night-NOM quiet-COP.PRES The night is quiet.
- b. yoru-ga sizuka-datta. night-NOM quiet-COP.PAST The night was quiet.

Bantu languages also have two classes of adjectives, agreeing ("real", or "verbal") and non-agreeing ("nominal"), distinct from nouns and verbs (Doke 1927, Posthumus 2000, Stassen 1997:168, Matushansky and de Dreu 2009):

(11) a. Ngimu- hle. "agreeing adjective": Zulu AGR_S1SG- AA₁- beautiful I am beautiful. Ngib. ngcono. "non-agreeing adjective": Zulu AGR_S1SG- improved I am better. Ngi mfana. NP predicate: Zulu c. ngu-AGR_S1SG- PRED- AUG- boy I am a boy.

In **Zulu**, NP predicates require a copular particle, while AP predicates don't.

4.2. Adverbs

Welsh doesn't have any adverbializing suffix: AP-internal modification is done by another adjective either directly or with the help of the preposition of, and VP-internal modification requires an additional marker homophonous with the predicative yn.

4.3. Prepositions

Welsh adjectives can **appear with the prepositions** yn 'in' (yielding adverbs that can modify VPs, but not APs) and o 'of' (yielding AP-internal modification):

- (12) a. Fedrith o redeg yn gyflym.

 can.PRES.3SG he run in quick

 He can run quickly.

 Jones 2009
 - b. arbennig o ddiddorol special of interesting especially interesting

The adverbializer yn triggers lenition (soft mutation, like the predicative yn) rather than nasal mutation (which is what the prepositional yn does), so the question arises if such adverbs are in fact depictives. The answer is no:

(13) Oedden nhw 'n ffyrnig yn achlysurol. Jones 2009 be.IMPF.3PL they PRED fierce in occasional They were occasionally fierce.

A few nouns (*andros* 'devil', *coblyn* 'goblin', and *syndod* 'surprise') and locative expressions (*dros ben* 'over head' and (y) tu hwnt 'beyond') can also occur in the configuration of (12b).

4.4. AP-AP modification

Welsh adjectives can be modified by adjectives directly, just like nouns (Jones 2009)

- (14) a. tawel rhyfeddol duiet strange strangely quiet strange a strange idea strange idea
- (15) a. swnllyd ofnadwy noisy awful evening awful awfully noisy awful an awfull evening

VP-modification can't be done by an AP (unlike, say, in Hebrew or in German), so adjectives and adverbs are not homophonous in Welsh.

default

exceptional

A two-level modification (*most awfully noisy*) is not allowed for any adjective positions (see Jones 2009), but this could be in part pragmatic (cf. ^{??}[incredibly awfully] noisy) or linked to the fact that direct AP-AP modification is restricted.

4.5. AP position

Adjectives can appear either before or after nouns and adjectives they modify (Rouveret 1994, Sadler 2000 and Willis 2006, among others). This is determined on the lexical basis:

- (16) a. dadansoddiad cymharol analysis comparative comparative analysis
 - b. cymharol ifanc comparative young comparatively young
- (17) a. penderfyniad difrifol decision serious serious decision
 - b. difrifol wael serious ill seriously ill
- (18) a. fy **hoff hen** gi my favourite old dog my favourite old dog
 - b. tawel **rhyfeddol** quiet strange strangely quiet

Adjectives appearing before the constituents they modify trigger lenition.

VP adverbs must appear after the VP, except if functioning as frame adverbials (Jones 2009).

4.6. Lenition in the feminine

Mittendorf and Sadler 2006: Welsh feminine nouns trigger lenition on the following AP (the first word thereof):

NB: The mutation on *pwysig* 'important' in (19c) is not the "soft-mutation" (lenition) but the aspirated mutation, caused by the adverb *tra* 'very'.

