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# THE MISTAKE OF PREDP

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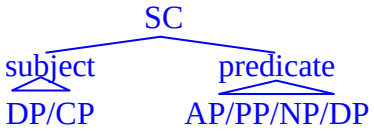
## 1. HOW SMALL CAN A CLAUSE BE?

Stowell 1981, 1983: not only verbs have subjects. Predication is a structural relation possible in the absence of a verb:

(1) a. Alice became [$_{SC}$ t$_i$ president/the head of the association]. NP/DP predicate
b. This proposition is/seems [$_{SC}$ t$_i$ preposterous/out of the question. AP/PP predicate
c. [$_{CP}$ That Jessie should fight] **was considered** [$_{CP}$ t$_i$ obvious]. CP subject/ECM verb

**Small clause**: a minimal unit of non-verbal predication:

(2)


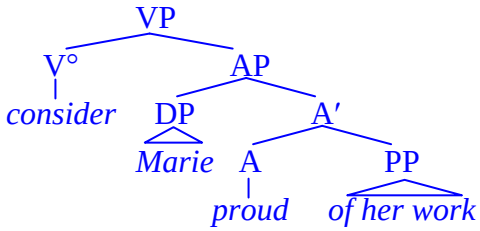

Important: semantically a small clause corresponds to something akin to a proposition

### 1.1. Small clauses as projections of the predicate

Stowell 1981, 1983: small clauses are projections of the predicate, no functional structure

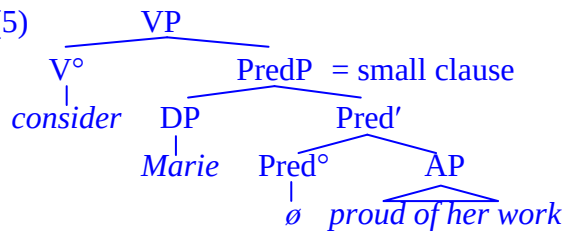
Evidence from subcategorization: different verbs require different lexical categories:

(3) a. I expect [that sailor off the ship (by midnight).
b. *I expect [that sailor very stupid/a captain].
c. *I expect [that sailor killed by the enemy].

(4)



### 1.2. Small clauses as projections of a functional head

Bowers 1993, 2001: predication must be mediated by a functional head, which has a semantic as well as a syntactic function.

(5)


### 1.2.1. Coordination of unlikes

**Coordination** of small clause predicates of apparently different lexical categories is possible:

(6) a. I consider Fred **crazy and a fool**.
b. I consider Mary both **shrewd and in the know**.

It is impossible to assign a label to the constituent formed by the coordination of X′ and Y′ which suggests that they should belong to the same category – hence a functional head should be present in the small clause (Bowers 1993, 2001).

Maling 1983 (citing Dik 1968 and Peterson 1981): projections of different lexical heads may be coordinated in cases of adverbial modification (7), which suggests that the prohibition is semantic (see Whitman 2004 for a proposal):

(7) The surgeon operated slowly and with great care.

The issue of labeling remains, but the postulation of a functional projection is only necessary if the label cannot be a constructed one

### 1.2.2. Movement

Svenonius 1994: the small clause **predicate can move**, which makes it a maximal projection (solving one of Williams' (1983) problems with Stowell's proposal):

(8) a. What does John consider Bill?
b. How do you want your eggs?
c. How famous did the incident make the criminal?

Alternative: the subject of the small clause moves into [Spec, VP] (i.e., the Raising-to-Object analysis of Postal 1974, see Runner 2006 for discussion); (8) can be analyzed as involving the movement of the entire small clause.

It is likewise unclear whether the prohibition to move segments has any empirical support

### 1.2.3. Multiple specifiers

Lexical XPs may have specifiers, which would render this position unavailable for the small-clause subject:

- Williams 1983: Anglo-Saxon possessives should not be predicates (9a)
- Bowers 1975, Jackendoff 1977, Heim 2000, Bhatt and Pancheva 2004, etc.: DegP in [Spec, AP] for comparatives (9b)
  alternative (Abney 1987, Bowers 1987, Corver 1990, 1991, 1997a, b, Matushansky 2013): Deg° takes AP as its complement
- measure phrases appearing in PPs (9c)

If small clauses are projections of Pred°, [Spec, PredP] can host the subject.

