Possessor-Licensing in Passamaquoddy

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1. Introduction

In this paper I seek to explain a small set of facts from Passamaquoddy—spoken in Washington County, Maine—which has consequences for the analysis of Algonquian languages in general, as well as for the treatment of first and second person inflectional forms cross-linguistically. Specifically, I focus on transitive constructions in which one argument is a possessed NP, and where the reference of the possessor affects (or is affected by) the valency of the verb. In a sentence with a possessed object, for example, a regular transitive verb form is used, provided the possessor is co-referential with the subject.¹

\[1\]

Object possessor refers to subject:

- a. n-kopha (nil) n-temis
  1-shut.in(3) [1] 1-dog
  ‘I shut my dog in.’ (DS:127-61) [TA]

- b. p'ecipton (nekom) t'atomopilom
  bring (3) [3] car
  ‘He brought his own car.’ (DS:128-62) [TI]

On the other hand, if the possessor refers to an NP other than the subject, a form normally associated with double-object verbs is used, suggesting that a rule of possessor ascension has applied.² Double-object forms are not used under conditions of co-reference, however, nor are regular ones when the object possessor is disjoint from the subject (2c–d):

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¹Following Leavitt (1985), I represent reduced vowels as [o]. The initials DS (followed by the number) refer to David Sherwood’s (1986) grammar and numbering (page and inset), from which most of the data are taken.

²Possessor ascension, a term borrowed from Relational Grammar, refers to a process whereby the possessor of an object NP assumes the role of direct object, while the possessed noun is demoted (becomes a “chômeur” in the parlance of RG).
(2) Object possessors disjoint from subject NP:

a. n-tekhotowan nowel t’opskwons
   1-hang.up(3/3’) Nowel coat
   ‘I hung up Nowel’s coat.’ (DS:127-58) [TA+O]

b. monohmowan canol t’atomopilom
   buy(3/3’) John car
   ‘He bought John’s car.’ (DS:127-60) [TA+O]

c. *monowal canol t’atomopilom
   ‘He bought John’s car’ (DS:128-63) [TA]

d. *monohmen canol t’atomopilom
   ‘He bought John’s car’ (DS:128-64) [TI]

The pattern as described goes beyond the class of verbs normally associated with implicit arguments such as benefactives: David Francis (personal communication) reports that any normally TA or TI verb can accommodate a third argument, as the following example indicates:

(3) Non-benefactives (structure added):

a. Husa ‘toktekgal [pro ’temisoh]
   Husa kick(3’) 3-dog
   ‘Husa kicked his dog.’ [Tri]
   (cannot mean someone else’s dog)

b. Husa ‘toktekomuwanal [pro ’temisoh]
   Husa kick(3) 3-dog
   ‘Husa kicked his dog.’ [TA+O]
   (does not mean his own dog)

The person features of the subject do not make a difference either, as in some Algonquian languages where a similar effect occurs with third, but not with first or second person subjects. Finally, similar sentences in other Algonquian languages (e.g., Ojibwa) do not induce the same effect, so this phenomenon is confined to Passamaquoddy.

A slightly different paradigm emerges when the possessor is a first or second person. As expected, a possessive pronoun can appear under coreference with a subject without affecting the valency of the verb, and when the pronoun is disjoint, a double-object verb form will be used. Surprisingly, however, no double-object form is needed if the possessor is what appears to be an empty pronoun. This is not the case with disjoint third person pronouns, which require double-object forms regardless of their lexicality. Compare the grammatical interpretation of (4a) — with a disjoint empty pronoun and a TI verb — with the one in (3b), where the possessive pronoun requires the use of TA+O verb form:
(4) 1st and 2nd person pronouns:
   a. k-alak [pro/*nil n-takomok]
      2-hide(3p) my 1-snowshoes
      "You hid my snowshoes." (DS: 65-6) [TI]
   b. k-atowinok [nil n-takomok]
      2-hide(1/3p) my 1-snowshoes
      "You hid my snowshoes." (DS: 59) [TA+O]

The exceptional behaviour of first and second person possessors will be seen to follow from their status as clitic-pronouns that adjoin to INFL, rather than as empty pronouns in the specifier position of DP. First, however, I adopt a view of underlying structure in Algonquian that brings it into line with standard theory. This will enable us to address the phenomena surrounding possessor licensing as well.

