

A preliminary semantics for pronominal predicates¹

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In this paper I develop a semantic analysis of *niʔ* in Northern Straits Salish. The challenge is to harmonize its use as a third person pronoun with its use as a pseudo-identificational copula. Drawing upon observations of how it behaves in clefts, my analysis of *niʔ* treats it as a functor of type $\langle et, et \rangle$ which takes a CP or NP inner argument and a DP subject. The relation between the DP subject and the predicative inner argument is mediated by a free variable. The analysis subsequently leads to an original treatment of clefts in this language.

1 Introduction

In this paper I examine the semantic properties of pronominal predicates, also known as independent pronouns (Wiltschko 2001), predicative pronominals (Montler 1986) and predicative verbs (Galloway 1990). My attention here is rather restricted – I almost exclusively study data from Northern Straits Salish² and my proposal is essentially confined to the third person form *niʔ*. However, the overarching aim is to lay the groundwork for future study of the semantics of pronominal predicates across the Salish family.

Kroeber (1999) has argued that *niʔ* can be treated as an identificational copula based on its ability to take two DP arguments in an apparent equative construction. It is also used as the main predicate in a clefting construction, in which it appears to have much the same meaning. In many other languages, including English, the main inflected predicate in a cleft is a copula.

Most of this paper concentrates on this use of *niʔ* in clefts to determine whether an identificational copula semantics is indeed the best treatment of this morpheme. Drawing upon previous work on Straits clefts in Shank (2002) and Davis, et al. (2003a, b), I discuss both structural and semantic reasons why the identificational copula analysis is incorrect. I then propose a different semantics

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² Northern Straits is a Coast Salish language. Unless otherwise indicated, all data non-cited comes from the Samish dialect, as spoken in Malahat, British Columbia. In the cited data, I have on occasion changed some glosses and regularized the orthography for continuity.

which captures why *ni* superficially appears to be an identificational copula, but also accounts for its pronominal nature as well.

The remainder of this paper is structured as follows: In Section 2 I present data showing that *ni* can be regarded as a pronoun and also data that suggest it simultaneously functions as an identificational copula. In Section 3 I discuss syntactic evidence which challenges the simplest identificational copula analysis. This is backed up by semantic evidence in Section 4. In Section 5 I present my own analysis. Section 6 introduces some interesting extensions of this analysis and Section 7 some potential problems.

2 Basic observations

The paradigm of pronominal predicates is given in (1).

(1)		SINGULAR	PLURAL	
	1 ST	ʔós(ə)	ɪnɪŋəl	
	2 ND	nók ^w (ə)	nək ^w ɪl'ɪyeʔ	
	3 RD	ni	nəniʔɪyeʔ	Galloway 1990: 33 ³

When used as arguments, pronominal predicates must be introduced by a determiner, like all DPs in the language. In the following examples, the argument has been “and-fronted” to an initial topic position.

- (2) a. tiʔə ʔósə ʔiʔ ʔiʔən sən ʔəʔ nək^wə
 dem 1s.pred and eat[cnt] 1s.sbj obl.det 2s.pred⁴
 ‘I’m eating with you.’ *Songhees*: Raffo 1972 : 64
- b. tə nók^wə ʔiʔ ʔən-əs sx^w ʔə
 det 2s.pred and give-1s.obj 2s.sbj obl
 tsə n-kəpú.
 det 2s.pos-coat
 ‘You give me your coat.’ *Songhees*: Raffo 1972 : 63
- c. s-əw ni ʔiʔ x^wéʔtč-əs
 fem.det-link 3s.pred and jealous[res][cnt]-prp
 ʔəʔ ʔósə
 obl.det 1s.pred
 ‘She is jealous of me.’ *Songhees*: Raffo 1972: 63

³ Across the dialects, the pronouns vary slightly in terms of whether the 1st and 2nd singular have a final schwa and the placement of glottalization in the 2nd and 3rd plural forms.

⁴ Abbreviations as follows: cnt = continuative, comp = complementizer, dem = demonstrative, det = determiner, dur = durative, evid = evidential, fem = feminine, lnk = link, nom = nominalizer, o = object, obl = oblique, pl = plural, pos = possessive, pred = predicative, prp = purposive, pst = past, recip = reciprocal, s = singular, sbj = subject, st = stative sub = subordinate, tr = transitive, ymq = yes/no question.

- d. tə ɪnɪŋəɪ ʔiʔ séʔsəsi ɪtə ʔə
 det 1pl.pred and afraid 1pl.sbj obj
 s-əw̃ nɪɪ
 fem.det-lnk 3s.pred
 ‘We are afraid of her.’ *Songhees*: Raffo 1972: 64
- e. tə nəkʷɪfəyeʔ ʔiʔ ʔéɪəʔ ʔəs-xʷáy-əɪ
 det 2pl.pred and here st-wake[cnt]-dur
 ‘You (pl) are awake.’ *Songhees*: Raffo 1972: 63
- f. tɪʔə ɪnɪŋəɪ ʔiʔ ləmɛʔ-t ɪə
 dem 1pl.pred and trip[cnt]-tr 1pl.sbj
 t-əw̃ nənɪʔfəyeʔ
 det-lnk 3pl.pred
 ‘We kick them.’ *Songhees*: Raffo 1972: 65

When used as predicates, they are not introduced by determiners.

- (3) a. ʔəs
 1s.pred
 ‘It’s me.’
- b. nəkʷ
 2s.pred
 ‘It’s you.’
- c. nɪɪ
 3s.pred
 ‘It’s him, it’s her, that’s it, that’s the one.’
- d. ɪnɪŋəɪ
 1pl.pred
 ‘It’s us.’
- e. nəkʷɪfəyeʔ
 2pl.pred
 ‘It’s you folks.’
- f. nənɪʔfəyeʔ
 3pl.pred
 ‘It’s (lots of) them.’ Galloway 1990: 31

Pronominal predicates differ from other pronouns in the language by being emphatic (Jelinek and Demers 1994). The following forms are most naturally translated by using clefts, which are used to encode focus.

- (4) a. $nək^wə$ $yəx^w$ $sə$ $nə$ -ten
 2s.pred evid det.fem 1s.pos-mother
 'It must be YOU who are my mother.'
 Lummi: Jelinek and Demers 1994: 714 (46)
- b. $niṭ$ $tə$ Andy $ʔiṭ$
 3s.pred det Andy escape
 'It is Andy who escaped.'