(9) a. I consider Josiah **my** best friend.
b. Ayelet seems **much** smart**er than her friends**.
c. Set the pole **15 inches** to the right.

However, the theory-internal prohibition against multiple specifiers has become **obsolete**:

- Chomsky 1995 assumes multiple specifiers in order to deal with *there*-insertion;
- to enable movement out of the vP phase (Chomsky 2000) it must be postulated that vP has specifiers in addition to the thematic specifier hosting the subject;
- multiple CP specifiers are required in order to account for multiple wh-fronting (Rudin 1988).

## 2. THE SEMANTICS OF PRED°

Standard assumption: APs, NPs and PPs denote predicates (semantic type ⟨e, t⟩). What does Pred° do in this story?

### 2.1. A change in basic type

Bowers' proposal: APs, NPs and PPs do not denote predicates, but rather must be converted into predicates. The semantic function of Pred is therefore to create a predicate that could be combined with the subject.

NB: Both Bowers 1993, 2001 and den Dikken 2006 take the extreme position, though for different reasons: **every** kind of predication must be mediated by a functional head. We will not address this complication here.

Pred° (or Pr°, in the terminology of Bowers 1993) converts a property (semantic type π) into a propositional function (type ⟨e, p⟩) (Bowers 1993, 2001)

Chierchia 1985, Chierchia and Turner 1988: a property is a propositional function (semantic type ⟨e, p⟩), which can be nominalized, i.e., turned into an individual.

Chierchia's reasoning (approx.):

(10) a. Being crazy/to be wise is crazy.
b. Doctor is a good profession.

Once they have been nominalized (^), properties can be used as arguments of other properties

Bowers 1993, 2001: vice versa. NPs, APs and PPs are non-valent property-type entities and must be converted into propositional functions. Thus for Bowers, Pred° mediates between every subject and every predicate, including verbal ones

If, following Bowers, non-verbal categories create phrases that (before the introduction of the subject) correspond to the semantic type π, then an NP has the semantic type π. How does it **combine with a determiner**?

Possibility: the determiner also functions as a type-converter (although both NPs and DPs can be predicates)

Likewise, if an AP is a property in Bowers' sense, how can it become attributive? How does a PP become attributive? Obviously, another type conversion is necessary, and for APs and PPs it should be different from the one for NPs (to explain that the former but not the latter can function as modifiers, but only the latter combine with determiners).

This very much looks like putting the cart before the horse to me. We artificially give NPs, APs, PPs, etc., a **semantic type that precludes their linguistic use** and then convert them to a usable type

**Summary**: a total overhaul of the usually assumed compositional semantics is necessary in order to implement this proposal

### 2.2. The eventuality argument

Assuming the standard predicate type for APs, PPs and NPs, it can be suggested that the role of Pred° is to introduce an eventuality argument

This is the role often given to the **copula** (Bierwisch 1988, Kamp and Reyle 1993, Rothstein 1999)

Maienborn 2005a, b: the copula introduces a referential argument for a temporally bound property exemplification (thus turning a property into a "Kimian state"; stative verbs such as *think* or *resemble* are also Kimian states):

(11) ⟦be/sein/ser…⟧ = λP λx λz [z ≈ [P(x)]]
Asher 1993:145-146 defines ‘‘≈’’ as relating a discourse referent for an abstract object (facts, propositions, etc.) to a DRS that characterizes this discourse referent

This is the wrong order of arguments for a raising verb like *be*, but should be fine for Pred°

Problem: small clauses do not pattern with VP-eventualities with respect to **modification or anaphoric reference**

Maienborn 2005a, b: a three-way distinction for eventualities:
- Davidsonian eventualities: events (eventive verbs) and states (position verbs)
- Kimian states (stative verbs and the copula)

Kimian states fail definition-based eventuality diagnostics

D-eventualities can be **perceived**; Kimian states cannot be (small clauses can):

(12) a. I saw Karen tired/happy/*intelligent. small clause
b. I saw Karen leave the room. eventive verb
c. *I saw Karen be tired/weigh 60 kg. stative verb

D-eventualities can be **located in space**; K-states and small clauses cannot be:

(13) a. *The champagne is/seems warm in the living room. small clause
b. The champagne is standing in the living room. eventive verb
c. #The champagne costs $100 in the living room. stative verb

D-eventualities can combine with **manner modifiers**; K-states and small clauses cannot:

(14) a. *Karen was/seemed generously/carefully tired/intelligent. small clause
b. Karen generously paid a lot of money. eventive verb
c. *Karen generously owns/owes a lot of money. stative verb

D-eventualities and K-states can be **temporally modified**; small clauses cannot be:

(15) a. #Karen was/seemed angry yesterday/for three days. small clause
b. Justine paid a lot of money yesterday/for three days. eventive verb
c. Justine owned/owed a lot of money yesterday/for three days. stative verb

K-states can be **referred to**; small clauses cannot be:

(16) a. #Justine was/seemed angry. It was over soon. small clause
b. Justine thought that the earth was flat. It was over soon. stative verb

(17) a. #Justine seemed angry. I didn’t see that. small clause
b. ?Justine thought that the earth was flat. I didn’t see that. stative verb

(18) #I consider Caroline a genius and that/it is exciting.

It would seem that small clauses do not correspond to an eventuality of any sort. While they can seem to be objects of perception, like D-eventualities, this could be a depictive structure:

(19) We saw the kitten meow/sick/*white/on the tree/*an animal.

Also, it has been suggested that non-verbal predicates already have an eventuality argument, which is used to account for the stage/individual-level distinction:

- Kratzer 1995: only stage-level predicates do
- Chierchia 1995, McNally 1998: stage-level predicates refer to location-dependent eventualities; individual-leveled predicates, to location-independent eventualities
- Ramchand 1996, Fernald 2000: individual-level predicates have one eventuality argument, stage-level predicates have two

The hypothesis that Pred° combined with its complement yields an eventuality of some sort predicts that predicative APs, NPs and PPs will have semantic properties that argument NPs and adjunct APs and PPs do not have. To the best of my knowledge, no such argument has ever been made

### 2.3. Summary

The hypothesis that Pred° is necessary for predication on semantic grounds seems untenable:
- it does not seem to create predicates out of properties
- it does not seem to introduce an eventuality/state argument

In other words, for the time being Pred° cannot be argued to be motivated by theory-internal considerations, nor can it be given any semantics (i.e., it must be semantically null)

If it is systematically phonologically null as well, that is highly suspicious.

Frequent hypothesis: copular particles lexicalize Pred°

Languages to be discussed: Welsh, Eastern Riffian, Edo, Bantu
To be avoided: copular particles with adjectives only, primary predication only

## 3. COPULAR PARTICLES AS LEXICALIZATIONS OF PRED°

If APs, NPs and PPs are saturated properties that require combination with Pred° to function as predicates, we expect either no categorial differences with lexicalization of Pred° or more or less random lexicalization (in some languages with APs, in some with PPs and NPs, etc.).

In many languages a **functional element** appears between the subject and (some categories of) the predicate (Bowers 1993, 2001):

(20) a. Mae Siôn *(yn) ddedwydd. — Welsh (Rouveret 1996:128)
is Siôn PRT happy
*Siôn is happy.*

b. Y mae Siôn yn feddyg.
PRT is Siôn PRT doctor
*Siôn is a doctor.*

(21) a. Èmèrí *(yé) mòsèmòsè. — Edo (Baker 2003a)
Mary PRED beautiful.A
*Mary is beautiful.*

b. Úyì *(rè) ọ̀khaèmwẹ̀n.
Uyi PRED chief.N
*Uyi is a chief.*

(22) a. M-kango *(ndì) w-a u-kali. — Chichewa (Baker 2003a)
3-lion PRED 3-ASSOC 3-fierce
*The lion is fierce.*

b. M-kango *(ndì) m-lenje.
3-lion PRED 1-hunter
*The lion is a hunter.*

Cross-linguistic overt realization patterns of copular particles and copular verbs with different lexical categories of predicates (Hengeveld 1992, Stassen 1997, Pustet 2005):
(i) No copular particles with PPs; a special copular or stance verb is often required
(ii) Lexicalization with APs only if lexicalization with NPs

Therefore, the copular particle is not a lexicalization of Pred° under Chierchia's and Bowers' view

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, syntactic or semantic.

Hengeveld 1992: the correlation in (ii) 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. If this is correct, the languages in question should provide independent evidence for this

Adger and Ramchand 2003 propose a semantic motivation for a nominal copular particle: NP predicates do not have an eventuality argument slot. How does this extend to AP predicates?

