Inanimate nouns as subjects in Mi'gmaq: Consequences for agreement morphology[*]

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Abstract: In this paper, I present data from Mi'gmaq (Eastern Algonquian) on inanimate nouns as subjects to investigate agreement patterns. I provide evidence that Mi'gmaq differs from another Algonquian language, Blackfoot, in that Mi'gmaq does allow inanimate nouns in subject position of experiencer verbs and transitive verbs. For transitive verbs, Mi'gmaq data demonstrates that the object's animacy is important for the agreement morpheme in v however when the subject's animacy is varied, the shape of the verb does not change. This could be captured by positing an animacy probe in v which is sensitive to the animacy of the object but crucially no animacy probe in T, the spell out of which does not change when when the subject's animacy is varied. However, a complication arises for this analysis when data from intransitives is added. The animacy of the subjects of intransitive verbs *are* important for animacy agreement. I end with the suggestion, two caveats notwithstanding, that this agreement pattern seems to be evocative of an ergative-alignment of animacy agreement on Mi'gmaq verbs: animacy of third person objects (and not subjects) govern the shape of the verb in transitive verbs while the animacy of the third person subject governs agreement in intransitive verbs.

Keywords: Algonquian, Agree, animacy, morphosyntax, Mi'gmaq

1 Introduction

Algonquian languages split nouns into two grammatical classes: animate and inanimate. There is a semantic basis for this class: living entities are grammatically animate, however there is also a class of non-living entities that are grammatically animate. It has been reported for the Algonquian language Blackfoot that grammatically and semantically inanimate subjects of transitive verbs are not possible (Ritter and Rosen 2010). Furthermore, experiencer verbs in Blackfoot like 'to be happy' also do not allow inanimate subjects (Johansson 2008). As such, in Blackfoot the morphological consequences of inanimate subjects cannot be tested with these verbs. On the other hand, in Mi'gmaq, an Eastern Algonquian language, inanimate nouns *are* allowed in subject position of both transitive verbs and experiencer verbs, so agreement patterns of inanimate nouns can be observed. Thus, the aim of this paper is to investigate the morphological consequences of inanimate nouns in subject position in Mi'gmaq and explore a way to capture the agreement patterns.

This paper is structured as follows. I give background on Mi'gmaq and the relevant parts of the verb (section 2). In section 3, I show that unlike in Blackfoot, Mi'gmaq allows inanimate subjects as experiencers (of fictional contexts) and subjects of transitive verbs. Given these data, I

investigate how inanimate subjects affect agreement morphology in transitive verbs (section 4). I argue that animacy agreement is governed by the object of transitive verbs and the animacy of the subject does not affect agreement morphology of the verb. I explore an analysis using an Agree framework (Chomsky 2000, 2001), positing an animacy probe which is valued by the animacy features of the object in *v*. The spell out of T (the inner suffix) does *not* have an uninterpretable animacy feature because it is not sensitive to the subject's animacy. Ultimately I reject this analysis as I conclude in section 5 by presenting data from intransitive verbs that poses problems for the analysis in 4. Data from intransitive verbs suggests that on an abstract level animacy agreement is ergative-aligned. That is, some intransitive data, coupled with the new evidence from transitive verbal agreement, suggest that while the object is important for animacy agreement of transitive verbs, the subject's animacy is important for agreement morphology of intransitive verbs. I end by discussing implications of this suggestion.

2   Background on how animacy is marked in Mi'gmaq

Mi'gmaq (also spelled Mi'kmaq, Micmac, or Mi'kmaw) is a head-marking Eastern Algonquian spoken in Eastern Canada. The data in this paper is from the Listuguj dialect of Mi'gmaq from Listuguj, Quebec. Unless otherwise cited, all Mi'gmaq data is from my fieldwork and the online dictionary (Mi'gmaq Online Dictionary 2015). The next sections provide background on animacy and the relevant parts of the transitive verb for this paper (the final and inner suffix).

2.1   Animacy

Nouns are classified into two categories in Algonquian languages: animate and inanimate. For the most part, nouns that are living (including most trees, but excluding most plants) are classified as animate but some semantically inanimate nouns are grammatically animate (Dahlstrom 1995; Quinn 2001). There is a semantic basis for this noun grouping, i.e., people and animals are animate, but beyond this semantic basis, grammatical animacy of the noun is not predictable. Generally speaking, there are no nouns that are semantically animate but grammatically inanimate.[1]

Grammatical class is most clearly observed via plural morphology, as shown in the table below. I have bolded the plural morphemes. We can see that *-g* is used to mark animate nouns, whereas *-l* marks animate nouns. This table shows that grammatical animacy is important for agreement morphology, rather than semantic animacy.[2]

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[1]Goddard (2002:213) reports that animacy can play a *derivational* role in deriving collectives. For instance, in the Massachusetts language the collective noun *nuppometuonk* 'my descendants' and in the Fox/Meswkaki language the collective noun *owiye·he·hi* 'animals, small game' are both inanimate.