Having discussed the pronominal predicates as a class, I now concentrate more narrowly on the third person singular form *niṭ*.

In an English cleft, the main inflected predicate position in a cleft is occupied by the copula *be*, as seen in the English glosses in (4). Kroeber (1999: 370) has argued this is the proper analysis of *niṭ* as well. He points out that across Salish, the predicate corresponding to *niṭ* is used to express identity between two nominals. Although one of these nominals may sometimes be a zero pronominal, especially clear cut cases can be found in which two full nominal DPs are equated. In Shank (2002), I argued for the same analysis based on the following sort of data from Straits.

- (5) a. $niṭ$ $k^wsə$ Richard $k^wsə$ $ləplit$.
 3s.pred det Richard det priest
 'Richard is the priest.'
- b. $niṭ$ $k^wsə$ James $k^wsə$ Jimmy.
 3s.pred det James det Jimmy
 'James is Jimmy.'

Under this analysis, *niṭ* would have the meaning given in (6). Simply, it would be an identity predicate.

- (6) $[[niṭ]]$ = $\lambda x.\lambda y.x = y$

This is a rather elegant analysis for examples like (5a-b), but it is difficult to understand in what sense such an item can still be regarded as a third person pronoun. In the following sections I will present structural and interpretive evidence that suggests that the identificational copula analysis is incorrect. I then go on to develop a new semantics that captures the pronominal nature of *niṭ*.

3 The structure of clefts

A cleft in Straits has the linear form given in (7).

- (7) $niṭ$ + [cleftee] + [cleft clause]

In the examples in (8) the predicate is followed by two arguments – a DP cleftee and a headless relative clause which is also introduced by a determiner.

- (8) a. nɪt [kʷsə Richard] [kʷsə tʰs-ət kʷsə láʔsn].
 3s.pred det Richard det break-tr det plate
 'It's Richard that broke a plate.'
- b. nɪt [kʷsə sqéws] [kʷsə n̩-s-síəʔ].
 3s.pred det potato det 2.pos-nom-buy
 'It's the potatoes that you bought.'

These examples appear to be compatible with the identificational copula analysis. Since headless relative clauses routinely function as full arguments (Kinkade 1983, Montler 1993), the cleft clause can be regarded as an entity denoting argument which is being identified with the entity denoted by the cleftee. A sentence like (8b) would have the semantic translation in (9).

- (9) [[nɪt]]([kʷsə sqéws])([kʷsə n̩-s-síəʔ]) =
 [λx.λy.x = y](the.potatoes)(the.ones.you.bought) =
 the.potatoes = the.ones.you.bought

However, once we look at more data, this simple picture starts to become questionable. Kroeber (1999) observes that in the Coast Salish languages when the predicative pronominal is used, the cleft clause normally lacks a determiner.⁵ In Straits, although using a determiner on the cleft clause is fully grammatical, the overwhelming tendency is to leave the determiner off, in accord with Kroeber's observation. So, the sentences in (8) can also surface as in (10).

- (10) a. nɪt [kʷsə Richard] [tʰs-ət kʷsə láʔsn].
 3s.pred det Richard break-tr det plate
 'It's Richard that broke a plate.'
- b. nɪt [kʷsə sqéws] [n̩-s-síəʔ].
 3s.pred det potato 2.pos-nom-buy
 'It's the potatoes that you bought.'

Strikingly, the same is even true in sentences parallel to the data in (5). In the examples supposedly involving two full DPs, the determiner is in fact fully optional on the second argument.

- (11) a. nɪt kʷsə Richard ləplɪt.
 3s.pred det Richard priest
 'Richard is the priest.'

⁵ Kroeber's description of the facts is a little different. He outlines the environments in which the cleft clause lacks a determiner to be "if the fronted constituent is a personal pronoun, a demonstrative, or a DP introduced by an article" (Kroeber 1999: 378). These boil down to cases involving a pronominal predicate, in the terminology I have adopted.

- b. níl kʷsə James Jimmy.
 3s.pred det James Jimmy
 'James is Jimmy.'

This is really remarkable, because arguments in Straits must have determiners. Even proper names must take a determiner in order to function as an argument, as shown by the following minimal pair.

- (12) a. téčəl kʷsə Richard
 arrive det Richard
 'Richard got here.'
- b. * téčəl Richard
 arrive Richard

The optionality of the determiner on the headless cleft clause in clefts suggests that this constituent is not a full argumental DP. Rather, I believe this is evidence that the cleft clause should be taken at face value as a relative clause. By this I mean treating the cleft clause as a CP which is not embedded within a DP.

As discussed by Montler (1993), relative clauses in Straits do not require an overt complementizer.⁶ The following Saanich sentences mean the same thing.

- (13) a. ʔəw xči-t sən kʷsə swəyqə?
 lnk know-tr 1s.sbj det man
 tšm-ət-əs
 hit-tr-3.sub
 'I know the man who he hit.'
- b. ʔəw xčit sən kʷsə swəyqə?
 lnk know-tr 1s.sbj det man
 kʷsə tšm-ət-əs
 comp hit-tr-3.sub
 'I know the man who he hit.'

Saanich: Montler 1993: 256 (67-8)

Since determiners and complementizers are isomorphic in this language, we can reanalyze the apparent optional "determiners" on cleft clauses as actually being optional complementizers.⁷ With this change in hand, we can treat the relative cleft clause not as a DP but as a CP.

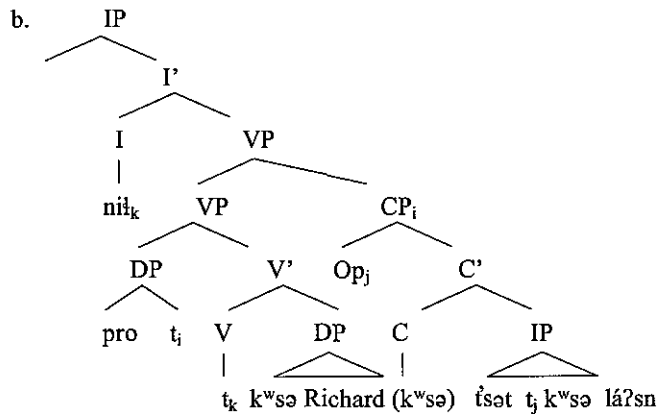
This makes the identificational copula hypothesis difficult to maintain in its simplest form. However, one might still maintain a more complex treatment which continues to treat *níl* as an identificational copula. Shank

⁶ Montler does not distinguish determiners and complementizers terminologically, and refers to what I am calling a complementizer in (13b) as a determiner.

