The Content of Copulas in Kwak'wala[*]

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1.   Copulas in Kwak'wala

Although there has been comparatively extensive work (e.g. Boas 1893, 1900, 1911, Boas et al. 1947, Grubb 1997, Levine 1977, 1980, 1984, Anderson 1984, Chung 2007, Nicolson and Werle 2009) on Kwak'wala, a Northern Wakashan language of British Columbia, there has been little work investigating the properties of copulas or copular sentences. Upon examining equative sentences in particular, we find that Kwak'wala exhibits a robust copular pattern (Littell *to appear*) that has not heretofore been investigated in detail, in large part because previous work on Kwak'wala has asserted that the language lacks a copula altogether.

> "As in other languages that lack the defining verb 'to be' (as in 'it is a man'),
> the distinction between noun and verb offers difficulties, because every noun
> may also be predicative" (Boas et al. 1947, p. 205).

The assumption that Kwak'wala lacks copular elements is due in large part to data such as the following:

(1)   **Dagwa̱da**=tɬ=a̱n
        doctor=FUT=1
        "I am going to be a doctor."

(2)   **'Walas** =ux̱w gukw=a̱x̱ =s   Masaki
        big   =3MED house=VIS =OBL Masaki
        "Masaki's house is big."

(3) **A̱ngw** =i=da   lotł=e'   x̱a k̓ut̠ala?
     who   =3DIST=DET get=INVIS ACC fish
     "Who caught a fish?" (Lit: "The one who got a fish is-who?")

Nominal, adjectival, and even WH stems may be used directly as clausal predicates without need for any "linking" element. Nor does there appear to be any use of a *be*-like element as an inflectional host in particular tense or aspect combinations.

Sentences such as (1-3) only establish, however, that there is no overt element corresponding to *to be* in *predicative* sentences; *to be*, however, is famously claimed to be polysemous (Russell 1919):

"It is a disgrace to the human race that it has chosen the same word *is* for those two such entirely different ideas as predication and identity — a disgrace which a symbolic logical language of course remedies" (Russell 1919).

In addition to predicating properties of entities ("I am American", "The house is big", etc.), copulas also serve to identify two entities (Russell 1919, Higgins 1973, Adger and Ramchand 2003, Mikkelsen 2005), as in "Clark Kent is Superman" or "Darth Vader is my father". Although such predicative and equative sentences in English appear, at least on the surface, to have a similar structure, we find in Kwak'wala two rather different constructions:

Context: We're talking about what we're going to be when we grow up.

(4) Kitł-inuxw=tł   =a̱n.
     catch.fish-expert=FUT =1
     "I'm going to be a fisherman."

Context: Two brothers are playing at being fisherman and fish. One is going to play the fisherman, and the other the fish, but they can't agree on who gets to be the fisherman and who has to settle for being the fish.

(5) Nugwa=tł =i   kitł-inuxw=tł.
     be.1=FUT =3DIST catch.fish-expert=FUT
     "I'm going to be the fisherman."

If we examine $e = e$ sentences in Kwak'wala, a robust pattern emerges that does not very much resemble the predicative structures in (1-3). Sentences that assert the identity of two entities canonically consist of two DPs, either of which may under certain circumstances be left out, and in the predicate position one of five dedicated roots *nugwa, su, ga,*

yu, and *he*, corresponding to one of the five deictic categories[1] and agreeing in deixis with one of the DPs (ordinarily the second).[2]

(6) **Nugwa**='a̱m   Patricka
     be.1=FOC   [*DP1* Patrick]
     "I'm Patrick."

(7) **Su**='a̱m   ḳa̱p̓-id-sa̱'w   =s
     be.2=FOC [*DP1* cut.with.scissors-CHANGE-PASS] [*DP2* =2]
     "You're the one who got a haircut."