[2]Glosses: 1 = first person; 2 = second person; 3 = third person; AI = animate intransitive verb; AL = alienable; AN = animate; DEM = demonstrative; GA = grammatically animate; II = inanimate intransitive verb; INAN = inanimate; INST = instrumental; INV = inverse; LOC = locative; LV = linking vowel; PART = particle; PL = plural; PRON = pronominal clitic; PRFV = perfective aspect; SA = semantically animate; TH = theme sign; VAI = transitive animate verb (object is animate); VTI = transitive inanimate verb (object is inanimate)

Table 1: Animate and inanimate plural morphology

Animate		Inanimate	
*ji'nm – ji'nm-u-**g***	'man' – 'men'	*wasueg – wasueg-**l***	'flower' – 'flowers'
*lpa'tuj – lpa'tuj-**g***	'boy' – 'boys'	*suitis – suitis-**l***	'candy' – 'candies'
*pu'tai – pu'tai-**g***	'bottle' – 'bottles'	*mutputi – mutputi-**l***	'chair' – 'chairs'

Next, I detail the relevant parts of the verb for this paper.

2.2 Finals

Animacy has consequences for verbal morphology. In intransitive verbs the verb agrees with the subject's animacy. In transitive verbs, the object's animacy is marked on the verb. This classification of transitive verbs based on the animacy of the object began as early as Bloomfield 1927 for Fox. The verb's *final* is sensitive to the animacy features of the object. The final is transitive animate (TA) if the object is animate and transitive inanimate (TI) if the object is inanimate (Bloomfield 1946). The following examples show that with animate objects, the verb takes the transitive animate final and with inanimate objects, the verb has the transitive inanimate final. Any mismatch of final is marked as ungrammatical as shown in (1b) and (2b).

(1) **Animate object**

    a. Wissugw-⟨al⟩-oq tap'tan.
        cook-⟨TA⟩-2.PL   potato.AN
        'You all cook the potato.'

    b. *Wissugw-⟨atm⟩-oq tap'tan.
         cook-⟨TI⟩-2.PL   potato.AN
         Intended: 'You all cook the potato.'

(2) **Inanimate object**

    a. Wissugw-⟨atm⟩-oq wa'w.
        love-⟨TI⟩-2.PL   egg.IN
        'You all cook the egg.'

    b. *Wissugw-⟨al⟩-oq wa'w.
         cook-⟨TA⟩-2.PL   egg.IN
         Intended: 'You all cook the egg.'

Examples of TA finals are *al, a'l, a, i* and ∅ and TI finals are *at+m, a'tu, (i)tu* and ∅ (Fidelholtz 1968; Hamilton 2015; McCulloch 2013).[3] In both of these lists is a null final marker (∅). For verbs with a null final and an animate object, the only distinguishing marker is the presence or absence of the direct theme sign *-a-*. This is exemplified in (3a). The direct theme sign is sensitive to person hierarchies. For the purposes of this paper, the direct theme sign signals that the more salient, or topical, individual is acting on the less salient, or less topical, individual. Example (3b) shows when a final does not appear with an inanimate object. In cases when the final does not appear, I do not separate out the verb stem and final.

(3) **Examples from Mi'gmaq Online Dictionary (2015)**

    a. *Transitive animate with no final*
        Tems-⟨∅⟩-a-**t**-l.
        cut-⟨TA⟩-DIR-**3**-OBV
        'He cuts it (animate).'

    b. *Transitive inanimate with no final*
        Tems'-⟨∅⟩-**g**.
        cut-⟨TI⟩-**3.SUBJ**
        'He cuts it (inanimate).'

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[3]The selection of these finals seems to be idiosyncratic. However, McCulloch (2013:17) notes that verbs with body-part medial affixes tend to select the *-a* final.

Example (4) shows that the TI final is preserved when followed by a first person plural exclusive verb form (-*eg*).

(4) **Transitive inanimate with allomorph -*m* (Mi'gmaq Online Dictionary 2015)**
  tems'- m -**eg**
  cut- TI -**1.EXCL**
  'We cut it (inanimate).'