⁷ Davis and Matthewson (1996) also discuss the difficulty in distinguishing determiners and complementizers in St'at'imcets (Lillooet Salish).

(2002) argues that the cleft clause forms a discontinuous definite description with a covert *pro* in subject position. This analysis builds on work by Percus (1997) and Hedberg (2000), who independently argue that in an English cleft, the subject *it* is in fact functioning as a definite determiner to the cleft clause which has been extraposed. Extending their analysis to Straits, Shank (2002) proposes the following.⁸

- (14) a. *niŋ* *kʷsə* Richard [*kʷsə* *ʔs-ət* *kʷsə* *láʔsn*]
 3s.pred det Richard comp break-tr det plate
 'It's Richard that broke a plate.'



To conclude this section, there is structural evidence that the cleft clause in Straits clefts is not an argumental DP but in fact a relative clause CP. Since the identificational copula analysis was built upon the observation that *niŋ* may take two DPs as arguments, reanalyzing the cleft clause as a CP undermines the simplest analysis. One might possibly maintain the identificational copula by arguing that a covert *pro* functions as a discontinuous definite determiner to the extraposed cleft clause, following Shank (2002). But as we will see in the next section, there is semantic evidence that clefts cannot be regarded as equative constructions involving definites.

4 The semantics of clefts

An identity predicate forces the two arguments to be identical in reference. This possibly accounts for one of the distinctive features of English clefts, namely *exhaustivity* or *maximality*. For example, (15a) conveys (15b).⁹

⁸ In Shank (2002) I ignore the pronominal nature of *niŋ* and treat it as a verb.

⁹ Clefts in English also have an existential effect, presupposing the existence of an individual who has the property encoded in the cleft clause. I postpone discussion of this until section 7.1.

- (15) a. It was John [that ate the fish].
 b. John ate the fish, and nobody else (i.e. who isn't John) ate the fish.

Assuming this construction involves an identificational copula and that the cleft clause can be treated as a discontinuous definite description, (15a) will have the semantic translation in (16).

- (16) $[[be_{ident}]]([John])([the.one.who.ate.the.fish]]) =$
 $[\lambda x.\lambda y.x = y](John)(the.one.who.ate.the.fish) =$
 John = the.one.who.ate.the.fish

Exhaustiveness falls out because for everybody who ate the fish, they would have to be identical in reference to John. Therefore, John is the only person that ate the fish.

Davis, et al. (2003a, b) examine whether similar effects can be detected in Straits Salish and St'át'imcets (Lillooet). In both languages, a rather robust exhaustivity effect was at first detected. The exhaustivity effect is exemplified in the next examples. In (17), consultants were asked for an exhaustivity judgement out-of-the-blue. The (a) example involves a nominal predicate, and the consultant had no intuition of exhaustivity. The (b) example contains a *niŋ* cleft, and exhaustivity was reported.

- (17) a. læplít kʷsə Tom ʔə mətúliyəʔ.
 priest det Tom obl Victoria
 'Tom is a priest of Victoria.'

Does it sound like Tom is the only priest?: "No, I guess not. Just stating he's a priest.'

- b. niŋ kʷsə Tom læplít ʔə mətúliyəʔ.
 3s.pred det Tom priest obl Victoria.
 'It is Tom who is the priest of Victoria.'

Does it sound like Tom is the only priest?: "Yes."

Another piece of data involves the use of a cleft in context rather than out-of-the-blue. In these cases, the consultant was asked whether the sentence was felicitous given the scenario described. Once again, consultants distinguished between nominal predicates and clefts. The nominal predicate in (a) was perfectly acceptable in context, whereas the cleft in (b) was judged to be infelicitous.

- (18) Context: There were three people, Peter, Jill and Richard; Jill and Richard each broke a plate.

- a. Richard kʷsə ʔs-ət kʷsə láʔsn.
 Richard det break-tr det plate
 'Richard broke a plate.'

- b. ?? nił k^wsə Richard t̥s-ət k^wsə láʔsn.
 3s.pred det Richard break-tr det plate.
 'It's Richard that broke a plate.'

Consultant's comment: "Hmm. No, that's like saying 'He's the one that broke the dish' while pointing."

While these data are compelling, Davis, et al. (2003b) have found that this exhaustivity effect can be treated as a scalar implicature. A scalar implicature is a type of pragmatic exhaustivity inference that arises when speakers consider the relative strength of an assertion vis-à-vis others which could have been made. When one of the interlocutors asserts $\phi(n)$, containing the scalar term n , then an inference $\neg\phi(n+1)$ will arise. The standard explanation lies in Grice's (1975) conversational Maxim of Quantity, according to which speakers should be as informative as possible. To illustrate, we can take the example of English numerals, which can be ranked on a scale. According to Horn (1972, 1989) and Kadmon (1987), the numeral in (19a) truth conditionally means "at least", as in (19b). However, out-of-the-blue, the numeral will ordinarily have the "exactly" reading, in (19c).

- (19) a. Three people passed the exam.
 b. At least three people passed the exam.
 c. Exactly three people passed the exam.

We can see that the "exactly" reading is in fact just an implicature, because no contradiction results when a higher scalar member is asserted.

- (20) Q: Did three people pass the exam?
 A: Yes, in fact four did.

If the numeral did mean "exactly n ", then it should not be cancellable without causing a contradiction. This is the case when the modifier *exactly* is used overtly in English.

- (21) Q: Did exactly three people pass the exam?
 A: * Yes, in fact four did.

With this background in mind, we can return to the discussion of Straits. In a yes-no question scenario parallel to the English data just discussed, it is possible to answer "yes" to a question in a scenario even when exhaustivity is not satisfied. This is predicted to be okay if exhaustivity were simply a scalar implicature (cf. 20) but is predicted to be bad if exhaustivity were part of the truth conditions (cf. 21).

(22) Context: You bought two things, a hat and a shirt.