2. Theoretical Assumptions

I begin by assuming that Algonquian has a configurational structure rather than a flat one, and that its characteristic non-configurational properties (free word-order, unmarked absence of lexical pronouns, etc.) derive from one parameter that sets it off from languages like French or English. This is the so-called Polysynthesis Parameter of Baker (1993), in which agreement morphemes — rather than NP arguments — are marked for abstract Case. This in turn entails that NPs in canonical argument positions (specifier of IP, sister to the verb) take the form of empty pronouns, i.e., pro. When they do appear, lexical NPs are appositional, as many researchers of Amerindian languages have observed. Following Baker’s (1991) analysis of Mohawk, these will be adjoined to IP at D-structure. In order to receive or share a theta-role, lexical NPs and instances of pro must be licensed by agreement, formally expressed through co-indexation. An agreement morpheme must be available for every argument, lexical or otherwise.

2.1. Proximates and specifiers

As is well known, NP arguments in Algonquian languages divide into proximates and obviatives, and Passamaquoddy is no exception. While discourse factors often intervene, the generalization is that every sentence contains one and only one proximate NP — unless a possessive construction is involved. With very few exceptions, possessors are also proximate, whereas the nouns that they possess are obviative.
In standard GB theory, the canonical position of a possessor is the specifier of a determiner phrase (DP). Consequently, the notion “proximate” may be assimilated to this position, and by analogy to the clausal subject too, the Spec of IP. X-bar theory admits of only one specifier per maximal projection, thereby matching the distribution of proximate NPs in Algonquian sentences (pace discourse intervention). Proximates may thus be defined as pronominal elements in the Spec of IP/DP, or else as lexical NPs co-indexed with them. Recall that it is necessary in Baker’s theory that lexical NPs do not occupy argument positions, Case having been assigned directly to agreement.

In their analysis of Potawatomi, Halle and Marantz (1993) propose a system in which first and second person prefixes are inherently proximate, distinguished by the feature [-obv]. Third person prefixes can be [-obv] or simply left unmarked, as in intransitive sentences. Third person NPs, on the other hand, may be [-obv], [+obv] or unmarked, depending on their sensitivity to other NPs in the sentence and/or discourse. Only arguments (or members of their chains) marked for the feature [+obv] bear special morphology. Halle and Marantz also claim that prefixes are pronoun-clitics that originate in subject position, which in our system would translate as the Spec of IP/DP. I accept this position insofar as first and second persons are concerned, but will propose that third person prefixes in Passamaquoddy have the status of agreement heads — at least in DPs — rather than of clitic-pronouns. The following structures express my assumptions about these two categories:

(5) D-structure of Algonquian clauses and complex nominals:

3 Specifiers are immediately dominated by a maximal projection (XP) and sister to X-bar. Although we assume the DP Hypothesis, arguments are often referred to as NPs for convenience.
To summarize, lexical NPs are adjoined to IP or DP, whereas non-lexical ones (i.e., *pro*) function as specifiers or complements in canonical argument positions. Specifiers correspond to the notion of proximity in Algonquian, complements obviation. Discourse factors may obscure this, however, e.g., when a proximate is marked as obviative. The choice of which NP is proximate in a transitive construction is determined by the theme-sign (direct or inverse).

2.2. Licensing

In this section, we outline our assumptions concerning the formal relationship between NPs in Algonquian and the agreement morphemes that license them. The following conventions serve as the basis for discussion (adapted from Huang 1984):

(6) The Licensing Conventions:

1. Convention A: co-index a lexical NP with an available pronoun in an argument position
2. Convention B: co-index an empty pronoun with the closest available element, NP or agreement

Convention A pertains to those NPs that cannot appear in argument positions because of Case—i.e., NPs adjoined to IP or DP. Co-indexation implies a feature-sharing, so that e.g., obviative NP-adjuncts could not be co-indexed with empty pronouns in specifier position (proximates) and conversely. Convention B, on the other hand, is an adaptation of Huang's Generalized Control Theory concerning the distribution of all null pronouns, PRO as well as *pro*. Here the term "available" captures the intuition that a pronoun cannot be licensed by an agreement morpheme that bears the index of another argument: in effect, this would violate the Binding Theory (Principle B). The precise meaning of "closest" is not relevant to the present discussion.