A careful examination of the behavior of copular particles in languages that have them argues against treating them as Pred°

### 3.1. Bantu copular particles

Two types of problems:
- ➢ copular particles restricted to NPs
- ➢ copular particles restricted to present-tense primary predication

Empirically:

- The Zulu copular particle *ngi* (Posthumus 1978, 1988, 2006) appears only with NP predicates
- In Xhosa NP predicates require the copular particle in all environments; AP, PP and locative predicates appear without a copular particle
- Venda present-tense primary predication is an invariable copular particle with AP and NP predicates
- Swahili (Steere 1884/1930, Loogman 1965, Brauner and Herms 1986, Marshad and Suleiman 1991) has an optional copular particle with AP and NP predicates in present-tense primary predication
- In Chichewa (Kiso 2012) the copular particle *ndi* is used in present-tense primary predication with NP predicates only

Once again, no evidence for Pred°

### 3.2. Welsh copular particle

Initial confirmation: *yn* clearly appears in small clauses

**Primary predication**:

(23) a. Mae Siôn *(yn) ddedwydd. Rouveret 1996:128
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:

(24) Rydw i'n ystyried [Siôn yn niwsans]. Zaring 1996
am I+PROG consider John PRED nuisance
*I consider John a nuisance.*

(25) a. Peintia'r petryal bach yn goch.
paint-IMP+the rectangle small PRED red
*Paint the small triangle red.*

b. Dw i'n licio cwrw yn oer. Bob Morris Jones, p.c.
be-1SG I+PROG like beer PRED cold
*I like beer cold.*

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

(26) A mi yn ofnus, ni ddywedais ddim. Rouveret 1996
and I PRED shy NEG said nothing
*Since I am shy, I said nothing.*

NP-internal **reduced relatives** (Willis 2006):

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

Crucially for us, *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

And with degree modifiers it does not behave as expected

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

3.2.1. Welsh predicate fronting

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

(28) a. Ffeind wrth bawb ydy Mair. Jones 1993 via Rouveret 1996
kind to everyone is Mair
*Mair is kind to everyone.*

b. Meddyg yw Sion. Rouveret 1996
doctor is Sion
*Sion is a doctor.*

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*:

(29) a. Y brenin yw Arthur. Rouveret 1996
the king is Arthur
*Arthur is the king.*

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*):

(30) a. A ydyw Ifan yn bregethwr? Rouveret 1996
Q is Ifan PRED preacher
*Is Ifan a preacher?*

b. Nid yw Ifan yn saer. Williams 1980:94
NEG is Ifan PRED carpenter
*Ifan is not a carpenter.*

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

Summary: the lack of *yn* in predicate fronting can be due to incorporation but its correlation with movement to C° and fronting requires a separate explanation

### 3.2.2. Degree modification

The syntax of *yn* in comparatives containing a differential argues against the hypothesis that it lexicalizes Pred°:[1]

(31) a. ateb ychydig yn well Mittendorf and Sadler 2008
answer little PRED better
*an answer slightly better*

b. ateb sydd ychydig yn well
answer is.REL little PRED better
*an answer that is slightly better*

(32) a. Mae hi llawer/ychydig yn dalach. ✓PD, ✓GA
be.PRES.3SG she much/slightly PRED taller

b. %Mae hi'n llawer/ychydig talach. ✓PD, *GA
be.PRES.3SG she+PRED much/slightly taller
*She is a lot/slightly taller.*

The same effect can be observed with measure phrases:

(33) a. Mae hi ddwy fodfedd yn dalach. ✓PD, ✓GA
be.PRES.3SG she two inches PRED taller
*She is two inches taller.*

b. *Mae hi'n ddwy fodfedd talach. *PD, *GA
be.PRES.3SG she+PRED two inches taller

c. Mae hi'n ddwy fodfedd yn dalach. doubling: ✓PD, *GA
be.PRES.3SG she+PRED two inches PRED taller
*She is two inches taller.*

d. *Mae hi ddwy fodfedd talach. *PD, *GA
be.PRES.3SG she two inches taller
*She is two inches taller.*

The position of *yn* (after the differential) is incompatible with the hypothesis that it heads the small clause.

It cannot be assumed that the differential has moved because adverbs and degree expressions generally do not scramble

[1] For the Welsh judgments below I'm indebted to Peredur Davies-Webb and Gwenllian Awbery.