2.3 Inner suffix

The other relevant morpheme is the inner suffix,[4] which follows the verb final, or theme sign (if the verb takes an animate object). The inner suffix indexes person features of the subject or object (subject to person hierarchies). For third person singular subjects with third person animate objects the third person marker is -*t*, as in example (5a) and (6a). For verbs with third person singular subjects and inanimate objects, the marker is -*g* (in (5b) or -*oq* in (6b)). The selection of -*g* or -*q* is dependent on the TI final.

(5) a. Ges-al-a-**t**-l.
     love-TA-DIR-**3**-OBV
     'He loves him/her/it (animate).'

   b. Ges-at-**g**.
     love-TI-**3**
     'He loves it (inanimate).'

(6) a. Nem-i-a-**t**-l.
     see-TA-DIR-**3**-OBV
     'He sees it (animate).'

   b. Nem-ito-**q**.
     see-TI-**3**
     'He sees it (inanimate).'

When the subject is plural, the inner suffix is '*tit* (palatalized to '*tij* word finally).

(7) a. Ges-atm-**i'tij**.
     love-TI-**3.PL**
     'They love it.'

   b. Ges-al-**i'tit**-l.
     love-TA-**3.PL**-OBV
     'They love him.'

2.3.1 Summary

The tables below summarize the relevant parts of a TA verb where the object is animate (Table 2) and a TI verb, where the subject is inanimate (Table 3).

Table 2: Template of a TA verb

'He loves it.AN'					
root	final	theme sign	**inner suffix**	T	outer suffix
ges-	-al	-a	**-t**	-∅	-l
love	**TA**	DIR	3	PRES	OBV

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[4]This slot corresponds to what Bloomfield 1962 calls slot 5.

'He loves it.IN'				
root	final	theme sign	**inner suffix**	T
ges-	-at	—	**-g**	-∅
love	**TI**	—	**3**	PRES

In this section, I have shown that nouns in Algonquian languages are categorized into two classes: animate and inanimate. These classes have a general semantic basis (all living entities are animate), but the semantic basis stops there (for instance, shirts, potatoes, and knives are animate whereas dresses, turnips and saws are inanimate). Thus, animacy in Algonquian languages is a grammatical feature, which has consequences for verbal agreement morphology. The parts of the verb relevant to this study are the final, which marks grammatical animacy of the object, and the inner suffix.

3 The status of inanimate subjects in Mi'gmaq

In this section, I provide evidence from Mi'gmaq that inanimate subjects of transitive verbs and inanimate experiencers are possible in Mi'gmaq. The basis for the studies and fieldwork I conducted comes from data and studies on Blackfoot, a Plains Algonquian language. I first detail the data on Blackfoot demonstrating that inanimate subjects are not possible as subjects of transitive verbs or experiencer verbs. Then I present new evidence from Mi'gmaq that inanimate nouns can be subjects of transitive verbs and experiencer verbs.

3.1 Transitive verbs

In this section, I provide evidence that Blackfoot, another Algonquian language, disallows all semantically inanimate subjects (including the class of semantically inanimate but grammatically animate nouns). Then I present data from Mi'gmaq that shows the opposite: inanimate subjects of transitive verbs are permissible.

3.1.1 Blackfoot

Blackfoot only allows semantically animate nouns to be subjects of transitive verbs (Frantz 1991; Ritter and Rosen 2010).[5] The example in (8a) demonstrates that a semantically inanimate noun 'knife' cannot be the subject of transitive verb in Blackfoot. Instead, to express the intended utterance, a speaker would say (8b) where there is an instrumental prefix on the verb (*iiht-*) and an impersonal theme sign (*-'p-*).

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[5]Valentine (2001:426) comments that in Ojibwe "[b]oth actors and goals may be animate, or either the actor or the goal may be inanimate, but both cannot be inanimate: a transitive predication in Nishnaabemwin must have at least one animate argument." In other words, if there is an inanimate subject, the object must be animate. It is unclear if Valentine (2001:426) means that the Ojibwe constraint is sensitive to grammatical or semantic animacy. It may be safe to assume a semantic animacy constraint based on the fact that he furthers that "Most commonly actors, as initiators and controllers of actions, are animate" (426), assuming initiators, for the most part, must possess will or agency and therefore be animate.

(8)   **Blackfoot**

    a. *Om-wa   isttoán-wa   ikahksíni-**m**-wa ann-istsi   ikkstsiksi-istsi.

       DEM-3.PROX.AN knife-3PROX.AN cut.TI-**TH**-3SG   DEM-PL.IN branch-PL.IN

       Intended: 'That knife cut those branches.'

    b. Om-wa   isttoán-wa   **iiht**-ikahksíni-**'p**-yi   ann-istsi   ikkstsiksi-istsi.

       DEM-3.PROX.AN knife-3PROX.AN **INST**-cut.TI-**TH**-PL.IN DEM-PL.IN branch-PL.IN

       'By means of the knife, the branches were cut off.'