(8) **Ga**='m   =a̱n   wayas   =ga   Sarah
     be.3PROX=FOC [*DP1* =1POSS sweetheart] [*DP2* =3PROX Sarah]
     "Sarah [sitting right here] is my sweetheart."

(9) **Yu**='a̱m   Superman   =ux̱w Masaki
     be.3MED=FOC [*DP1* Superman] [*DP2* =3MED Masaki]
     "Masaki [present right now] is Superman."

(10) **He**='a̱m   dulow =i   Hannah
     be.3DIST=FOC [*DP1* win]   [*DP2* =3DIST Hannah]
     "Hannah [currently absent] is the winner."

These roots show the same five-way person/location distinction as the Kwak'wala determiner/pronoun series *=a̱n, =(a)s, =ga, =ux̱w, =i,* and appear to be historically related to them.

	Person/Location	Predicate	Corresponding Prenominal
	1st	*nugwa*	*=a̱n*
	2st	*su*	*=(a)s*
(11)	3rd PROXIMAL	*ga*	*=ga*
	3rd MEDIAL	*yu*	*=ux̱w*
	3rd DISTAL	*he*	*=i*

It is important to note that, although these are sometimes described as "verbal pronouns" or "pronominal predicates", "pronoun" is used here in the sense that they exhibit apparent person features in a paradigm isomorphic to pronouns; they are not "pronouns" in the sense that they can be used as pro-forms for NPs or DPs. This stands in contrast to pronoun-like equative elements in other Northwest languages, such as Straits Salish (Shank 2003) or St'át'imcets (Lillooet Salish) (Thoma 2009), which can be shown in other contexts

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[1] Kwak'wala third persons systematically show a three-way locational deictic distinction, leading to what amounts to a five-way {1st, 2nd, 3rd PROXIMAL, 3rd MEDIAL, 3rd DISTAL} person paradigm.

[2] In many sentences this root is followed by a focus particle *='m* or an element *=d* of uncertain function. In the same way that DISTAL *he* most likely comes from the DISTAL deictic marker *=i, hed(a)* (be.3DIST) is I think likely to have come from its definite counterpart *=i=da*. What it is doing synchronically, however, is unclear; for many sentences it would difficult to maintain that it is still a definite determiner. *=d* is much more frequent in clefts than in canonical equative sentences.

to act as ordinary pronouns. Attempting to use one of these "verbal pronouns" in an ordinary pronominal position (such as an argument to a verb or complement of a preposition) leads to ungrammaticality:

(12)   Ṭsow =a̲n/*nugwa x̲a   s(a) =ux̲w/*yu la=x̲(a)   =ux̲w/*yu.
        give =1   ACC OBL =3DIST   PREP=ACC =3DIST
        "I gave that to her."

   Boas (1947) found these predicates problematic − they shared the five-way distinction that pronominal elements do, but are in a clausal position reserved for predicates:

> "The first and second persons seem to be built up of *n* for the first and *s*
> for the second, an element *o*, and for the first person, the suffix *ga* (after *o*,
> *gwa*). It seems, however, quite against the spirit of the language that *n* and
> *s* should appear as stems in first position." (p. 257)

   That is to say, a series of apparent pronouns is appearing in a clausal position that only predicates should occupy. The traditional solution to this dilemma is to posit a series of "predicative pronouns", one-place predicates with meanings of something like *to-be-me*, *to-be-you*, *to-be-this-one*, *to-be-that-one*, and *to-be-that-one-yonder*. This solution, however, runs into problems both syntactic (§2) and semantic (§3).

   Littell (2010) offers a different solution to Boas's dilemma: that these elements are not pronominal at all, but copular, serving as the predicates of equative sentences and exhibiting suppletive agreement with their subjects. In this paper I will look in greater depth at the semantics of these elements, in particular investigating their contributions to the truth-conditional and presupposed meanings of the sentence.

