REVISITING "SPECIFICITY": AN ALTERNATIVE SEMANTICS ACCOUNT FOR WESTERN SAMOAN*

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The concept of "specificity" in article semantics, as opposed to definiteness, is famously fraught—or, as Farkas (2002:213) describes, "notoriously non-specific". Linguists have variously suggested that specificity is based on partitivity, referentiality, or scope. This article examines each of these proposed definitions in light of novel data from Western Samoan, a language widely described as having an article system with a specific/nonspecific contrast. I find that no traditional definition of specificity accounts for the distribution of Samoan articles, and suggest instead an analysis implemented in alternative semantics in which the specific and nonspecific differ in whether they generate alternatives, and whether they are presuppositional. The data presented show that specificity systems vary extremely widely, even more so than previously imagined, resulting in the need to define "specificity" in even more abstract terms—or to cease to consider it a salient category altogether.

1. Introduction: The problem of "specificity"

Within article semantics, the two principal contrasts are often thought to be definiteness vs. indefiniteness, and specificity vs. nonspecificity. The former opposition has been exhaustively examined in the literature, with the definite article generally believed to signal the uniqueness (e.g., Kadmon 1990) or familiarity (e.g., Kamp 1981, Heim 1982) of a referent.

(1) I am eating **the apple**.
unique and/or familiar apple → definite

(2) I am eating **an apple**.
not unique and/or newly mentioned apple → indefinite

Specificity, meanwhile, has been much more diversely defined. A specific nominal might be one which is noteworthy (Ionin 2006), referential (Fodor and Sag 1982), wide scope (Heim 1982), covertly partitive (Enç 1991), presuppositional (Diesing 1992), or restricting variation across alternatives (Farkas and Brasonveanu 2021). The sheer number of definitions probably stems from a tendency to label any article contrast that is not clearly based on definiteness as one of "specificity".

In the discussion that follows, I will consider scopal, referential, and partitive definitions of specificity—what Farkas (1994) notes as the three most prevalent uses for the term. In §2, I turn to Western Samoan, a language whose article system is traditionally described as exhibiting a specificity contrast rather than a definiteness contrast. I carefully examine novel data in the form of speaker judgments and commentary to arrive at five generalizations guiding specific/nonspecific article distributions. After concluding that none of the common definitions for specificity can

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account for these distributions in §3, I develop a semantics for the specificity contrast rooted in alternative semantics in §4. §5 concludes and points to broader implications.

1.1. Specificity as wide scope

Perhaps the most historically common conception of specificity defines a specific nominal as taking wide scope over some operator, and a nonspecific nominal as taking narrow scope with respect to an operator. The contrast can be seen in the ambiguity of the indefinite in (3).

(3) John wants to marry **a Norwegian**. . .
   a. He met her last year.
      $\exists >$ want $\rightarrow$ SPEC
   b. He will move to Norway to achieve his goal.
      want $> \exists \rightarrow$ NSPEC

(adapted from Farkas 1994:121, ex. (3))

In the scopally specific reading of (3a), *a Norwegian* has been interpreted as taking wide scope over the modal *want*, such that there exists a (particular) Norwegian whom John wants to marry. In contrast, in (3b), the indefinite has been interpreted as taking narrow scope with respect to the modal, such that any Norwegian woman might satisfy John's wish.

While scopal specificity has been argued to be relevant to many article phenomena, of note to this article is Collins's (to appear) analysis of Samoan. Collins argues that the central article distinction in Samoan is one of semantic scope, with the specific article *le* scoping higher than all operators and the nonspecific article *se* scoping below any operators.[1] He tentatively suggests that both articles represent choice functions, and provides the following minimal pair sentences to show how this semantic analysis might account for interpretational differences.