                                                  (Frantz 1991: 44)

3.1.2   Mi'gmaq

In order to test environments involving different combinations of animate and inanimate arguments I used 29 short (<4 seconds) videos depicting various events with two participants. These videos were originally used in a study on animacy, topicality and agentivity in Yucatec Maya (Butler et al. 2012, Prep). Speakers were asked to provide one-sentence descriptions of these videos. Three speakers participated in describing the videos, two males and one female between the ages of 50 and 70. Each Mi'gmaq speaker was also bilingual in English, but grew up speaking Mi'gmaq. After showing these videos, I asked follow-up questions where I varied the plurality of the subjects and objects. I also showed participants pictures, asking them to describe events with one-sentence answers.

    This section details animacy effects on verbal morphology. I show that the verbal morphology does not index the animacy of the subject noun, but it does index plurality of the subject. When the subject of TI verbs is singular, the inner suffix is marked with *-g*, and plural subjects *-i'tij* (or *-iti't* before an inanimate plural marker).

    In the first set of data are TI verbs, or verbs with inanimate objects, with possible combinations of semantically and grammatically animate and inanimate subjects in the singular. The sentence given is '*x* cuts the branch(es)'. The possible subjects are: *ji'nm* 'man' (animate) and *tma'gittaqan* 'saw' (inanimate). In order to firmly establish the context where a knife or saw cuts a branch, I used a picture depicting a knife cutting branches as well as the following context where the knife or saw can cut through anything:

(9)   Ula tma'gittaqan tems'-g ta'n pas   goqwei.

     DEM saw.IN   cut.TI-3 TA'N PART what

     'This saw cuts through anything.'

    After this context was established, the following sentences were elicited with the subjects 'man', and 'saw'. Note that with these verbs the TI final is null and thus I gloss the verb root as 'cut.TI'. Recall from section 2 that it is still possible to distinguish a TI verb from a TA verb when the final is null. The inner suffixes indexing third person are bolded.

(10)   a.   **Grammatically animate and semantically animate subject**

          Ji'nm   tems'-**g** psetgun.

          man.AN cut.TI-**3** branch.IN

          'The man cuts the branch.'

b. **Grammatically inanimate and semantically inanimate subject**
Tma'gittaqan   tems'-**g**   psetgun.
saw.IN   cut.TI-**3** branch.IN
'The saw cuts the branch.'

Regardless of the animacy, the subjects across all three examples are marked with the third person singular marker (-*g*). When the object is plural, the inanimate plural marker (-*l*) appears after the inner suffix (-*g*).

The examples below show that the inner suffix when the subject is plural is -*i'tij*.

(11) a. **Grammatically animate and semantically animate subject**
Ji'nm-u-g   tems'-m-**i'tij** psetgun.
man.AN-LV-PL.AN cut-TI-**3.PL**   branch.IN
'The men cut the branch.'

b. **Grammatically inanimate and semantically inanimate subject**
Tma'gittaqan-n tems'-m-**i'tij** psetgun.
saw.IN-PL.IN   cut-TI-**3.PL**   branch.IN
'The saws cut the branch.'

Note again that the inner suffix *i'tij* stays the same regardless of the animacy of the subject.

In the next two data sets, I show examples with the TA verb *migutesguatl* 'to bump into', with the animate object *wow* 'pot'. The subjects exemplified below are *ji'nm* 'man' (animate), and *mijua'ji'jewei tepaqan* 'baby carriage' (inanimate). In all these examples, the inner suffix (-*t*) indexes the third person and does not change when the animacy of the subject changes. Importantly, this marker does not vary according to the animacy of the subject. Like in the previous examples, the final is null, thus I gloss the verb as 'verb.TA' signifying that the verb is transitive animate.

(12) a. **Grammatically animate and semantically animate subject**
Ji'nm   migutesgu-a-**t**-l   wow-u-l.
man.AN bump.TA-DIR-**3**-OBV pot.AN-LV-OBV
'The man bumps into the pot.'

b. **Grammatical inanimate and semantically inanimate subject**
Mijua'ji'j-ew-ei tepaqan migutesgu-a-**t**-l   wow-u-l.
child-ew-POSS   car.IN   bump.TA-DIR-**3**-OBV pot.AN-LV-OBV
'The carriage bumps into the pot.'

Examples in (13a–13b) show that with plural animate and inanimate subjects the plural marker is -*'tit* before the obviative marker -*l*. As in examples (12a–12b), the animacy of the subject is not indexed on the verb.