2.   The Conventional Account

The conventional account of the syntax of these sentences comes from Anderson (1984). In this account, the predicates *ga*, *yu*, and *he* are fundamentally *demonstrative* − that is, they express *to-be-this-one*, *to-be-that-one*, etc.[3]

   The concept of "demonstrative predicates" in Kwak'wala is intended as a direct parallel to Kwak'wala WH predicates. English question words exhibit the distribution of Ds − they occur as arguments, resist further determiners (*"the which book"), etc. Kwak'wala question words, on the other hand, appear to be predicates (Anderson 1984); we can see this in the direct parallelism between the question and answer pair in (13-14).

(13)   **'Ma̱t̓sat̓ł** =i   lodł-ana̲m   s=ux̲w   Masaki?
        what   [s =3DIST receive-NMZ OBL=3MED Masaki]
        "What did Masaki get?" (Lit: "That received by Masaki is-what?")

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[3]Anderson's account does not consider the 1st and 2nd person *nugwa* and *su*, but we could easily extend his account to them.

(14)   **Busiy**   =ux̱w lodł-anạm   s=ux̱w   Masaki.
       cat   [$_S$ =3MED receive-NMZ OBL=3MED Masaki]
       "Masaki received a cat." (Lit: "That received by Masaki was-a-cat.")

Anderson's (1984) demonstrative predicates are meant to parallel the question words exactly: in the same way that the Kwak'wala word for "who" (*angwa*) is really "to-be-who" and "what" (*'ma*) really "to-be-what", the Kwak'wala words for "this", "that", and "yon" are meant to be "to-be-this", "to-be-that", and "to-be-yon".

Anderson therefore proposes a question-like structure for these sentences, in which everything that follows the demonstrative predicate is a kind of relative clause, sometimes headless, which acts as the subject of the predication. In this account, (10) would have a structure in which *dulow* and *=i Hannah* are in some manner of apposition relationship, and together serve as the subject of *he*. (10) would thus more literally read as "The winner Hannah is that one yonder" or "Hannah who won is that one yonder."

Anderson notes a puzzling consequence, however; he analyses these subjects as relative clauses, but a sentence like (10) would have as its subject an *internally headed* relative clause (*dulowi Hannah*), which do not occur anywhere else in the language (Anderson, 1984 p. 34).

Furthermore, the morphosyntactic parallel between questions and "demonstrative" sentences is not exact. We can see in (16) that the putative subject *dulowa* lacks both the *=i=da* and *=e'* determiners of its counterpart in (15). Although in some circumstances arguments can lack determiners, subjects never lack determiners, making it hard to maintain that *dulowa* is a subject of (16).

(15)   A̱ngw   **=i=da**   **dulow=e'**
       who   [$_S$ =3DIST=DET win=INVIS]
       "Who won?" (Lit: "The one that won is-who?")

(16)   Nugwa='ạm   **dulowa**.
       be.1=FOC   [$_{S?}$ win]
       "I'm the one that won." (Proposed lit: "The one that won is-me.")

Anderson (1984) suggests that headless relative clause subjects might lack the appropriate functional projection to host these determiners, but this exact headless relative clause subject occurs in the parallel question (15) with determiners intact. It would also be awkward to explain away the lack of the expected determiners in (18) in this manner; it would require analyzing the proper name subject *Masaki* as a headless relative.

(17)   A̱ngw   =ux̱w=da   bạgwanạm?
       who   [$_S$ =3MED=DET man]
       "Who's that man?" (Lit: "That man is who?")

(18) Yu=ʼa̱m   **Masaki**.
be.3MED=FOC [_S?_ Masaki]
"He's Masaki." (Proposed lit: "Masaki is-that-one.")

In addition to the difficulties Anderson uncovers, there are other ways in which the proposed subjects do not otherwise act like subjects. Kwak'wala subjects can (and frequently do) surface to the left of their predicate when elements like *k̓iʼs* precede, but these "subjects" cannot:

(19) K̓iʼs yu=ʼm   **=uxw Katie k̓a̱p̓-id-sa̱ʼw**
not   be.3MED=FOC [_S?_ =3MED Katie cut.with.scizzors-CHANGE-PASS]
"Katie's not the one who got a haircut."