- (19) a. cath ddu fawr cat.FSG black big a big black cat
 - b. agwedd bwysig aspect.FSG important (an) important aspect
 - c. agwedd dra phwysig aspect.FSG very important (a) very important aspect

UR: agwedd pwysig

UR: cath du mawr

UR: agwedd tra pwysig

The feminine adjective, however, can in turn trigger lenition on its own modifier (Jones 2009, citing Thomas 1996:221):

- (20) a. noson wyntog ddychrynllyd night.F windy frightening a frighteningly windy night
 - b. diwrnod gwyntog dychrynllyd day.M windy frightening a frighteningly windy day
- (21) a. merch gas gythreulig woman.F nasty devilish a devilishly nasty woman
 - b. dyn cas cythreulig man.M nasty devilish a devilishly nasty man

If the Welsh adjectives behave like nouns in this respect, the explanation is straightforward.

4.7. Compounding

Welsh compounding is also head-initial and the second member undergoes lenition if the first member is feminine:

- (22) a. siop fara shop bread baker's (shop)
 - b. siop gig shop meat butcher's (shop)

Given the cross-linguistic similarity between compounding and modification, this extra lack of a difference is encouraging.

4.8. Comparatives and equatives

Gensler 2002 also emphasizes the similarity between adjectives and nouns: "compared forms exist not just for adjectives but also for a number of nouns (Williams 1980:33-34). Thus, with the superlative: pen 'head', penn-af 'chief'; ôl 'track, rear', ol-af 'last'; diwedd 'end', diweth-af 'last'. And with the comparative: lles 'benefit', lles-ach 'more advantageous'; amser 'time', amser-ach 'more timely'; elw 'profit', elw-ach 'more profitable'. As for the equative degree, the morphological equative form also has a nominal meaning: teg 'beautiful', cyn dec-ed 'as beautiful as' (with lenition after cyn 'as'), tec-ed '(degree of) beauty'."

5. Intermediate summary

The subcategorization properties of *yn* are fully consistent with it being a copular particle.

The hypothesis that **copular particles subcategorize for nouns and nominal adjectives** is not contradicted by Welsh: Welsh adjectives and nouns are clearly very similar.

Restricting copular particles to predicates headed by **nouns and nominal adjectives** seems to be **inconsistent with the hypothesis that the copular particle is Pred**° (under the standard view of Pred° as the head of any small clause).

However, it makes perfect sense if the main function of nouns is **classificatory rather than ascriptive** -- predication is primarily ascriptive (while identity is primarily classificatory).

The remaining two yn-less environments don't change the picture.

6. WELSH PREDICATE FRONTING

Rouveret 1996, Zaring 1996, etc.: when the predicate is fronted, the particle yn disappears:

(23) a. Ffeind wrth bawb ydy Mair. kind to everyone is Mair *Mair is kind to everyone.*

Jones 1993 via Rouveret 1996

b. Meddyg yw Sion. doctor is Sion *Sion is a doctor*.

Rouveret 1996

In addition, the copula is not clause-initial and the form of the copula is different.

Does the new form of the copula reflect the incorporation of the putative Pred°?

Perhaps, but this form is also used in the **equative copula**, where there is no evidence for the presence of yn:

(24) a. Y brenin yw Arthur. the king is Arthur *Arthur is the king*.

Rouveret 1996

- b. Arthur yw'r brenin.
 Arthur is-the king
 It is Arthur who is the king.
- c. *Y mae Arthur yn y brenin.
 PRT is Arthur PRED the king

... and when yn is clearly **not incorporated** (after clause-initial negation, question particle or if):

(25) a. A ydyw Ifan yn bregethwr? Q is Ifan PRED preacher Is Ifan a preacher?

Rouveret 1996

b. Nid yw Ifan yn saer. NEG is Ifan PRED carpenter *Ifan is not a carpenter*.

Williams 1980:94

More likely conclusion: the copula form yw reflects the **movement of the copula to C** $^{\circ}$ (but see Zaring 1996 for the hypothesis that it is also the lexical copula).

If the predicate is a PP (or an AspP), the *mae* form must be used:

(26) a. Yn Llundain (y) mae Siôn. in London PRT is John *John is in London*.

Zaring 1996

b. *Yn y dre yw/ydy Gwyn. in the town be.PRES.3SG Gwyn ('Gwyn is in town.') Borsley, Tallerman and Willis 2007

...except after clause-initial negation, question particle or if.