Degree modification also requires the obligatory *yn* when the predicate is fronted (Borsley 2011):

(34) a. Bron yn barod ydy Mair ___.
almost PRED ready be.PRES.3SG Mair
*Mair is almost ready.*

b. *Bron parod ydy Mair ___.
almost ready be.PRES.3SG Mair

(35) a. Braidd yn siomedig ydy hi ___.
rather PRED disappointed be.PRES.3SG she
*She is rather disappointed.*

b. *Braidd siomedig ydy hi ___.
rather disappointed be.PRES.3SG she

(36) a. Bron yn fradychwr ydy o ___.
almost PRED traitor be.PRES.3SG he
*He is almost a traitor.*

b. *Bron bradychwr ydy o ___.
almost traitor be.PRES.3SG her

These data are inexplicable if *yn* is Pred° which incorporates into the copula with predicate fronting: adverbs cannot be interveners for head-movement

### 3.2.3. PPs, equatives and intensives

As is generally the case with copular particles, *yn* is absent when the predicate is a PP (Jones and Thomas 1977:47, Jones 2009):

(37) a. Mae Siôn (*yn) yn Lludain /o flaen y tŷ. Zaring 1996
is Siôn PRED 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.*

This is incompatible with the hypothesis that *yn* is Pred° (which is supposed to be present in all small clauses)

### 3.2.4. A sketch of a solution

Proposal (Matushansky 2012b): Welsh adjectives are nominal (not nouns, but nominal)

Evidence (cf. Dixon 2004):
- no morphological adverb formation
- ability to combine with prepositions
- use in compounding
- triggering lenition on the modifiers in the feminine, just like nouns

Independent evidence for nominal vs. verbal adjectives comes from languages with two types of adjectives: Japanese (Dixon 1977, Miyagawa 1987, Kubo 1992, Nishiyama 1999, Baker 2003b, Backhouse 2004, etc.), the Cariban language Macushi (Abbott 1991 via Dixon 2004), the Tibeto-Birman language Manange (Genetti and Hildebrandt 2004), Xhosa, Zulu...

**Japanese** adjectives are divided into "verbal" and "nominal"

Only the latter require an overt copula:

(38) Canonical ("verbal") adjectives

a. yama-ga taka-i.
mountain-NOM high-PRES
*The mountain is high.*

b. yama-ga taka-katta.
mountain-NOM HIGH-past
*The mountain was high.*

(39) 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.*

Only "verbal" adjectives function as nominal modifiers without additional morphology:

(40) a. Taroo-ga [utukusi-i] tori-o mita. Yamakido 2000
Taroo-NOM beautiful-PRES bird-ACC saw
*Taroo saw a beautiful bird.*

b. Hanako-ga [kirei na] hana-o katta.
Hanako-NOM pretty PRES flower-ACC bought
*Hanako bought a pretty flower.*

Yamakido 2000: both types of adjectives can function as non-intersective modifiers:

(41) Max-ga kanzen-na baka da.
Max-NOM complete$_N$ fool be
*Max is a complete fool.*

Converging evidence: the relation between an overt copula/copular particle and time-stability of a predicate (Hengeveld 1992, Wetzer 1996, Stassen 1997, Pustet 2005)

### 3.3. The Eastern Riffian copular particle

The Berber language Eastern Riffian has a copular particle used with AP and NP predicates:

(42) a. netta d̲ a-ryaz Oomen 2011
he PRED M-man
*He is a man.*

b. netta d̲ a-wessar
he PRED M-old
*He is old.*

The copular particle is obligatory in copular clauses, as well as in secondary predication:

(43) a. y-err-it̲ d̲ lmalik Oomen 2011
3SG:M-turn.into:P-3SG:M:ACC PRED king
*He made him king.*

b. i-ssess lqehwa-nnes t ta-berk̲an-t
3SG:M-drink:I coffee-3SG:M:POSS PRED F-black-F
*He drinks his coffee black.*

c. t̲a-mɣar-t̲-nnes t̲-err-it̲ d̲ a-wessar
F-woman-F-3SG:POSS 3SG:F-turn:P-3SG:M:ACC PRED M-old
*His wife made him old.*

Oomen 2011: the existence of the category *adjective* in Berber languages is controversial.