Consider next how the Licensing Conventions affect NPs in Passamaquoddy. First, let us suppose that DPs are "defective" in that the agreement morpheme contained within them is unable to license the empty pronominal in the specifier position (5). This is not the case with IP, since subjects (proximates) surface without special morphology or constraints on reference. Possessors, on the other hand, may be forced to rely on agreement or the subject in the containing clause in order to be licensed. If the possessor refers to someone other than the subject, an agreement morpheme must be added, as in (2b). If the possessor refers to the same person as the pronominal in subject position, that NP can license it without inducing a violation of the Binding Theory (recall lexical NPs are peripheral in the licensing process). This accounts for (1a–b).
The Licensing Conventions hold of all NPs, regardless of their lexicality. This accounts for the sentences in (1–2) where the object NP contains an overt possessor, as well as those in (3) where the possessor is taken to be pro. If null possessors did not require licensing, disjoint reference would be possible with monotransitive verbs. Still, (3a) is precluded by this analysis. What then of (4a), in which a covert first person possessor is disjoint from the subject of a monotransitive verb? This will be taken up in the following section.

3. Local Clitic-Pronouns

Halle and Marantz (1993) maintain that personal prefixes in Potawatomi (and by extension, other Algonquian languages) are clitic-pronouns, rather than agreement heads. They are pronoun-like in that lexical material can intervene between them and inflected verbs — an improbable event if they originated under INFL. Departing slightly, I propose that only local prefixes are clitic-pronouns, but that non-local ones are completely different — they represent agreement instead. This division of personal prefixes is partially motivated by the fact that local forms correspond phonologically to full pronouns, whereas non-local forms do not: n/nil, k/kil, but w/nekom. I return to non-local prefixes below.

3.1. Distributional evidence

First and second person prefixes are clitic-like in that they cannot stand alone, but must adjoin to something else. Halle and Marantz take this to be COMP, but here we will assume that it is INFL (cf. Section 4.1). A characteristic property of clitics is their ability to function both as maximal projections (XPs) and as heads. Local forms originate in specifier position (reserved for phrasal categories), and they amalgamate with the verb in INFL. The latter is a head position, implying that prefixes are also head-like. More importantly, if local clitic-pronouns are heads, they would not be subject to the Licensing Conventions. This assumes that adjunction of the clitic-pronouns to INFL occurs prior to the point at which the Licensing Conventions hold (S-structure).

Consider the case in which a first person clitic-pronoun is disjoint from the subject, with no extra morpheme added to the verbal complex (4a).

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4 Similar facts from Passamaquoddy are reported in Leavitt (1985).
5 In some Algonquian languages, each of the personal prefixes may correspond phonologically to a full pronoun, e.g., Potawatomi w/-win (cf. Hockett 1966).
6 According to Chomsky (1986), adjunction can only involve categories of the same level — that is, heads adjoin to heads (XPs to XPs), but not heads to XPs and conversely.
Because it is a head, licensing applies vacuously. Moreover, the presence (or trace) of the clitic-pronoun in specifier position precludes a full pronoun from appearing there. The latter must therefore be adjoined to DP and licensed accordingly (recall that agreement under DP is defective, and cannot license a pronominal in the specifier position). If the possessor is co-referential with the subject, it may be licensed through co-indexation (1a); if it is disjoint, an extra agreement morpheme must be added (4b).

As noted earlier, the referential possibilities of third person pronouns makes no difference with regard to lexicality. This can be explained by assuming that third person prefixes differ from their local counterparts in appearing in head, rather than specifier position. The latter will then be free to host an empty pronoun, which may in turn support an overt NP. If the possessor and the subject are disjoint, only an extra agreement morpheme in the verbal complex will ensure well-formedness. The possessor (pro) may support a lexical pronoun as in (2b), or stand alone, as in (3b).