(13) a. **Grammatically animate and semantically animate**
Ji'nm-u-g   migutesgu-a-**'tit**-l   wow-u-l.
man.AN-LV-PL.AN bump.TA-DIR-**3.PL.SUBJ**-OBV pot.AN-LV-OBV
'The men bump into the pot.'

133

b. **Grammatically inanimate and semantically inanimate subject**

Mijua'ji'j-ew-ei tepaqan-n migutesgu-a-**'tit**-l wow-u-l.
child-ew-POSS car.IN-PL.IN bump.TA-DIR-**3.PL.SUBJ**-OBV pot.AN-LV-OBV

'The carriages bump into the pot.'

Based on this evidence, I conclude the following for Mi'gmaq: (i) animate and inanimate nouns can be in subject position of transitive verbs and (ii) the animacy of the object, not the subject, governs the shape of the verb. In other words, when there are two third person arguments, the transitive verb only indexes the animacy of one. In the cases above, the verb only indexes the object's animacy. Number, however, is important for agreement of both subject and object. This pattern contrasts with Blackfoot, a language which does not allow any inanimate subjects of transitive verbs.

3.2 Experiencer verbs

In this section, I describe a study done by Johansson (2008) on experiencer verbs or verbs denoting emotional states. In Blackfoot, agreement morphology always agrees with semantic features of the subject of the experiencer verb, whereas in Mi'gmaq agreement morphology reflects grammatical features of the subject.

3.2.1 Blackfoot

Furthermore, for verbs denoting emotional states, or psych verbs, Johansson (2008) provides evidence that intransitive verbs with agentive or experiencer subjects do not take inanimate subjects. In her study, she investigated how Blackfoot speakers would describe a fictional world where inanimate objects can experience sentient states (like feeling). She explored whether agreement morphology reflects grammatical agreement (will there be inanimate agreement morphology on the verb, agreeing in grammatical animacy with the inanimate noun?) or semantic agreement (will the verb agree with the imposed semantic state on the inanimate noun, so animate agreement morphology?). To do this, she asked speakers how to say "the flowers are happy" in a fictional world where flowers (which are grammatically inanimate) can feel. She found that switching the gender of the subject (by adding an animate plural determiner and plural morphology on the noun) or creating a new form of the verb with inanimate agreement morphology were rejected. The grammatical example in (14a) shows animate agreement on the verb stem, thus the verb agrees with the semantic animacy of the noun 'flower', and not its grammatical animacy (inanimate).

(14) **Blackfoot**

a. amo-(i)stsi pisatssaisski-istsi iik-i'taam-ssi-y(i)-(y)aawa.
dem-PL.INAN flower(IN)-PL.INAN very-happy-be.AI-PL-PRON

'These flowers (inanimate) are happy (animate).'

b. *amo-(i)ksi pisatssaisski-iksi iik-i'taam-ssi-(y)i-yaawa
dem-PL.AN flower(AN)-PL.AN very-happy-be.AI-PL-PRON

'These (*animate) flowers are happy (animate).'

c. *amo-(i)stsi pisatssiasski-istsi iik-i'taam-ii-(yi)-yaawa
dem-PL.INAN flower(IN)-PL.INAN very-happy-be.II-PL-PRON

'These flowers (inanimate) are happy (*inanimate).'

In Blackfoot, again we see a semantic animacy restriction on experiencer verbs. Only semantically animate nouns can act as subjects of psych verbs. In this case, agreement morphology in Blackfoot aligns with the sentience of the inanimate noun 'flower' in the fictional world.

3.2.2 Mi'gmaq

I conducted the same happy-flower study with speakers of Mi'gmaq. I used the verb *wel'te'tege-* 'to be happy'. The noun *wasueg* 'flower', like in Blackfoot, is inanimate so I was able to replicate the same study. When presented a fictional world where flowers can think and feel, speakers translated 'the flowers are happy' inflecting the verb with inanimate third person plural suffix *-gl* as in (15a), thus coining a new form of the verb. Any other combination of morphemes were rejected by speakers.

(15)   a.   Wasueg-**l**   wel'te'tege-**g-l**.
            flower-**IN.PL**   happy-**3.IN-IN.PL**

            'The flowers (inanimate) are happy (inanimate).'

       b.   *Wasueg-**ig**   wel'te'tege-**j-ig**.
            flower-**PL.AN**   happyAI-**3.AN-PL.AN**

            'The flowers (animate) are happy (animate).'

       c.   *Wasueg-**l**   wel'te'tege-**j-ig**.
            flower-**PL.IN**   happy.AI-**3.AN-PL.AN**

            'The flowers (inanimate) are happy (animate).'

       d.   *Wasueg-**ig**   wel'te'tege-**g-l**.
            flower.IN-**PL.AN**   happyAI-**3.IN-PL.IN**

            'The flowers (animate) are happy (inanimate).'