While in some of them quality concepts are expressed by stative verbs, in others, such as Eastern Riffian, quality concepts appear to be deverbal nouns, at least from the point of view of their morphology (see also Djemai 2008). Such adjectives, when used as predicates, require the copular particle *d̲* that also appears with NP predicates.

The link between the nominal nature of an adjective and the presence of the copular particle is further supported for Eastern Riffian by the fact (Oomen 2011) that non-integrated adjectives of Arabic origin, such as *mṭewweṛ* 'smart', appear without the copular particle:

(44) y-etban eyyi mṭewweṛ Oomen 2011
3SG:M-appear:I 1SG:DAT smart
*He seems smart to me.*

The question remains why NPs systematically require a copular particle to become predicates

And furthermore, **what about Edo**?

### 3.4. Edo copular particles

Baker 2003a: the role of Pred° is to introduce the external argument and it does so differently for different lexical categories, so different lexicalizations of Pred° for APs and NPs are not unexpected:

(45) a. Èmèrí *(yé) mòsèmòsè. Edo (Baker 2003a:40)
Mary PRED beautiful.A
*Mary is beautiful.*

b. Úyì *(rè) òkhaèmwèn.
Uyi PRED chief.N
*Uyi is a chief.*

Two problems:
- the status of adjectives in Edo
- the copular particle outside primary predication

Omoruyi 1986: Edo adjectives form a **small closed class** and are obligatorily attributive, i.e., they cannot appear in a sentence without an NP that they modify:

(46) a. *ọ́gbọ̀n ẹ̀ré Òsàrọ́ dẹ́rè. Omoruyi 1986:299
new it-is Osaro buy.PAST

b. ọ̀wịyí ẹ̀ré Òsàrọ́ dẹ́rè.
old it-is Osaro buy.PAST
*It is an old one that Osaro bought.*

It seems therefore that the items that Baker treats as adjectives can in fact be **deverbal nouns**

Furthermore, Edo copular particles **disappear in depictives** (Ota Ogie, p.c.) and **resultatives** (in the latter case, apparently optionally):

(47) a. À biẹ́ Èmérì ọ̀khaèmwẹ̀n. Edo (Ota Ogie, p.c.)
IMPRS give.birth Mary chief.N
*Mary was born a chief.*

b. À biẹ́ Èmérì mòsèè. Edo (Ota Ogie, p.c.)
IMPRS give.birth Mary beautiful.A
*Mary was born beautiful.*

(48) a. Òzó kòkó Àdésuwa mòsèmòsè. Edo (Baker 2003a:219)
Ozo raised Adesuwa beautiful.A
*Ozo raised Adesuwa so that she was beautiful.*

b. Úyì yá èmátòn ?(dòó) yé pèrhè. Edo (Baker 2003a:42)
Uyi make metal INCEP PRED flat.A
*Uyi made the metal to be flat.*

c. *Òzó gbé èmátọ̀n yé pèrhè̩. Edo (Baker 2003a:43)
Ozo beat metal PRED flat.A
*Ozo beat the metal, causing it to be flat.*

This is unexpected for Pred°, unless Pred° is systematically incorporated into the higher verb (cf. Stowell 1991). But then Edo copular particles cannot be viewed as evidence for Pred°

## 4. PREDICATE CASE

In a number of languages NP and sometimes AP predicates are marked with a special case:

(49) a. Ja sčitaju ee lingvistkoj. Russian
I consider her-ACC linguist-INS
*I consider her a linguist.*

b. Ona vernulas' krasavicej.
she came back beauty-INS
*She came back a beauty.*

(50) a. salma ʕayyanat walad-a-ha wazir-an. Arabic
salma nominate.CAUS-PRF child-ACC-her **minister-ACC**
*Salma nominated her child to be a minister.*

b. walad-u-ha ʕuyina wazir-an.
child-NOM-her nominate.PASS-PRF **minister-ACC**
*Her child was nominated to be a minister.*

It seems reasonable to assume that this case is assigned by Pred°

However, this theory explains neither languages where predicates are marked with a number of cases (e.g., in Finno-Ugric (52)-(53)) nor the fact that the predicative case alternates with nominative in present tense copular clauses in Russian and Arabic (51):

(51) a. Vera assistent/*assistentom. Russian
Vera assistant-NOM/INS
*Vera is an assistant.*

b. Zaydun waziirun/*waziiran. Arabic, Maling and Sprouse 1995
Zaydun-NOM minister-NOM/ACC
Zaydun is a minister.