The placement of local clitic-pronouns in the Spec. of DP means that corresponding lexical possessors (i.e., independent pronouns) must be adjoined — most probably to the possessed DP itself, but perhaps also to some other category. The same is also true of third persons, since lexical NPs are precluded from appearing in argument positions due to lack of Case. This leads us to predict that possessors can be separated from the nouns that they possess, so long as they are licensed. While results are often mixed, this prediction is borne out in the Passamaquoddy and Ojibwa examples below:

(7) Displaced possessors (Passamaquoddy and Ojibwa):

a. noel n-tekhotevan tepskwens
   n-tekhotevan tepskwens noel
   both: 'I hung up Nowel's coat.'
   [Passamaquoddy]
   (Anna Harnois, personal communication)

b. Peter ni-gi-wa-bamina-an o-gosis-an
   Peter 1-past-see-obv 3-son-obv
   'I saw Peter's son.' (Grafstein 1984: 139)
   [Ojibwa]

The acceptability of (7a–b) allows us to maintain the hypothesis that possessors are adjoined to DP, rather than restricted to the Spec of DP position (empty pronouns only).

3.2. Phonological evidence

The proposal is that first and second person prefixes are clitic-pronouns, syntactically discrete and quite unlike third person prefixes. That local forms are proximate seems obvious, and their association with a specifier
position accounts for their position with respect to the verb. Third person prefixes, on the other hand, are analyzed as features of inflection. There is some evidence for this apart from the behaviour of possessive pronouns. For example, several phonological processes affect word-initial third person forms, but relatively few affect local ones. The following examples are from Sherwood (1986):

(8) Phonological changes to third person forms:

1. \( w \rightarrow \emptyset / \# -; \) cf. \( \text{oichton} \) (‘He makes it from that.’), vs. \( \text{noichton} \) (‘I make it from that.’)
2. \( w \rightarrow \emptyset / \# -\text{C}_{[+\text{son}]}; \) cf. \( \text{nemeyal} \) (‘He sees him (obv.)’), from \( w+n\text{em}+\text{ey}+a+l \)
3. \( \text{wk} \rightarrow \text{kw} / \# -\text{V}; \) cf. \( \text{kwiseyal} \) (‘He made him (obv.)’), from \( w+k\text{is}+\text{ey}+a+l \)
4. \( w\text{C}_x(\text{obs}) \rightarrow \text{C’x} / \# -; \) cf. \( \text{t’eme} \) (‘He smokes.’), from \( w+\text{tem}+\text{e} \)

Examples (8a–b) show how the prefix \( w- \) is deleted before homorganic vowels and other sonorants. While this may seem like an accident of the form itself (i.e., that \( w- \) is somehow prone to undergo assimilation), one cannot help but notice how Algonquian grammar consistently treats third persons differently than local ones (such as with the choice of directionals in transitive sentences involving both). In light of these syntactic facts, the phonological behaviour of \( w- \) is not entirely coincidental. Examples (8c–d) show how \( w- \) interacts with obstruants in word-initial position. Again the point is not that \( w- \) is “weak” (it is), but that \( n- \) and \( k- \) do not undergo the same phonological processes. Plausibly, this could be attributed to a word boundary separating \( n- \) and \( k- \) from the stem which is absent when the subject is third person. I then predict that if such a boundary were not there, \( n- \) and \( k- \) would undergo the same types of changes. In this respect, consider the following rules also listed by Sherwood (subscript numerals refer to affix position in the verbal complex):

(9) (Non-) changes to 1st and 2nd person prefixes:

1. \( n\text{C}_x(\text{obs}) \rightarrow \text{C’x} / \# -; \) but /+/ does not intervene between /n/ and /C/ 
2. \( \emptyset \rightarrow \text{n} / \text{X}_{\text{II stem}} + -+ 3\text{h} \)
3. \( -\text{N}_{\{\text{stem, theme}\}} \rightarrow \emptyset / -+4\text{k} \)
4. \( \{w, n\} \rightarrow \emptyset / \# -\text{CC}, \) but no examples cited where \( n=\text{first person} \)

Example (9a) is the exact counterpart of (8d), with the stipulation added that a morpheme boundary must not intervene (in my system it would be a word boundary). Thus, it could not be the relative weakness of \( w- \) to \( n- \) that
causes it to undergo the rule (8d). Examples (9b–c) show how segments that are phonologically equivalent to $n$- delete under special circumstances in the verbal complex. Crucially, however, there is no word boundary that triggers the change: INFL is the dominating node. Example (9d) represents a case where first and third person prefixes are potentially treated the same—a problem for any analysis that assigns them different status. Still the author does not cite an example in which the first person prefix $n$- undergoes deletion: a conjunct form is used instead.