(20) *K̓iʼs   **=uxw Katie k̓a̱p̓-id-sa̱ʼw**   yu
not   [_S?_ =3MED Katie cut.with.scizzors-CHANGE-PASS] be.3MED
Intended: "Katie's not the one who got a haircut."

However, if the constituent in question is not a *relative* clause, but merely a *small* one, and is not the subject but a copular complement, these "unexpected" syntactic properties become less problematic (Littell 2010). In making these changes, what results is something compatible with existing small-clause analyses of copular sentences (in particular Moro 1997, 2006).

3.   Testing the Truth-Conditional Contribution

Many aspects of the syntax of these sentences are still unclear, however, and thus much of the reason for believing these elements to be fundamentally equative (rather than fundamentally deictic) come from their semantics.

Foremost, we can note that these predicates occur in every equational/identificational sentence, and whenever they occur, the context always seems to be equative: that there is some entity or set of entities with which the subject is being identified.[4] In a merely predicative context such as that in (24) − when the subject is just a member of a set, rather than the unique or maximal individual − the equative sentence is inappropriate:

Context: In a particular group of people, I am the only one that has a car.

(21) Ka-nukw=a̱n.
car-have=1
"I have a car."

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[4]It is not the case that each such sentence is *translated* as an English equative sentence. Since an equative sentence entails its predicative counterpart − "I am the one with a car" entails "I have a car" − it is sometimes the case that a predicative translation is used for an equative sentence, and vice-versa. Nonetheless, an equative English translation is usually used for Kwak'wala equatives. When a predicative sentence is set aside a sentence that differs minimally in the insertion of *nugwa/su/ga/yu/he*, the latter sentence is almost always given a "...is the one that..." translation. Boas et al. (1947, p. 258) lists a number of such sentences, and each one is given a translation along the lines of "...is the one that...", "... is what...", etc.

(22) **Nugwa**='a̱m ka-nukwa.
    be.1=FOC   car-have
    "I'm the one with a car."

Context: I am among the many people that have cars.

(23) Kanukwa̱n.

(24) #**Nugwa**'a̱m kanukwa.

Furthermore, when we perform tests to try to determine their contribution to the truth conditions of the sentence, the identity meaning (rather than the demonstrative or deictic meaning) is picked out.

3.1 Negation

One test for the truth-conditional content of an operator is negation: when negated, which meaning component is denied?

The predicates *nugwa*, *su*, *ga*, *yu*, and *he* may scope either under (25) or over (26) negation:

(25) **He**=d   =i   Stacey **k̓i's** nax̱-'e   x̱a 'wap
    be.3DIST=DET =3DIST Stacey not drink-CHANGE ACC water
    "It's Stacey who didn't drink the water."

(26) **K̓i's he**=d   =i=da   ba̱gwana̱m ga̱lu̱ł-'e   x̱=us   musmus
    not be.3DIST=DET =3DIST=DET man   steal-CHANGE ACC=2POSS cow
    "It's not that man who stole your cow."

When the predicate scopes under negation, it is the identity meaning, rather than the deictic meaning, that is denied. That is, the negation of (27) does not mean "It is not the case that Katie my wife is-this-one", but just "It is not the case that Katie is my wife."

(27) **Yu**='m   =a̱n   ga̱na̱mp =ux̱w Katie.
    be.3MED=FOC =1POSS wife   =3MED Katie
    "Katie is my wife."

(28) K̓i's =a̱n   **yu**   ga̱na̱mp =ux̱w Katie.
    not =1POSS be.3MED Katie   =3MED Katie
    "Katie isn't my wife."