With these verbs presented here, we see third person agreement morphemes agreeing with grammatical animacy. As we have seen so far with the happy flower examples, grammatical animacy in Mi'gmaq is marked over sentience, unlike in Blackfoot. Agreement morphology in Mi'gmaq does not track sentience. In other words, when given the choice between choosing to agree with semantic or formal (grammatical) features, Mi'gmaq choses formal whereas Blackfoot chooses semantic. This is similar to agreement with polite plurals and adjectives: some languages agree with formal features (e.g. Serbo-Croatian) and some with semantic (e.g. French) (Despić 2016; Wechsler and Hahm 2011).

The new contribution of this data is that Mi'gmaq, unlike Blackfoot, allows inanimate subjects of transitive verbs and experiencer intransitive verbs. In the next section, I discuss how the status of inanimate subjects of transitive verbs affects, if at all, agreement morphology for transitive verbs.

4   Animacy agreement on transitive verbs: Exploring an analysis

As has been previously established in the literature, the object of transitive verbs is important for the final morpheme. In this section, we will see that when the animacy of the third person subject

is not indexed in the verbal morphology. Thus, animacy of the subject does not matter for agreement morphology on the verb. I then explore account for this data under a probe-goal framework Chomsky (2000, 2001).

4.1 Animacy of the object is important for agreement morphology

As discussed above, the animacy of the object governs the shape of the transitive verb. Below are repeated examples from above that show the final morpheme (in boxes) changing depending on the object's animacy.

(16) **Animate object**
    a. Wissugw-$\boxed{\text{al}}$-oq tap'tan.
          cook-$\boxed{\text{TA}}$-2.PL potato.AN
          'You all cook the potato.'

b. **Inanimate object**
      Wissugw-$\boxed{\text{atm}}$-oq wa'w.
      love-$\boxed{\text{TI}}$-2.PL   egg.IN
      'You all cook the egg.'

This distinction between animate and inanimate forms for verbs in Algonquian languages is well known. However, if we review again the data presented in the section above, it is clear that the animacy of the subject does not affect the shape of the verb.

(17) a. **Animate subject**
          Ji'nm   tems'-**g** psetgun-n.
          man.AN cut.TI-**3** branch.IN
          'The man cuts the branch.'

      b. **Inanimate subject**
          Tma'gittaqan tems'-**g** psetgun.
          saw.IN   cut.TI-**3** branch.IN
          'The saw cuts the branch.'

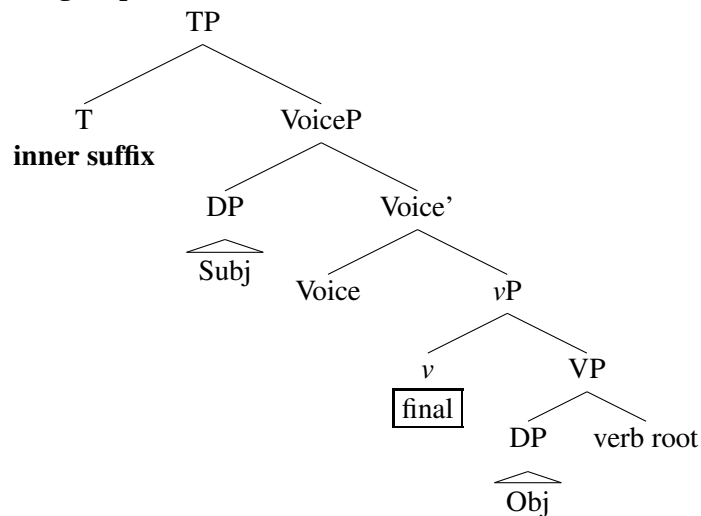However, we do see that the number of the subject does affect agreement morphemes, namely the inner suffix.

(18) a. **Plural animate subject**
          Ji'nm-u-g   tems'-m-**i'tij** psetgun.
          man.AN-LV-PL.AN cut-TI-**3.PL**   branch.IN
          'The men cut the branch.'

      b. **Plural inanimate subject**
          Tma'gittaqan-n tems'-m-**i'tij** psetgun.
          saw.IN-PL.IN   cut-TI-**3.PL**   branch.IN
          'The saws cut the branch.'