Summarizing, I have proposed that first and second person prefixes in Passamaquoddy are clitic-pronouns, whereas third persons represent agreement. The former originate in Spec of IP and DP, the canonical position of proximates. The latter are base-generated under INFL (and DET), such that the specifier positions are filled with empty (XP) pronouns. The prefix-like appearance of the local forms is due to their syntactic weakness, which forces them to cliticize to INFL; consequently, they are exempted from the Licensing Conditions. The division of personal prefixes in this manner accounts for the syntactic facts surrounding them, but finds phonological justification as well: elements that originate in INFL are subject to several processes that exclude local forms. This turns out to be expected if the latter are inherently inflectional.

4. Consequences

The claim that certain prefixes in Algonquian represent structural (IP) subjects raises further questions about the syntax of this language family. One concerns the status of the conjunct order, a paradigm in which there are no personal prefixes at all. Are these sentences therefore subjectless? Here I argue that they are not. In addition, I consider the fact that possessors of intransitive subject NPs do not require special licensing mechanisms.

4.1. The conjunct order

Paradigms of verb agreement in Algonquian are divided into three orders, the independent, conjunct and imperative. Up to now, only verb forms in the independent order have been discussed, since only these are specified for personal prefixes; verb forms in the conjunct order, on the other hand, are distinguished by their absence:

(10) Conjunct forms:

1. ma te-hc k-wewinowihpa ksahayan
   NOT EMPH-FUT 2-recognize (IND, pl, 1) come.in (CON, 1)
   'You won't recognize me when I come in.' (DS:136)

Imperative forms will not be discussed, but remarks on the conjunct pertain to them as well.
2. kotama nil ntolohkew wesamolarek
   NOT [1] 1-work (IND, NEG, 1) very.hot (CON, 0)
   'I don’t work when its too hot out.' (DS:137)

Although the conjunct verb in (10a) has a first person subject, it would be ungrammatical to express it as a prefix.

The conjunct order is typically used in _wh_-questions, negatives, and other cases of subordination. Of most concern for our analysis, however, is the implication that sentences of this type are not specified for subjects, these being local prefixes and other proximates. Nevertheless, a close examination reveals that subjects are always present, registered by inflection and sometimes showing up on full NPs as well (see above). The question then is why prefixes do not surface.

One possibility is that conjunct forms receive their interpretation through variable-binding, or that some kind of operator (negative, adverbial) occupies a specifier position in underlying structure. If this were the Spec of IP, we would predict (correctly) the lack of first and second person prefixes in the conjunct order, since both operator and pronoun could not take up the same syntactic space. At the same time, however, third person prefixes would be expected to occur, since (in my analysis) they represent agreement instead of clitic-pronouns. This prediction is not borne out.

A more likely scenario is one in which the conjunct operator appears in the specifier position of CP, somewhat analogously to _wh_- and negative operators in English: e.g., *Never again will I pass down that road.* This at least provides an explanation for the unmarked order of constituents in _wh_-questions and other conjunct structures in Algonquian (cf. Cyr 1993). At the same time it affords us another way of evaluating the absence of personal prefixes in this environment. As in other operator-variable constructions, let us assume that INFL moves to COMP in order to anchor the operator in Spec of CP. For clitics then, we need only stipulate that they are left-adjoining, and that INFL is the only suitable host. Cliticization therefore takes place after movement of the inflected verb to COMP or not at all (resulting in a violation of its lexical specifications). In the conjunct order, the Spec of IP must be filled with empty first and second person pronouns instead of clitics.

If clitic-pronouns are lexically-specified for adjunction to INFL, third person agreement morphemes are already part of it, and with the verbal complex move to COMP (I-to-C). _Prima facie_, we might expect them to surface in the conjunct order, but this does not occur. Nevertheless, it often happens in the conjunct that the stem-initial vowel is altered phonologically, which I take to be a reflex of I-to-C movement: (10b) represents an example of the changed conjunct. In light of these forms then, the
absence of third person prefixes can be seen to follow from essentially the same event.\textsuperscript{8}

The proposal that local prefixes represent clitic-pronouns in Algonquian (non-local ones agreement) must be supplemented with further assumptions in order to accommodate the conjunct order. For local forms (which originate in Spec,IP) it is necessary to assume that INFL moves to COMP, and in so doing alters the syntactic environment on which their well-formedness depends. Still, the functions of the conjunct order are strongly reminiscent of operator-variable constructions in other languages where such movement is attested. Moreover, features governing insertion into particular syntactic environments are commonly attributed to clitics and agreement morphemes (cf. Halle and Marantz 1993). The absence of non-local forms is also seen to follow from I-to-C movement in the conjunct order.