Q: nił ʔə kʷsə yásəqʷ kʷə ń-s-síłəʔʔ
 3s.pred ynq det hat det 2.pos-nom-buy
 ‘Is it a hat that you bought?’

A: heeʔə
 yes

This contrasts with the same discourse fragment in which ʔəw hay “only” is used instead of nił. ʔəw hay is truth conditionally exhaustive, and the question requires a “no” answer in context.

(23) Context: You bought two things, a hat and a shirt.

Q: ʔəw háy ʔə kʷsə yásəqʷ kʷə
 lnk only ynq det hat det
 ń-s-síłəʔʔ
 2.pos-nom-buy
 ‘Is it only a hat that you bought?’

A: ʔəwə
 no

A second piece of data which suggests that exhaustivity in nił clefts is merely an implicature comes from data in which the exhaustivity inference can be overtly cancelled by the speaker appending the additive particle ʔeʔ “also, too”.

(24) nił kʷsə sʔəlíʔəqł kʷəy̯kʷiʔ, ʔiʔ kʷsə
 3s.pred det child[pl] hungry and det
 słən.łəniʔ ʔeʔ.
 woman[pl] too.
 ‘It’s the kids that are hungry, and the ladies too’

Davis, et al. (2003b) argue that a scalar implicature arises because nił clefts are used in focus constructions in which there is a contextually salient and finite set of alternatives. This set forms a partially ordered scale in which propositions can be informationally ordered in terms of strength. Any stronger alternative that is not asserted is ruled out by scalar implicature (Rooth 1992).¹⁰

¹⁰ To be slightly more explicit, if a speaker asserts ‘RICHARD broke a plate’ in a context which invokes the set of salient alternatives {Richard broke a plate, Jill broke a plate, Peter broke a plate}, then an implicature arises that Jill didn’t break a plate and Peter didn’t break a plate. The hearer reasons that since ‘Everybody broke a plate’ or ‘Richard and Jill broke a plate’, etc., are semantically stronger statements than ‘Richard broke a plate’, these would have been used instead of the weaker alternative which was asserted if they were true. The fact that they were not used leads the hearer to conclude that the

The important lesson from this section is that *ni#* does not enforce absolute identity of reference between the cleftee and the cleft clause. This means the semantic evidence points away from the analysis in (14), where a covert *pro* subject forms a discontinuous definite description with the cleft clause, which is equated with the clefted DP.

Lisa Matthewson (p.c.) suggests that one might still be able to maintain an identificational copula analysis if one adopted a choice function analysis of the covert determiner, following her treatment of determiners in St'át'imcets in Matthewson (1999). Under this analysis, rather than analyzing the *pro* as a definite determiner in (14), one might treat it as a variable ranging over choice functions. The discontinuous DP headed by this determiner would be of type *e*, since a choice function maps a type $\langle et \rangle$ argument to a member of the set which it denotes. Because the choice function variable is existentially closed, the DP would have the force of an indefinite. Under this analysis, the identificational copula would be able to equate two type *e* arguments, but since they would be indefinites they would not entail exhaustiveness.

This reanalysis successfully accounts for why the cleft clause is a CP and also why Straits clefts lack an exhaustivity entailment. However, it is still unclear how *ni#* can be regarded as a pronominal. In the next section I offer a completely novel analysis of *ni#* and the structure of clefts that accounts for the data in Sections 3 and 4, while making it clear in what sense *ni#* is a pronoun.

5 Analysis

Before introducing my new analysis, I will reiterate some of the facts which it must account for. In Section 3 we saw evidence that suggests the cleft clause is a relative clause CP which is optionally introduced by a complementizer. Under standard assumptions, relative clauses are not entity denoting expressions but rather predicative expressions of type $\langle et \rangle$ (Heim and Kratzer 1998). The data in Section 4 showed that full identity is not actually required between that which is clefted and those that are in the set denoted by the relative clause. The exhaustivity inference is only a conversational implicature.

An ideal analysis of *ni#* is not exactly an identificational copula, but something a lot like it, which leaves room for the item to be construed as a pronoun. I propose the following:¹¹

$$(25) \quad [[ni\#]] = \lambda P.\lambda x. x \leq y \ \& \ y = \iota z.Pz$$

stronger statements are false, and therefore that Richard is the only person who broke a plate from the contextually salient set.

¹¹ An alternative analysis which I will not discuss in detail is that *ni#* be treated not as an identificational copula, but as a predicative copula, with the semantics in (i).

$$(i) \quad [[be_{pred}]] = \lambda P.\lambda x.P(x)$$

Such a copula is essentially an inflectional bridge between the logical subject and the logical predicate in languages such as English where APs, NPs and PPs cannot function as the main predicate in finite clauses. This analysis suits the syntactic requirement that the inner argument of *ni#* be of type $\langle et \rangle$, but it does not capture the pseudo-exhaustivity effects or the fact that *ni#* is a pronominal.

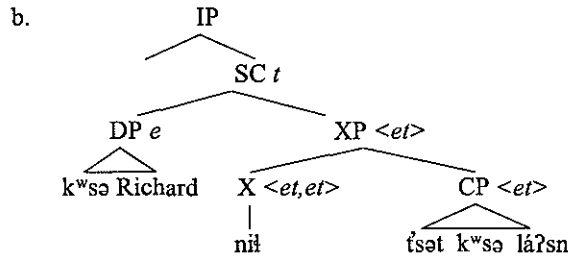
where x and y are possibly plural individuals

I assume that the domain of individuals contains both singular and plural individuals. Singular individuals are atomic and have no subparts whereas plural individuals are sums of atomic individuals. Therefore, the singular individuals a and b are atomic and the plural individual $a \oplus b$ is an individual sum comprised of the atoms a and b .¹² Individuals in the domain are related by the subpart relation \leq , so that $a \leq a \oplus b$ and $a \oplus b \leq a \oplus b \oplus c$.

This translation of *nĩt* in (25) takes two arguments – a predicate and an entity denoting expression. The predicate is type-shifted by the ι -operator from type $\langle et \rangle$ to e .¹³ This operator maps a predicate P onto the maximal individual in the set denoted by P . This maximal entity is identified with a free variable y . The second argument of *nĩt* must be an entity denoting expression of type e . According to these semantics, the sentence is true if this latter entity is a subpart of the individual y (the free variable) which is identified as the maximal individual in the set denoted by the cleft clause.