(4) Sā lē tusi e Susana { **le** / **se** } **pese**.
PST NEG write ERG S. **SPEC** **NSPEC** **song**

(5) a. $\exists f : \text{CF}(f) \wedge \neg\text{wrote}(\text{Susana}, f(\text{song}))$ with SPEC
   $\rightarrow$ 'Susana was not writing a (certain) song.'
   b. $\neg\exists f : \text{CF}(f) \wedge \text{wrote}(\text{Susana}, f(\text{song}))$ with NSPEC
   $\rightarrow$ 'Susana wasn't writing any songs.'

(adapted from Collins to appear, exs. (30)–(31))

Collins argues that when the specific article appears in (4), the negation operator scopes below the an existential quantifier closing the choice function (5a). Meanwhile, when the nonspecific article is used, the same negation operator will scope above the existential closure of the choice function (5b). The result is the interpretational difference exhibited in the translations in (5a–b).

Collins's analysis has been assumed in later works (e.g., Howell 2020). However, §3 will provide data calling his conclusions into question. For now, I elaborate on two other common definitions of specificity.

[1] Collins (to appear) additionally argues that Samoan has a third type of indefinite, pseudo-incorporated objects, which have "stubborn narrow" scope. Because nominals in this latter class are not headed by an article, and because Collins's analysis for them is largely compatible with my analysis of SPEC/NSPEC, I will not consider them here.

1.2. Specificity as referentiality

A related but distinct view of specificity emerges from Fodor and Sag (1982), in which indefinites like *a Norwegian* in (3) are ambiguous simply because they may be referential or non-referential. Thus, specific indefinites sometimes appear to be taking wide scope, but in reality simply denote a particular—if yet unidentified—referent. Farkas (1994:125) shows how the scopal and referential definitions of specificity might diverge in the following example.

(6) **A student in Syntax I** cheated on the exam. . .
   a. His name was John.
      SPKR has a specific referent in mind → SPEC
   b. We are all trying to figure out who it was.
      SPKR doesn't have a specific referent in mind → NSPEC (adapted from Farkas 1994:120–121, ex. (1))

Both the interpretations resulting from (6) involve the indefinite taking wide scope, and thus are scopally specific. However, (6a) involves a referentially specific interpretation, while (6b) involves a referentially nonspecific interpretation. Thus, although scopal and referential specificity may have overlap, they are nevertheless empirically distinct.

1.3. Specificity as partitivity

One final view of specificity is introduced by Enç (1991), who considers Turkish nominals in object position. When marked with accusative case, these objects are interpreted as belonging to a superset of aforementioned, or definite, individuals. When unmarked, the object is interpreted as not belonging to any aforementioned or contextually familiar group. Specificity is thus derived from the more concrete notion of definiteness.

(7) Odama birkaç çocuk girdi. . .
'Several children entered my room. . . '

   a. **Iki kız-ı** tanıyordum.
      two girl-ACC I.knew
      'I knew **two girls** (from among them).'
      'two girls' ⊆ 'several children' → specific

   b. **Iki kız** tanıyordum.
      two girl I.knew
      'I knew **two girls** (not in the group).'
      'two girls' ⊈ 'several children' → nonspecific

(adapted from Enç 1991:6, exs. (16)–(18))

An example of partitive specificity from English can be seen in (8), where *some ghosts* is ambiguous between partitive specific and partitive nonspecific readings.

(8) a. **Some ghosts** live in the pantry; others live in the kitchen.
      possible referents limited to the (familiar) ghosts in the houes → SPEC
   b. There are **some ghosts** in this house.
      possible referents not limited → NSPEC (adapted from Farkas 1994:121, ex. (2))

With these three conceptions of specificity laid out, we can turn to a language whose article system is described to be based on specificity in order to determine which definition is most

explanatory. In the section that follows, I outline the article system of Western Samoan in terms of five generalizations guiding article distribution.