Summary: Welsh predicate fronting says nothing about the syntactic or semantic role of yn; while its absence from inverted structures can be attributed to incorporation into be, this is not an explanation and has nothing to do with it being or not being Pred°

Its **absence from identity clauses** somewhat supports the hypothesis that yn is Pred $^{\circ}$.

Jones 2009

7. EQUATIVES AND INTENSIVES

Welsh equatives can be simultaneously inflected and analytic, depending on the choice of the morpheme, dialect and register: "mor is more characteristic of southern dialects and would not typically occur in formal Welsh." (Jones 2009):

- (27) a. cyn/mor dal-ed â Sioned so/as tall-EQ with Sioned as tall as Sioned
 - b. mor/(*cyn) ddeallus â Sioned so/as intelligent with Sioned as intelligent as Sioned

Neither *mor* nor *cyn* are compatible with *yn*:

- (28) a. Mae Gwen mor gryf(ed) â Megan. Jones 2009 be.PRES.3SG Gwen as strong(-EQ) with Megan Gwen is as strong as Megan.
 - b. Mae Gwen cyn gryfed â Megan. be.PRES.3SG Gwen as strong-EQ with Megan Gwen is as strong as Megan.

Mor is ambiguous between the intensifying 'so' and the equative 'as'; *cyn* is equative only:

- (29) a. Mae Gwen mor gryf(ed). be.PRES.3SG Gwen so strong Gwen is so strong.
 - b. *Mae Gwen cyn gryf(ed). be.PRES.3SG Gwen so strong

Only *mor* can take a standard CP:

(30) Mae 'r tywydd mor/*cyn wyntog heddiw fel bod rhaid cau 'r bont. be.PRES.3SG the weather so/as windy today like be necessity close the bridge *The weather is so windy today that the bridge has to be closed.*

Why is *yn* absent?

The most straightforward answer: it's a category issue: *mor* and *cyn* are prepositions.

- Support: *cyn* is homophonous with the preposition 'before'.
- Problem: *mor* is not homophonous with anything. And though it triggers lenition, just like many prepositions, so do many degree words, such as *rhy* 'too'

A less likely hypothesis: *mor* and *cyn* involve covert movement (cf. Heim 2000).

Degree interrogatives are formed by using the interrogative word pa 'which, what' and the degree word mor 'so' combined with an adjective:

- (31) a. Pa mor bell ydy Porthmadog?
 which so far be.PRES.3SG Porthmadog
 How far is Porthmadog?

 Jones 2009
 - b. Pa mor dda ydy Ryan Giggs? which so good be.PRES.3SG Ryan Giggs How good is Ryan Giggs?
 - c. Pa mor dal ydy Mair? which so tall be.PRES.3SG Mair How tall is Mair?

The obligatory absence of *yn* results from fronting (note the suppletive form of *be*).

Could the same explanation apply to equatives?

Problem: all degree operators are incorrectly predicted to disallow yn, as the hypothesis that degree operators involve QR treats comparatives and equatives alike:

- (32) a. Mae Sioned yn dal-ach na Gwen.

 be.PRES.3SG Sioned PRED tall-er than Gwen

 Sioned is taller than Gwen.

 Jones 2009
 - b. Mae Aberystwyth yn llai na Llundain. be.PRES.3SG Aberystwyth PRED smaller than London *Aberystwyth is smaller than London.*

Degree modification in *cweit* 'quite', *go* 'fairly', *rhy* 'too' and *reit* 'exceedingly' and analytic comparison in *mwy* 'more, *lit*. bigger' and *llai* 'less, *lit*. smaller' behave exactly the same.

8. CONCLUSION AND FURTHER QUESTIONS

The subcategorization properties of the Welsh copular particle *yn* are consistent with what we know about copular particles in general

The cross-linguistic hierarchy in the lexicalization of copular particles (NP predicates before AP predicates) doesn't follow from the hypothesis that the copular particle is Pred°

The hypothesis that copular particles only appear with nominal adjectives is supported by the Welsh data.

Bi-nominal copulas may be classificatory (including identity) or ascriptive (predicational), which is often cross-linguistically encoded.