This opens up a new treatment of the structure of clefts. To simplify the compositional analysis, I will assume that at LF, the predicate is lowered back to its base position. The surface form of (26a) has the LF given in (26b), and is translated as in (26c). I defer discussion of the identity of XP dominating *nĩt* until Section 6.1. As for the phrase dominating this XP, I am calling it a Small Clause (SC) for now, although I cannot motivate this here and nothing crucial hinges on this assumption.

(26) a. *nĩt* [k^wsə Richard][tⁱ's-ət k^wsə láʔsn].



¹² In languages with a robust number distinction, singular individuals would be grammatically singular and plural individuals grammatically plural. Number marking is generally optional in Straits, except in first person (Montler 1986). Therefore, I assume that grammatical “singular” in Straits is actually ambiguous between singular and plural individuals, whereas the marked plural forms unambiguously refer to plural individuals.

¹³ The iota operator is based off the semantics of *the* in English. Following Chierchia (1999), the ι -operator maps a predicate to the maximal individual in the set denoted by the predicate. This is slightly different from the standard formulation, as discussed by Partee (1987) for example, where iota type-shifts a predicate onto the *unique* individual in the set denoted by the predicate. If there are no members in the set to which iota applies, the operation is undefined. This amounts to saying that iota has a presupposition of existence.

- c.
$$\begin{aligned} & [\lambda P. \lambda x. x \leq y \ \& \ y = \iota z. Pz][(\lambda x. \text{broke.a.plate}(x))](r) = \\ & [\lambda x. x \leq y \ \& \ y = \iota z. [\lambda x. \text{broke.a.plate}(x)](z)](r) = \\ & r \leq y \ \& \ y = \iota z. \text{broke.a.plate}(z) \end{aligned}$$

This says that Richard is a subpart of the maximal individual who broke a plate. It is important to bear in mind that nothing in the semantics forces Richard to be a *proper* subpart of the maximal individual who broke a plate. If Richard is not a proper subpart, then he will be identical to the maximal individual who broke a plate. As a default, speakers tend to interpret the cleftee as a non-proper subpart, which as discussed in the previous section is the effect of scalar implicature.

Syntactically, this analysis takes the optionality of the “determiner” on the cleft clause as evidence that we are actually looking at an optional complementizer on a CP. This CP is treated as the first argument of *nĩ* and is not syntactically embedded within a DP.

An immediate objection to this analysis is the following: If the cleft clause is a CP, then why not treat it as restricting the clefted DP? Isn't this simpler?

In Shank (2002) I discuss and dismiss the possibility that the cleft clause is restricting the clefted DP. In English, although clefted proper names may be followed by a relative clause, non-clefted proper names cannot be followed by a restrictive relative clause (Heggie 1988, Hedberg 2000). Assuming that proper names have the same properties in both cases, this is evidence that in an English cleft, the cleft clause does not in fact restrict the cleftee.

- (27) a. It was John [that Mary saw].
b. * John [that Mary saw] was limping.

It turns out that Straits is exactly like English in this respect. As seen in the (a) examples in (8, 10-11) above, a proper name may be clefted in Straits. However, a non-clefted proper name may not be restricted by a relative clause (28).

- (28) * ye? sən leŋ-nət kʷsə Richard [tʰəm-ət lə?
go 1s.sbj see-prp det Richard hit-tr pst
kʷsə sqʷəmáʔ].
det dog
'I'm going to see Richard (who) hit the dog.'

I take this as evidence that the CP does not restrict the DP cleftee.

Another syntactic aspect of this analysis worthy of discussion is that it treats the clefted DP as the subject of the sentence. Recall that in Shank (2002), I treated a covert *pro* as the subject, as in (14). I believe treating the cleftee as the subject is the right analysis, based on the following data.

- (29) a. nĩ sən tʰs-ət kʷsə láʔsn.
3s.pred 1s.sbj break-tr det plate
'I broke the plate.'

- b. *ni# sən čeʔiʔ.*
 3s.pred 1s.sbj work[cnt]
 ‘I’m working.’

In these examples the subject clitic *sən* is in focus.¹⁴ Since *sən* is exclusively a subject clitic, this is evidence that the cleftee must be the subject.

Semantically, the analysis of *ni#* predicts that the predicate places no restriction on the plurality of the cleftee. This is indeed the case. As seen in (30), the cleftee may be non-singular.

- (30) *ni# tə sən.ɬeniʔ kʷəyʔkʷiʔ.*
 3s.pred det woman[pl] hungry
 ‘It’s the women that are hungry.’

Assuming there are three women in question, Mary, Jill and Kate (m, j, k), then (30) will receive the semantic translation in (31).

- (31) $m \oplus j \oplus k \leq y \ \& \ y = \iota z.hungry(z)$

This says that the plural individual $Mary \oplus Jill \oplus Kate$ (i.e., with the subparts Mary, Jill and Kate) is itself a subpart of the maximal individual who is hungry.

Another benefit of this analysis which was lacking with the identificational copula analysis is that the pronominal nature of the predicate is transparent. There is a free variable (the variable *y* in (31)) which is free to receive its reference from context, as pronouns are. Furthermore, although the predicate *ni#* as a whole is of type $\langle et, et \rangle$, this free variable is of type *e*, an entity, which means that it ranges over the domain of individuals, like pronouns in other languages.

6 Extensions of the analysis

In this section I will broaden the discussion somewhat. In Section 6.1 I consider how well the analysis of *ni#* presented above can be extended to match the syntactic analysis of predicative pronominals proposed by Wiltschko (2001). In Section 6.2 I present and provide an account of new data in which *ni#* means “same” when encliticized with a morpheme (*ʔəwʔ*).. *ʔaʔ* meaning “just”.

6.1 AgrPhrase

I have repeated throughout this paper that my larger goal is to develop a semantics for *ni#* which allows for it to be regarded as a pronominal. My solution to this problem was to put a free variable right into the lexical entry. However, I have not dealt with the syntactic category of *ni#* and I have not

¹⁴ The example in (29b) was volunteered as a response to the question in (i).

- (i) *wet ʔač kʷ čeʔiʔ?*
 who req.info det work
 ‘Who’s working?’

addressed the use of *niŋ* within a DP to function as an argumental pronoun, as seen in (2).