The deictic information regarding Katie is unaffected – in both (27) and (28), Katie remains medially located with respect to the speaker. This is, I think, the result that we would want in any case; if this were not the case, negation would lead to deictic clashes between the negated predicate and the subject. We can see in paradigms such as (29-31) that the predicate agrees in its deictic specification with the second DP (argued in (Littell 2010) to be the subject):

(29) **Ga**='m   =a̱n   wayas   =**ga**   Sarah.
      be.3PROX=FOC [_DP1_ =1POSS sweetheart] [_DP2_ =3PROX Sarah]
      "Sarah [right next to me] is my sweetheart."

(30) **Yu**='m   =a̱n   wayas   =**ux̱w**   Sarah.
      be.3MED=FOC [_DP1_ =1POSS sweetheart] [_DP2_ =3MED Sarah]
      "Sarah [currently present] is my sweetheart."

(31) **He**='m   =a̱n   wayas   =**i**   Sarah.
      be.3DIST=FOC [_DP1_ =1POSS sweeheart] [_DP2_ =3DIST Sarah]
      "Sarah is my sweetheart."

The deictic specification of determiners and pronouns (Boas et al. 1947, Chung 2007, Nicolson and Werle 2009) seems to project. For example, in (32), the MEDIAL distance between the item in question is not negated in the first clause and then asserted to be possible in the second; in both the location of the item is known and stationary.

(32) K̓i's =**ux̱w**   ye'wixa, t̓isa̱m-xa̱nt   =**ux̱w**
      not =3MED move,   rock-MODAL =3MED
      "It's not moving; it's probably a rock."

If the deictic specification of *yu* in (28) did *not* project, it would contradict the projected deictic specification of *=ux̱w Katie*; the sentence would simultaneously presuppose her presence while truth-conditionally denying it. That the predicate in (28) continues to agree with subject even under negation suggests that the predicate is not *independently* offering deictic content at all, but simply exhibiting subject agreement.

Furthermore, if we step back for a moment, it would be strange from a purely "engineering" standpoint if the only way a language had to assert the identity of entities were to presuppose this identity and then assert the location of this entity. This is what we would expect, however, if the structure of (27) were really something like "Katie my wife is this one", since we expect appositive content like "Katie my wife" to project (Potts 2005). It would, in fact, leave a serious expressive gap in the language: if a language's only way of expressing identity projects through negation, then that language would not have any means of *denying* identity.

3.2   Question Answering

A further reason for believing that identity is not achieved through apposition is its behavior in answering questions. Identity seems not just to be the truth-conditional content of these predicates, but also the *at-issue* (Potts 2005, Beaver et al. 2009) content.

These predicates occur primarily in answering questions of identity − who is this, who did that, etc. − rather than questions of *where* someone or something is.[5]

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[5]Many answers to locative questions *do* contain copulas (§5), but exhibit a different structure than (34).

Context: We are predicting the results of a talent competition.

(33) A̱ngw =i=da   dulo-tł=e'
      who   =3DIST=DET win-FUT=INVIS
      "Who will win?"

(34) **He**='a̱m=tł   =i   Ruby
      be.3DIST=FOC=FUT =3DIST Ruby
      "It'll be Ruby [who will win]!"

If we take the demonstrative or locational meaning of the predicate to be its *at-issue* meaning, we get inappropriate results regarding question-answering. If *yu* means anything like TO-BE-FAR-AWAY-OR-ABSENT or TO-BE-THE-ONE-WHO-IS-FAR-AWAY-OR-ABSENT, then the answer in (34) is not actually answering the question in (33) ("Who will win?" #"Ruby is elsewhere!").

3.3   Lexical Derivation

A third piece of evidence for these predicates being fundamentally equative is their behavior when used as bases for further lexical derivation. To derive meanings such as *to want to X*, *to pretend to X, to become X, to wish one were X*, and even very specific meanings like *to X in a boat* or *to X on a surface*, one adds one of several hundred *lexical suffixes* to the root.