Thus, for transitive verbs the object's animacy is important for agreement on the verb, while the subject's is not. In the next two sections I detail the theoretical framework of how to capture this generalization for transitive animacy agreement. Then, I propose an interim analysis.
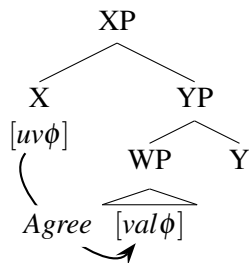
4.2 Theoretical framework

Following Hamilton (2015) for Mi'gmaq and Oxford (2014) for Algonquian languages in general, I assume successive cyclic movement of the verb from its base position to T. I assume the Mirror Principle (Baker 1985), where the order of the morphemes on the verb is parallel to the order of functional projections along the verbal spine. If the verb root is generated low in the structure (in VP) and tense and other affix attach as suffixes to the verb, the verb moves in a successive cyclic fashion from its base position to T(ense)P. I will adopt the following structure for Mi'gmaq (from Hamilton 2015). Following Hamilton (2015), the spell out of *v* is the final and the spell out of T is the inner suffix.

(19)   **Mi'gmaq verbal structure (Hamilton 2015)**

Following Chomsky (2000, 2001), I take agreement morphemes to be the result of an Agree relation between a probe with unvalued ϕ features and a goal (an NP or DP) with valued ϕ features. The probe searches in its probing domain and the ϕ features are valued and then spelled out on the probe. The agreement morpheme on the functional head X in (20) is the result of this Agree relationship.
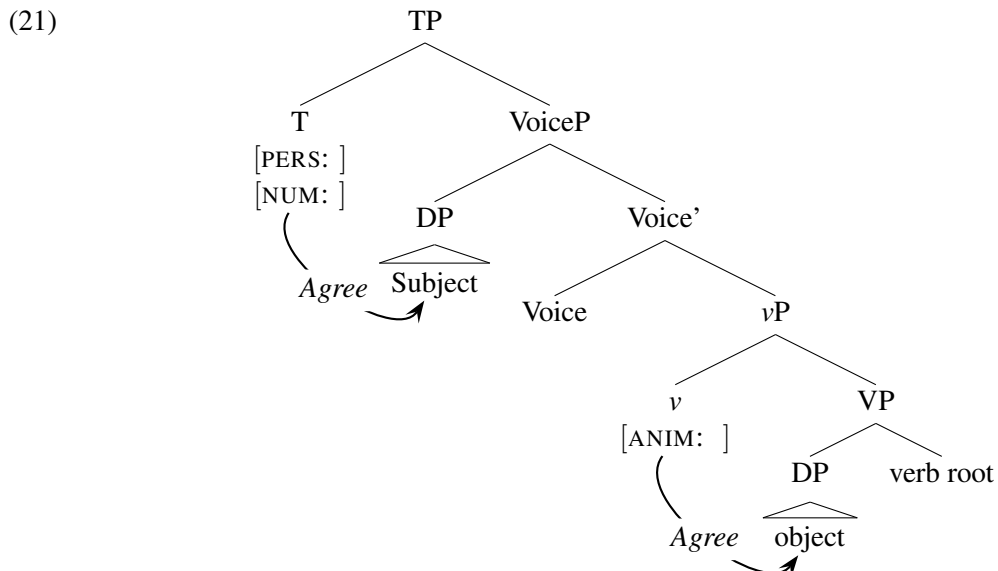
(20)   **Chomsky (2000) AGREE**

Similar to others' work in Algonquian languages (Hamilton 2015; Lochbihler 2012; Oxford 2014; Piggott 1989; Quinn 2006), I take the feature of animacy to be a privative feature, not binary. As such, the lack of an animacy feature (i.e. when the object is inanimate) results in the appear-

ance of a default marker (the TI marker). I have been glossing this so-called default morpheme as transitive inanimate (TI), following Algonquian linguistic tradition, and I will continue to do so.

4.3 Exploring an analysis: No animacy probe on T?

Given the data in section 3 where only the object's, and not the subject's animacy is important for the verb's form, we could intuitively account for the pattern by positing person and number probes on T and restricting the animacy probe to *v*. Recall that, for this third person data, the inner suffix changes when the plurality of the subject is varied, but not its animacy, and the final (spelled out *v*) is sensitive to the animacy features of the object. One way to capture the data on transitive subjects where the inner suffix does not change whether the subject is animate or inanimate is for T to only have person and number features. The *v* head has an animacy probe on it and indexes the animacy of the object in its c-command domain.[6] This structure is represented in 21.

(21)

```
                        TP
                  _____|_____
                 T            VoiceP
              [PERS: ]      ____|____
              [NUM:  ]     DP      Voice'
                 (        /\      ___|___
               Agree  Subject  Voice      vP
                                       ____|____
                                      v         VP
                                   [ANIM: ]   ___|___
                                      (      DP    verb root
                                   Agree   object
```

Positing an animacy probe in *v* which has the object in its c-command domain accounts for why animacy of the object matters. Crucially, there is no animacy probe in T, which has the subject in its c-command domain. Thus, the spell out of T is not sensitive to animacy features at all. This in turn could capture the generalization that the object's animacy, and not the subject's animacy, is important for agreement in transitive verbs. However, as I discuss in the next and final section, complications for this analysis arise when data from intransitive verbs is added.