Wiltchko (2001) gives extensive discussion to the internal and external syntax of pronominal predicates in Halkomelem, which she calls independent pronouns. She concentrates primarily on the use of these pronouns as arguments embedded within a DP. Halkomelem examples are given in (32).

- (32) a. q'óq'ey tú-tl'ò.
sick det-3s.pred
- b. kw'éts-lexw-es tú-tl'ò thú-tl'ò.
see-tr(3o)-3s det-3s.pred det.fem-3s.pred
Halkomelem: Wiltchko 2001: 9 (12a-b)

She argues that these pronouns head an AgrPhrase, and have the following phrase structure.

- (33) [DP [D *te* [AgrDP [AgrD *tl'ò* [NP Ø]]]]] cf. Wiltchko 2001: 3 (1)

In Straits, predicative pronominals may be embedded within a DP in much the same way as in Halkomelem. In the examples below, Straits *niŋ* functions like Halkomelem *tl'ò*.¹⁵

- (34) ḡén̄ tsə ḡən.ḡénə?-s ts-əw̄ niŋ spáaŋ
many det offspring[pl]-3.pos det-link 3s.pred Raven
'Raven had lots of children.' Saanich: Montler 1986: 242 (2)

At this preliminary stage of investigation, I think that the semantics I have developed are consistent with Wiltchko's proposal. Wiltchko argues that the strong AgrD feature licenses a null NP with which the Agr must agree. This null NP is obligatory in the make up of the independent pronoun, unless an overt NP takes its place.¹⁶ I have argued above that *niŋ* takes a type <et> expression as its first argument. Since NPs are of type <et>, Wiltchko's and my analysis are compatible in this respect. However, my semantics do not place any categorial restrictions on this argument, and so any constituent of type <et> may function as an internal argument, including CPs. I do not necessarily think this falls out as a difference of analysis so much as a difference of scope of study. Wiltchko does not discuss clefts, and so the question of whether Agr could take a CP argument does not enter her discussion. One might suppose that non-NPs would not trigger any agreement, and so there would be little motivation for positing an Agr here. However, as Montler (1993) discusses, headless relative clauses which function as full arguments do in fact license

¹⁵ For both languages, the presence of the particle '*u*' in Halkomelem, *əw̄* in Straits is obligatory in these forms. I have nothing to say about this, so like Wiltchko I will ignore its presence.

¹⁶ Using a slightly different terminology, Déchaine and Wiltchko (2002) argue that pronominal predicates head a ϕ -Phrase. In their discussion, they do not mention the presence of an NP.

(35) ʔəw̃ naʔtʰə čə θə q̣ʷaq̣ʷəʔ-t-əs kʷsə
 lɪk one. evid fem.det include-tr-3.sub det
 nə-men ləʔ ʔiʔ tsə s-q̣ʷaləʔ-s.
 1s.pos-father pst and det nom-include[pl]-3.pos.
 'My father and his companions included only one woman.'
Saanich: Montler 1993: 261 (76)

To close this section, I give the structure of a pronominal predicate embedded within a DP below.

- (36) a. tsə (ʔəw) niʔ spaalʔ
- b.
- ```
graph TD
 DP_e[DP e] --- D[D <et, e>]
 DP_e --- AgrP[AgrP <et>]
 D --- tsə[tsə]
 AgrP --- Agr[Agr <et, et>]
 Agr --- niʔ[niʔ]
 AgrP --- NP[NP <et>]
 NP --- spaalʔ[spaalʔ]
```

## 6.2 “Same”

<sup>17</sup> Note, however, that Wiltschko treats gender agreement on Salish determiners as natural gender rather than grammatical gender. This explains agreement is optional and mismatches are acceptable. Grammatical gender, on the other hand, is obligatory. Unlike natural gender, grammatical gender is sensitive to phi-features, which are hosted by AgrP. Therefore, data like (35) may not be very persuasive within Wiltschko's system.

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- (37) a.      ?əw̌      nɪľ      ?aɫ̌      tʰe?ə.  
              lnk      3s.pred      just      dem  
              That's the same thing/one. *Saanich*
- b.      (ʔe?)      ?əw̌      nɪľ      ?aɫ̌      kʷsə      léŋ-n-ən  
              also      lnk      3s.pred      just      comp      see-tr-1s.sub  
              ?ə      kʷsi?e      skʷəyčəl.  
              obl      dem      day  
              'It's the same one I saw yesterday (that day)'
- c.      ?əw̌      nɪľ      ?aɫ̌      (kʷsə)      sčəwécən      kʷsə  
              lnk      3s.pred      just      comp      chair      comp  
              čə?áw̌-ən      ?ə      kʷsi?ə      čəlélqɫ̌.  
              use[cnt]-1s.sub      obl      dem      yesterday  
              'This is the same chair I sat on yesterday.'

These forms can be treated as clefts. In (37a), the cleftee is arguably the demonstrative, and the cleft clause is covert.<sup>19</sup> In (37b,c), the cleftee is covert, and the cleft clause is present. Note that this subordinate clause is a CP. In (37c), the complementizer on [<sub>CP</sub> (kʷsə) sčəwécən kʷsə čə?áw̌ən ?ə kʷsi?ə čəlélqɫ̌] is fully optional. The structure of this sentence is given in (38).

- (38) a.      ?əw̌      nɪľ      ?aɫ̌      [(kʷsə) sčəwécən      kʷsə  
              čə?áw̌-ən      ?ə      kʷsi?ə      čəlélqɫ̌]
- b.      IP  
           └── SC  
               ├── (ʔəw̌)...?aɫ̌  
               └── SC t  
                   ├── DP e  
                   │   └── *pro<sub>F</sub>*  
                   └── AgrP <et>  
                       ├── Agr <et,et>  
                       │   └── nɪľ  
                       └── CP <et>  
                           ├── (kʷsə) sčəwécən kʷsə čə?áw̌ən  
                           └── ?ə kʷsi?ə čəlélqɫ̌.

The question is how the “same” reading emerges. (ʔəw̌)...?aɫ̌ can be treated as a scalar exclusive focus particle meaning something like “just”. Scalar exclusive particles presuppose that the background sentence holds for the element which is focused, while asserting that it does not hold for any alternative ranked higher than the focused constituent (Horn 2000).