4.2. Intransitives

The licensing-based account presented here addresses the distribution of possessors embedded in object NPs. A similar approach involving subjects fails to make the correct prediction, however: possessors of intransitive subjects in particular may apparently be licensed without the need for extra morphology.\textsuperscript{9}

\textbf{(11) Possessive constructions in intransitive sentences:}

\begin{itemize}
\item a. can t'ahsosowon cipinakwot
     John hat(3) be.ugly(3)
     `John's hat is ugly.' (DS:88) [II]
\item b. t'os t'awakwhoto
     daughter(3) cook.weli(3)
     `His daughters cook well.' (DS:89) [AI]
\end{itemize}

Moreover, there is no other argument present in (11a–b) with which a possessor could be co-indexed.

The behaviour of possessors with respect to licensing in Passamaquoddy is reminiscent of subject/object asymmetries found in other languages. Typically, theories of grammar invoke principles of Binding Theory to account for these asymmetries. GB theory, for example, allows subject —

\textsuperscript{8}Unchanged conjunct forms fail to register the movement of I-to-C, but this does not preclude the possibility that movement takes place at LF, rather than at S-structure. In either case, agreement would be incompatible with this operation.

\textsuperscript{9}What would otherwise be the possessed subject of a transitive verb tends to reverse directionality, making it an object.
POSSESSOR-LICENSEING

but not object—anaphors to be co-indexed with a c-commanding antecedent from outside the clause in certain situations:

(12) a. John expected [himself to arrive on time]

b. *Mary expected [John to meet herself at the station]

The understanding with regard to (12b) is that the subject John specifies a domain in which the object anaphor must be bound. While possessors in Passamaquoddy (or in any other Algonquian language) are not specifically anaphoric, they are necessarily associated with an empty pronoun in specifier position. According to Huang (1984), these in turn are subject to a separate process of identification which proceeds along the lines of Binding Theory. An empty object pronoun can only be identified by a subject, for example, which delimits its domain (this explains why even languages like Spanish and Italian only tolerate empty subject pronouns). If empty pronouns can also be identified by discourse antecedents—as in e.g., Chinese and Korean—it follows that identification of a possessor in an object NP would be blocked (by the subject), but not that of a possessor in a subject NP. We need only assume then that identification in Huang's sense is equivalent to licensing in ours.

5. Summary and Speculation

In this paper, I have argued that possessors in Passamaquoddy cannot be licensed by the features of the noun phrase, but depend instead on external factors—either an agreement morpheme or the subject of the containing clause. In the case of first and second persons, the possessor is a clitic-pronoun which avoids the Licensing Conventions in the independent order. Third person forms represent agreement, hence an empty pronoun occupies the specifier position of DP. Unlike clitics, this element (pro) is subject to licensing.

At this point we may speculate as to why NPs in this language fail to license their possessors. In other Algonquian languages, possessors of object NPs surface without extra agreement morphology or co-indexation with the subject (Grafstein 1984 gives examples from Ojibwa). What then is the difference between Passamaquoddy and these languages? Plausibly, it has to do with a weakening process. In English, for example, inflection was at one time rich enough to sanction empty subject pronouns and inversion of non-auxiliaries. Over time, this richness was eroded to the point where empty pronouns could not be identified and lexical ones were required. My appraisal is that essentially the same process has transpired within the Passamaquoddy noun phrase—i.e., the ability to identify an empty pronoun has eroded to the detriment of possessor-licensing. The difference
between English and Passamaquoddy is that in the latter, lexical NPs are entirely excluded from Case positions, so that external identification (or licensing, as I have called it) is required for every complex NP. Presumably, the changes ascribed to Passamaquoddy should be attested in other facets of the grammar. Their investigation awaits future research.

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