(52) Hungarian
a. A béka király-fi-vá vál-t. Kenesei et al. 1998:201
the frog-NOM prince-TRS change-PAST.3SG
*The frog turned into a prince.*

b. A katoná-t mindenki halott-nak hi-tte. Kenesei et al. 1998:203
the soldier-ACC everyone-NOM dead-DAT believe-PAST.3SG
*Everyone believed the soldier to be dead.*

(53) Finnish
a. Vanhus tul-i sokea-ksi. Fromm and Sadeniemi 1956:143
old man-NOM go/become-PAST.3SG blind-TRS.SG
*The old man went blind.*

b. Hän kuol-i vanha-na. Fong 2003
3SG-NOM die-PAST.3SG old-ESS
*S/he died old.*

Neither of these case-marking patterns is compatible with the hypothesis that predicative case is assigned by Pred° (see Matushansky 2012a for an analysis of multiple predicative cases in Finno-Ugric and Matushansky 2010 for a discussion of Russian)

## 5. OTHER PUTATIVE OVERT PREDICATORS

Other elements hypothesized to lexicalize Pred° include *as* and *for* (e.g., Emonds 1985, Aarts 1992, Bowers 1993, 2001, den Dikken 2006) and their cross-linguistic counterparts (Bailyn 2001, 2002 for Slavic, Eide and Åfarli 1999 for Norwegian), as well as the Russian *v* 'in' (Bailyn 2002).

(54) a. Mary takes John **for** a fool.
b. Jessamine views her mother **as** her best friend.

(55) a. My sčitaem ego svoim. Russian (Bailyn 2001)
we consider him.ACC self.POSS-INS

b. My sčitaem ego **kak** svoego.
we consider him.ACC AS self.POSS.ACC

c. My sčitaem ego **za** svoego.
we consider him.ACC FOR self.POSS.ACC
*We consider him as one of us.*

(56) a. Vi fant Marit (*som) naken/ *(som) nervevrak. Eide and Åfarli 1999:160
we found Mary SOM naked/ SOM nervous.wreck

b. Vi så Jon (*som) rasende/ *(som) spùkelse.
we saw John SOM furious/ SOM ghost

c. Vi returnerte pakken (*som) uåpnet/ *(som) flypost.
we returned parcel-the SOM unopened SOM air.mail

d. Han ankom selskapet (*som) maskert/*(som) sjørøver.
he arrived party-the SOM masked/ SOM pirate

e. Hun levde og døde (*som) ensom/*(som) eneboer.
she lived and died SOM lonely/ SOM hermit

(57) Jeg betrakter denne mannen som svært dum. Eide and Åfarli 1999:161
I regard this man as very stupid.

(58) On rešil vybrat'sja v prezidenty. Russian
he decided elect-INF-REFL in presidents-ACC=NOM
*He decided to get elected as president.*

Evidence against treating the Russian *v* 'in' as a realization of Pred° (Marelj and Matushansky 2010): parallel structures can be constructed with mass nouns (e.g., *in administration*) and with other prepositions (e.g., *iz* 'from')

Evidence (Marelj and Matushansky 2015) that *za*/*for* is just a preposition: c-selection, case-assignment properties, anaphor binding, etc.

## 6. CONCLUSION

Theory-internal arguments for the presence of an obligatory functional head (Pred°) in small clauses have either become obsolete or can be refuted by alternative analyses

From the point of view of compositional semantics there doesn't seem to be any role that such a functional head can fulfill

Postulating Pred° does not account for the phenomena that were supposed to follow from its presence:

- **copular particles** never appear with PP predicates; in languages where they systematically occur in small clauses with AP predicates (Welsh, Eastern Riffian) adjectives can be argued to be **nominal** (but perhaps not in Bantu languages)
- I am aware of no language with only one **predicative case** available: nominative-marked predicates always seem to be allowed, and often more than one non-direct (oblique) predicative case is available
- ***as, for* and *in(to)*** are amenable to a more economical analysis

Outstanding question: **why are copular particles restricted to nominal predicates**?

Adger and Ramchand 2003: NPs denote properties of individual entities, whereas APs, PPs and verbal constructions denote properties of individuals with respect to an eventuality.

Given that there is no evidence for functional heads in small clauses, they should probably be analyzed as lexical projections (as in Stowell's original hypothesis)

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