<sup>19</sup> This covert cleft clause could also be a covert noun, as Wiltschko has proposed in (33).

- (39) John just talked to *his sister<sub>F</sub>* (at the party).  
 a. **Assertion:** John talked to noone ranked higher than his sister  
 $= \neg \exists x [\text{his.sister} < x \wedge \text{talked.to}(j, x)]$   
 b. **Presupposition:** John talked to his sister  
 $= \text{talked.to}(j, \text{his.sister})$

Although (*ʔəw*)..*ʔal'* is phonologically encliticized onto the predicate *nɪ*, I will assume that it is a clause level adverbial which associates with a focus feature on the cleftee – the covert *pro* here.<sup>20</sup> The sentence in (37c) then has the meaning below. In this example, *pro* is translated as the variable  $x_1$ .

- (40) [[*ʔal'* [*pro<sub>F</sub>*] [*nɪ* [*səwéčən kʷsə čəʔáwən ʔə kʷsiʔə čələqɪ*]]]]  
 a. **Assertion:** No superpart of  $x_1$  is a subpart of the maximal individual which is a chair that I sat on yesterday =  
 $\neg \exists x [x_1 < x \wedge x \leq y \wedge y = \text{iz.chair.that.I.sat.on.yesterday}(z)]$   
 b. **Presupposition:**  $x_1$  is a subpart of the maximal individual which is a chair that I sat on yesterday =  
 $x_1 \leq y \wedge y = \text{iz.chair.that.I.sat.on.yesterday}(z)$

The alternatives that are excluded are subparts of the maximal individual *iz.chair.that.I.sat.on.yesterday(z)* which are not themselves some subpart of the individual which  $x_1$  refers to. The most colloquial paraphrase might be “This is exactly the chair that I sat on yesterday.”<sup>21</sup>

Let’s discuss a concrete scenario to see how it works. Imagine that there are two chairs in the domain, the blue chair (b) and the red chair (r). Let’s say that the reference of *pro* is the blue chair ( $g(x_1) = b$ ). There are three possibilities for what the maximal chair that I sat on yesterday could refer to. These are listed in (41).

- (41) (i) the blue chair:  $b = \text{iz.chair.that.I.sat.on.yesterday}(z)$

<sup>20</sup> It is perhaps controversial to say that a focus feature can be put on a null pronoun. For instance, this creates obvious problems in languages like English, where the focus feature has a prosodic reflex in emphatic stress. How is something which is not pronounced stressed? This is a legitimate question. My analysis has a precedent in Rullmann (2002) who argues that in English certain sentences must be treated as if there is a focus feature on the subject trace in VP. Furthermore, there is language internal evidence that covert *pro* can be clefted. In the only-cleft example in (i) below, the cleftee is null, yet judging by the English translation the subject is clearly focussed.

- (i) *ʔəw*    *hay*    *ʔal'*    [<sub>CP</sub> *ʔs-ət kʷsə č'éwɪ?*]  
 Ink    only    just    break-tr det    plate  
 ‘He’s the only one that broke a plate.’

<sup>21</sup> It is hard to appreciate the semantic import of this formula from an English perspective. The subpart relation makes *nɪ* inherently scalar in a way that English *be* is not. Since the subpart relation  $\leq$  has a lower-bounding “at least” semantics to it, excluding all higher alternatives gives you an “exactly” reading (i.e. no less and no more).

(ii) the blue chair and the red chair:

$$b \oplus r = \lambda z. \text{chair.that.I.sat.on.yesterday}(z)$$

(iii) the red chair:  $r = \lambda z. \text{chair.that.I.sat.on.yesterday}(z)$

We want the semantics to ensure the sentence is true only in situation (i). This is indeed the case. *ʔaʔ* excludes all superparts of the focus it is associated with. Since it is associated with *pro*, which refers to the blue chair, it excludes all superparts of the blue chair. With the limited domain we are considering, this means it excludes  $b \oplus r$ . Therefore, the sentence cannot be true in situation (ii). And what about situation (iii)? Well, since the individual  $b \oplus r$  is excluded, but  $b$  is not, it must be the case that  $r$  is excluded as well. Therefore, the sentence cannot be true in situation (iii) either.

I believe this analysis is sufficient to render the “same” reading, at least in this example. Further research is necessary to see whether this construction has more subtle properties not captured here.<sup>22</sup>

## 7 Kinks in the analysis

In this section I will briefly mention some problems with my preliminary semantics of *niʔ* which will have to be dealt with in future research. In 7.1 I discuss a missing existential presupposition. In 7.2 I discuss a problem with the proposed argument structure.

### 7.1 Where’s the existential presupposition?

The semantics I proposed for *niʔ* involves the  $\iota$ -operator, which is also used to capture the definite article *the* in English. It is well-known that *the* has an existential presupposition. For example, (42) below is normally reported to be infelicitous. It involves a presupposition failure, since *the* seems to presuppose the existence of a king of France. Since there is no king of France, not all the presuppositions of the sentence are satisfied and the sentence can not strictly be judged true or false.

(42) The king of France is bald.

The existential presupposition is built into the semantics of the  $\iota$ -operator. If there is no maximal individual which it can map a set to which, the result is undefined (See footnote 12). Since the  $\iota$ -operator is used in my semantics of *niʔ*, this predicts there should be an existential presupposition.

English clefts are generally assumed to have some existence effect that one may want to analyze as a presupposition. This has lead some researchers,

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<sup>22</sup> One questionable aspect of the analysis is whether we really want to say that the sentence presupposes that the blue chair is a subpart of the chair I sat on yesterday. It seems like this is asserted. This problem can perhaps be averted if we say that *ʔaʔ* does not in fact carry such a presupposition. In the literature on exclusive particles, this presupposition is very controversial. See Horn (1996) for an overview of the debate.

like Percus (1997) and Hedberg (2000) to argue that English clefts involve a concealed definite description. In Shank (2002), I reported finding an existential presupposition in Straits *niŋ* clefts, and so there I argued for the presence of a concealed definite description. However, subsequent fieldwork, reported in Davis, et al. (2003a) has shown that if any existential effect is present it is in fact very weak – impressionistically much weaker than even the exhaustivity implicature.

For example, at the beginning of a story, before any of the characters of the story have yet been introduced, there can be no presupposition that any of them should exist. Nonetheless, the use of *niŋ* is perfectly acceptable in the opening line of a story.