5 Including intransitives: Outlook and future research

In this paper, I showed that Mi'gmaq allows inanimate nouns in subject position of experience and transitive verbs. Focussing on transitive verbs, the object's animacy is important for the agreement morpheme in *v* however when the subject's animacy is varied, the agreement morphology is not

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[6]Hamilton (*forthcoming*) argues that the animacy probe in *v* is inherited via feature inheritance from Voice. I am restricting the scope of this paper to transitive verbs. However, I refer the reader to Hamilton (*forthcoming*) for convincing evidence from ditransitive verbs as to why the animacy probe in *v* is inherited from Voice.

affected. The generalization in the third person domain is that the animacy of the subject is not important for agreement morphology. This could be captured by positing an animacy probe in *v* which can probe the object but crucially no animacy probe in T. The spell out of T, the inner suffix, is not affected by the animacy of the subject. Below, I discuss data against this kind of analysis.

A complication for this analysis comes from data on intransitives. Recall that the inner suffix is what is important for third person subject agreement of transitive verbs and that that morpheme stayed the same no matter if the subject was animate or inanimate. In the following intransitive examples, the inner suffix (in bold) changes depending on whether the subject is animate or inanimate.

(22) a. E'pite'ji'j al-qo'gw-e-**t**.
   girl.AN   about-float-AI/II-**3.AN**
   'The girl floats.'

   b. Paqo'si   al-qo'gw-e-**g**.
   seaweed.IN about-float-AI/II-**3.IN**
   'The seaweed floats.'

In (22a) with an animate subject, the inner suffix is *-t*. In (22b), with an inanimate subject, the inner suffix is *-g*. For the happy flowers data presented in 3.2.2 we also saw that the *-g* inanimate suffix could attach to the verb 'to be happy' and create a new form, thus agreeing in grammatical animacy with the inanimate noun flower. For these sets of data, the animacy of the subject is important for verbal agreement morphology.

Right away, there is a problem for the analysis in (21). If T, which is the spell out of the inner suffix, does not have a animacy probe on it, how can it account for the intransitive data where animacy of the subject does govern the form of the inner suffix (*-t* for animates and *-g* for inanimates)?

At first blush, it would seem based on this data presented thus far on intransitives that *-g* is the third person inanimate marker for intransitives and *-t* is the third person animate marker. However, two caveats are worth mentioning. As described by Fidelholtz (1968), the third person animate marker is *-g* when it follows a consonant as in (23).

(23) Ji'nm   welgwi-jin-**g**.
   man.AN happy-AI-**3**
   'The man is happy.'

Secondly, the following data shows that with the verb *megwe'-* 'to be red' both the animate and inanimate subjects are marked with the inner suffix *-g* and the verb stem ends in a vowel (not a consonant as in (23)). Mi'gmaq Online Dictionary (2015) lists this form as being able to take both an animate and inanimate subject.

(24) Megwe'-**g**.
   red.AI/II-**3**
   'He/she/it.AN/IN is red.'   (Mi'gmaq Online Dictionary 2015:2227)

To account for the *-g*, Fidelholtz (1968:118) reports that underlying the stem *megwe'-* is *megwey-* with a palatal glide which thus counts as a consonant. If the subject is animate, the third person animate *-t* becomes *-g* after the palatal glide. He then posits another rule where the glide deletes

and the vowel is lengthened (represented by an apostrophe orthographically). If the subject is inanimate, the inanimate third person marker is *-g*. This accounts for the identical AI/II forms for this verb where *-g* indexes both animate and inanimate third persons.

Despite these two caveats, if the generalization that animacy is important for objects of transitives, but subjects of intransitive verbs is on the right track, it would point to, on an abstract basis, an ergative-alignment of animacy agreement. If this ergative-alignment of animacy agreement is correct, it would be (a) on an abstract agreement level and (b) only in a subset of a the grammar (Mi'gmaq is not an ergative-absolutive language). This pattern poses a potential problem for theories that associate ergativity with the case assigned to the external argument (Legate 2008; Woolford 1997). The Mi'gmaq pattern cannot be captured by an account based on case (inherent case assigned to the external argument), because Mi'gmaq does not overall show ergative alignment; rather it requires treating ergativity as a matter of agreement, and only a subpart of the agreement system.

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