From the semantic point of view, it is unlikely that nominal adjectives are more classificatory than "normal adjectives" -- the difference in encoding **doesn't seem functional**.

The absence of the copular particle in inversion structures remains a mystery.

9. APPENDIX 1: A FEW MORE WORDS ON THE WELSH INVERSION

Any (though only one) constituent can be inverted. Descriptions of the effects of inversion on the interpretation vary.

Gensler 2002 notes no genericity, transience, lifetime, stage-level, etc., effects.

Tallerman 1996 claims that the resulting focus is "mild" and the topic interpretation is also possible.

Rouveret 1996 claims that DP₁ is the focus:

- (33) a. Pwy yw eich ffrind? Myfanwy (yw fy ffrind). who is your friend Myfanwy is my friend 'Who is your friend?' 'Myfanwy is.'
 - b. Pwy yw Myfanwy? Fy ffrind (yw Myfanwy). who is Myfanwy my friend is Myfanwy 'Who is Myfanwy?' 'She is my friend.'

Borsley, Tallerman and Willis 2007: While normally overt material in [Spec, CP] is assigned contrastive focus, DP₂ in identity copular clauses is not.

note: Propositional adverbs, such as *efallai* 'perhaps', *hwyrach* 'probably', *braidd* 'hardly' and *prin* 'hardly', also appear in this position without being contrasted (Borsley, Tallerman and Willis 2007:124)

With predicational copulas the fronted constituent is contrastive:

- (34) a. Mae Caerdydd yn ddinas hardd. Borsley, Tallerman and Willis 2007 be.PRES.3SG Cardiff PRED city beautiful Cardiff is a beautiful city.'
 - b. Dinas hardd yw Caerdydd. city beautiful be.PRES.3SG Cardiff *Cardiff is A BEAUTIFUL CITY*.
 - c. Caerdydd sy 'n ddinas hardd.
 Cardiff be.PRES.REL PRED city beautiful

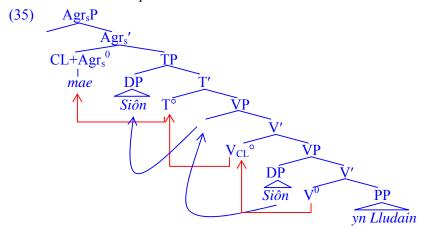
 It's Cardiff that's a beautiful city. / CARDIFF is a beautiful city.

note: the verbal form sydd arises whenever the subject is wh-moved. This form is compatible with the particle a (in C°) and doesn't require the special focus-embedding complementizer (cf. Zaring 1996), unlike the yw form, suggesting that the verb does not move to C° when the subject is in [Spec, CP]

10. APPENDIX 2: ROUVERET'S UNIFIED ANALYSIS OF THE WELSH COPULA

Rouveret 1996 distinguishes two types of predication in Welsh: stage-level (with the copula *mae*) and individual-level (elsewhere)

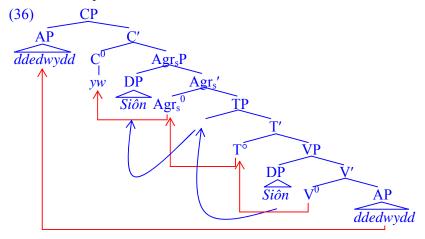
The structure of *mae*-predication:



Key points:

- the form *mae* contains an incorporated locative clitic
- the small clause is represented as a Larsonian shell
- the head-movement of the verb renders the subject and the predicate equidistant
- Spec, TP] is filled by the subject in locatives, by the predicate in existentials
- \triangleright the role of the copular particle yn is not discussed

In inverted copular clauses there is no locative clitic:



Key points:

- there is no basic difference between equative and predicational copular clauses
- \triangleright the role of the copular particle yn is not discussed
- identificational clauses are derived by moving the subject to [Spec, CP]; as this cannot be right (the copula never agrees with the element in [Spec, CP]; subject extraction gives rise to a different form of be, cf. (34c)), it is simpler to assume the reversal of order inside the small clause. On the other hand, this special form is only used with non-definite predicates...

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