- (43)     $\text{nə}^{\text{c}}\text{éx}^{\text{w}}$     $\text{ʔi}^{\text{ʔ}}$          $\text{niŋ}$          $\text{k}^{\text{w}}\text{sə}$      $\text{ləplit}$      $\text{k}^{\text{w}}\text{sə}$      $\text{ʔəné}^{\text{ʔ}}$      $\text{ʔə}$   
          once    prt        3s.pred   det        priest    det        come    obl  
           $\text{tə}$          $\text{méləxəl}$ .  
          det    Malahat  
          ‘Once it was a priest that came to Malahat.’<sup>23</sup>

Since I rely on the  $\iota$ -operator, this is predicted to be bad. The  $\iota$ -operator is undefined when there is no maximal entity that it can map a predicate to.

I have no explanation of this fact yet. One possibility is to redesign the semantics so that existence is asserted. This could be done if, rather than the  $\iota$ -operator, Russell’s original semantics for *the* were used.

- (44)     $[[niŋ]] = \lambda P.\lambda x. x \leq y \ \& \ \exists z[\forall z'[P(z') \leftrightarrow z' = z] \ \& \ z = y]$ <sup>24</sup>

I think more work needs to be done before this can be adopted, so I will leave the question open.

Examples like (43) also raise the question of how *niŋ* could be a pronominal. If no discourse referents have yet been introduced, then what is the free variable  $y$  going to refer to? I do not have a good explanation of this, but I will offer a possible path to analysis. Very often, *niŋ* is translated demonstratively as “this” or “that” and sometimes consultant’s will comment that its use is “like pointing”. (See for example the consultant comments accompanying (18b)). It is not the case that demonstratives always need to presuppose the existence of a discourse referent before they can be used. A demonstrative can deictically point out the referent. So in English, if the speaker is flipping through a catalogue, he can utter “This is a nice lamp” at the very moment he shows the picture to the hearer. This is a deictic act.

<sup>23</sup> Note the oddness of the English gloss here, which shows that the cleft in English and Straits cannot have exactly the same meaning.

<sup>24</sup> This would be the result if rather than using the type-shifter *iota*, the type-shifters *BE* and *THE* discussed by Partee (1987) were used. *THE* shifts an  $\langle et \rangle$  expression  $P$  to its generalized quantifier version of the definite article following Russell’s semantics. *THE* is  $\lambda P\lambda Q[\exists x[\forall y[P(y) \leftrightarrow y = x] \ \& \ Q(x)]]$ . *BE* shifts a generalized quantifier into a predicate. *BE* is  $\lambda \phi \lambda x[\phi(\lambda y[y = x])]$ . Applying both to a predicate  $BE(TH(P))$  shifts  $P$  to a generalized quantifier and then back to a predicate, but with a different denotation than it had originally. This predicate could then take the free variable  $y$  as an argument.

In English, the ability of demonstratives to be used with no prior introduction of a linguistic discourse referent seems to have an extension in the use of *this* as a sort of specific indefinite. A speaker may start a story with the following sentence, where *this* means something like “a certain”.<sup>25</sup>

- (45) Once this priest came to Malahat.

It is possible that *nɪ* in (43) is being used in a similar way. Again, this needs to be investigated further.

## 7.2 “Identical”

A second challenge is that *nɪ* can take reciprocal marking to get an “identical” reading. This is a little puzzling because the inner argument of *nɪ* is a predicate of type  $\langle et \rangle$ . This is not the normal argumental type which is expected to affect valency marking. So, in some sense *nɪ* is “intransitive” if one were simply to consider how many entity-denoting arguments it takes. This means that one would not expect it to take reciprocal marking which detransitivizes a transitive. Some relevant data are given below.

- (46) a.      ʔəw      nɪ-təlʔ      ʔalʔ      tiʔə      sqələxəʔ.  
                  lnk      3s.pred-recip      just      dem      dog[pl]  
                  ‘These dogs are identical.’      *Saanich*
- b.      nɪ-nókʷəl      \*(kʷsə)<sup>26</sup>      sčəwécən      kʷsə  
                  3s.pred-recip      det      chair      comp  
                  čəʔáw-ən      ʔə      kʷsiʔə      čələqɪ.  
                  use[cnt]-1s.sub      obl      dem      yesterday  
                  ‘This chair is identical to the one I sat on yesterday.’

One possible explanation is that *nɪ* is first transitivized before the reciprocal is added. Although Montler (1986) and Galloway (1990) analyze the control reciprocal *-təl* and the non-control reciprocal *-nəkʷəl* as simplex forms, one could argue that they are decomposable into the transitivizers *-t* and *-nə(xʷ)* respectively, which are then followed by the reciprocal *-(w)əl*.<sup>27</sup> If these forms were first transitivized, with the consequence of adding an additional entity denoting argument position, then it is less surprising that a reciprocal marker could be added. In that case, these forms are not quite as problematic, because a transitivized *nɪ* presumably would take two DP arguments. The inner  $\langle et \rangle$  argument is arguably covert here.

<sup>25</sup> This use of *this* was originally pointed out to me by Henry Davis.

<sup>26</sup> The determiner on *sčəwécən* in (46b) is obligatory – it is not an optional complementizer. This indicates that *sčəwécən* is embedded in a DP.

<sup>27</sup> The underlying /w/ surfaces as /kʷ/ if not glottalized. Montler (1986) cites Kinkade and Mattina (1981) who reconstruct the proto-Salish reciprocal as *\*-wəl-x*. Montler acknowledges that historically these forms are complex, but feels the synchronic evidence does not definitively point to or away from such decomposition in the modern grammar.

## 8 Conclusion

My goal in this paper has been to develop a semantic analysis of *nił* which captures both its apparent pronominal nature and also the way in which it resembles an identificational copula. Most of my data has been drawn from its use in clefts. The proposed truth conditions require the entity denoted by the subject to be a subpart of a possibly plural individual which is itself identified with the iota type shifted denotation of the inner argument. This item can be considered a pronoun because the possibly plural individual remains a free variable which ranges over entities of type *e*.

Although much of the discussion has been fairly speculative, this analysis offers a new and hopefully interesting perspective on what a pronominal predicate is, and why clefts in Straits mean what they mean.

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