(35)
mix̱a	to sleep
mix'e̱xsda	to want to sleep
mix̱abuła:	to pretend to be asleep

(36)
'wac̓i	to be a dog
'wac̓iye̱xsda	to want to be a dog
'wac̓ibuła	to pretend to be a dog

These bases may be verbal, adjectival, or nominal, and even in some cases WH-elements. Somewhat surprisingly, this system of lexical derivation is productive even for these copular/"demonstrative" elements. When we derive a new stem from the predicates in question, it is the identity meaning that serves as the base for further derivation:

(37) **Nugwa**-'e̱xsd =i   Henry
      be.1-want   =3DIST Henry
      "I want to be Henry."

(38) **yu**-buła   tł=i   Marion
      be.3MED-pretend CONN=3DIST Marion
      "She [present] is pretending to be Marion [absent]."

The meaning of the resulting predicate is not built from the deictic specification of the base − the stem *nugwa'e̱xsd* in (37) does not mean "want-to-be-me". This is likewise true for its analytic counterpart:

(39) A̱x-'e̱xsd=a̱n k̲=a̱n **nugw**=e' =s
      Ø-DESID=1   for=1 be.1=INVIS =OBL
      "I want to be her." (lit: "I want for my being of her.")

If the truth-conditional content of *nugwa* and *he* were TO-BE-ME, TO-BE-THAT-ONE, etc., we would expect TO-BE-THAT-ONE (rather than TO-BE-ME) to appear as the base for deriving WANT-TO-BE-THAT-ONE.

This issue − whether the predicate means "to be X" or "to be me" − cannot easily be disentangled when only considering symmetrical identity statements, but the asymmetry of wanting and pretending makes clear that the deictic specification is that of the subject.

4.   Contributing Identity

The tests above suggest that the deictic meaning of these predicates (if any) is some manner of projective content, such as a conventional implicature (Grice 1989, Potts 2005)[6], and that the identity reading is contributed truth-conditionally.

However, the tests above only argue that these *sentences* have identity as their truth-condtional at-issue content, not that these specific lexical items contribute it. It could be that these copulas themselves represent an identity function $\lambda y \in D_e.\lambda x \in D_e.x = y$, and exist in order to type-shift an e in predicative position into an appropriate $\langle e,t\rangle$ (cf. Reeve's (2010) EQ). Our theory would thus be a "two copula" theory, in which only one of those (the equative copula) has any phonological realization.

On the other hand, we could also hold that these copulas are semantically inert (apart, perhaps, from some projected deictic content), and exist for some other reason, such as hosting agreement or tense, or binding an event variable (Moro 1997, Adger and Ramchand 2003). The identity meaning would just come from a *covert* type-shifting operation (cf. Partee's (1987) IDENT) that occurs when a DP acts as predicate.

On the side of the copula itself being an identity function, we have its use as a base for derivation of identity-related stems. If these predicates were to have no such meanings themselves, why would they be the starting point for such derivations? It does not seem that they are acting as semantically empty bases, added for purely morphological reasons; there is already a semantically empty predicate *a̱x* (seen in 39) that serves exactly this purpose, and does not derive such "want/wish/pretend to be a particular entity" meanings.[7]

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[6]It is not precisely a *pre*supposition in the sense of (Stalnaker 1973), since it does not require its information to already be in the common ground. Whether or not *nugwa, su, etc..* themselves actually contribute such a presupposition, or whether their subject does, depends on how we implement *pro* and agreement.

[7]On the other hand, Wojdak (2005) offers arguments that Wakashan lexical suffixation is a PF phenomenon rather than the lexical creation of new stems. Also, that these elements are "inflected" for agreement before they undergo derivation suggests that this is not really derivation, is not really agreement, or is not either. If lexical suffixation is not truly a derivational process in Wakashan, then this argument that *nugwa, su,* etc. must have identity as part of their lexical meaning loses some of its force.

Furthermore, our main rationale for positing a silent type-shifter would be to allow a single copular denotation to handle both predicative and equative sentences − that is, as a way to capture the polysemy of *to be* without needing two different copulas. But Kwak'wala appears to lack this polysemy anyway − this mystery (of why the same element occurs with NP, AP, and DP predicates despite the difference in interpretation) does not arise in the first place.

However, one predicate type that remains to be seen: a *PP* predicate, as in "Pat is [*PP* in Fredericton]". Unlike verbs, adjectives, and nouns, Kwak'wala P heads do not host tense (even when derived from verbs), but unlike DPs would not require an IDENT-like operation either. Do they likewise require a copula?

5. Locative Copular Sentences

There are various ways of expressing locative sentences in Kwak'wala, but one basic type *does* use the copula:

(40) **He**=d   =i   le' =e=da   migwat=e' =e   Vancouver
      be.3DIST=DET =3DIST PREP =3DIST=DET seal=INVIS =3DIST Vancouver.
      "The seal is in Vancouver."

The structure of these − such as why the preposition occurs where it does − remains mysterious. There are various possible structural interpretations of this sentence, including one roughly parallel to "The seal is in Vancouver" and one parallel to "Vancouver is the location of the seal."

If the structure is indeed parallel to something like "The seal is in Vancouver", this argues for a tense-hosting account. There is no clear role for an identity predicate here, but there is a need for something to host tense, since a prepositional predicate won't.

In that case, the difference between Kwak'wala and English could just be a difference in the interaction of predicate type and tense, and therefore which types of predicates require copulas:

(41)

	eng	kwk
VP	✓	✓
NP	✗	✓
AP	✗	✓
PP	✗	✗
DP	✗	✗

✓ = can host tense itself
✗ = needs something extra

On the other hand, if (40) is parallel instead to "The location of the seal is Vancouver", it could still be an equative sentence like any of the above. For example, it appears most similar in structure to the following equative sentence:

(42) **He**=’a̲m=x̲a’   =e   gayutł   =i   Masaki=e’   =e
      be.3DIST=FOC=ALSO [*DP1* =3DIST come.from =3DIST Masaki=INVIS] [*DP2* =3DIST
      Dza̲pan
      Japan]
      "Masaki comes from Japan, too." (Lit: "Japan is Masaki's origin, too.")

If (40) is likewise equative, it still offers some reason for maintaining a copula-as-tense-host account — that the language must go to some extraordinary means to handle tense for a PP predicate, in this case by turning it into a DP, but no longer provides evidence against an account where the copula is itself the identity predicate.

6.   Conclusions

Various tests isolate identity as the primary truth-conditional meaning of *nugwa, su, ga, yu,* and *he* sentences.

I had originally proposed that it is the predicates themselves that contribute this meaning. For one, they appeared to occur in every equative sentence and only such sentences. They are the roots from which complex stems regarding identity (WANT-TO-BE, PRETEND-TO-BE, etc.) are built. The behavior of these sentences under negation and in answer to questions argues against an account where the identity of the two entities is achieved by apposition. Finally, the nonoccurence of the copula in predicative sentences seemed to obviate the need for a type-shifting account.

However, the appearance of these elements in sentences with PP-predicate meanings argues towards a semantically inert "one-copula" theory.

Despite previous claims, these predicates do not primarily seem to be contributing deictic information to the sentence. In part the traditional Boasian account was due to a conflation between the predicative and equative functions of copulas. In the absence of a conceptual division between predicative and equative copulas, these elements do not seem to *have* any function other than to differ by person and location. It is only when we set out to collect and compare predicative and equative sentences that the role of *nugwa, su, ga, yu,* and *he* in asserting identity emerges.

Kwak'wala thus appears to give us a counterexample to Russell's (1919) condemnation — a language that systematically distinguishes predicative and equative sentences by letting its predicates predicate and using a special set of predicates for identity. Whether these are themselves *identity predicates*, however, remains a question for further investigation.

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