2. The Samoan article system

2.1. The article inventory

Western Samoan (henceforth: Samoan) is a Polynesian language spoken natively by some 500,000 people on the island of Samoa. Like other languages in the family, it is strongly head-initial, with VSO word order and post-verbal scrambling. Samoan articles can broadly be classified into two kinds,[2] labeled by Mosel and Hovdhaugen's (1992) seminal grammar as the "specific" and "nonspecific". The exponents of each are shown below; throughout this article, I refer to *le*/Ø as SPEC and *se*/*ni* as NSPEC.[3]

	SPEC	NSPEC
sg	*le*	*se*
pl	Ø	*ni*

Mosel and Hovdhaugen demonstrate that the relevant semantic contrast is distinct from definiteness in examples like (9), where SPEC, in addition to NSPEC, can introduce new referents—something which a definite should not be able to do.

(9) 'O **le ulugali'i**, fānau **l-a lā tama** 'o **le teine** 'o Sina.
PRES **SPEC couple** give.birth **SPEC-POSS 3.du child** PRES **SPEC girl** PRES S.
'There was **a couple** that had **a child**, **a girl** called Sina. (Mosel and Hovdhaugen 1992:259, ex. (6.37))

The descriptive generalization that Mosel and Hovdhaugen arrive at is given in (10).

(10) *Mosel and Hovdhaugen's (1992) definitions of* SPEC *and* NSPEC*:*
a. "[SPEC] indicates that the noun phrase refers to one particular entity regardless of whether it is definite or indefinite. . . " (259)
b. "[NSPEC] expresses the fact that the noun phrase does not refer to a particular, specified item, but to any member of the conceptual category denoted by the nucleus of the noun phrase and its adjuncts" (261).

Although useful in affirming that something other than definiteness governs Samoan article choice, the descriptions above are too vague and involve too little negative data to point toward any one theory of specificity. Even so, information in the grammar has been taken to affirm that Samoan specificity corresponds to noteworthiness (Ionin 2006), or that Samoan can be represented in the

[2] Mosel and Hovdhaugen (1992) additionally present multiple categories of diminutive articles, but for the most part these can be subdivided into specific and nonspecific as well. Thus, I take the primary contrast within the article system to be a binary one.

[3] For the scope of this work, I focus almost entirely on the semantics of the singular *le* and *se*. Although Ø and *ni* were not shown to differ distributionally from their singular counterparts, number doubtless plays a role in their interpretations, and future work will have to uncover the particulars.

Article Choice Parameter theory of article acquisition (Ionin et al. 2003). Without additional data, these conclusions are premature—for instance, Tryzna's (2009) additional Samoan data calls into question the Article Choice Parameter theory. The following section serves to elucidate what (10) truly means in terms of formal semantics.

2.2. Characteristics

The generalizations about article distribution argued for here build off novel data gathered from four native speakers of Western Samoan: one man and three women between the ages of 30 and 65. Three of the four lived in Western Samoa at the time of elicitation, with the fourth living in California; all reported regular usage of the language in their day-to-day activities. Elicitation was conducted over Zoom. It should be noted that some speakers preferred to use *tautala lelei*, the literary register, while others preferred the vernacular (*tautala leaga* or "k-dialect")—thus, my examples are a mix of both, depending on which form a speaker felt more comfortable using.[4]

The characteristics are summarized below, with elaboration in the following subsections:

(I) SPEC presupposes the existence of the referent of the nominal.
(II) NSPEC introduces uncertainty.
(III) NSPEC can have a domain-widening interpretational effect.
(IV) NSPEC is unacceptable in out-of-the-blue episodic sentences.
(V) NSPEC is acceptable in episodic sentences with sufficient background context.

2.2.1. SPEC presupposition of existence

It was found that Samoan SPEC cannot be used with non-existent nominals. This is hinted at in the Samoan grammar, where Mosel and Hovdhaugen (1992:480) state that the verb *leai* 'not exist' cannot cooccur with SPEC-marked nominals.

(11) E leai { ***le** / **se** } **mea**.
NPST not.exist **SPEC** **NSPEC** **thing**
'There is **no thing**.'

However, beyond inability to cooccur with *leai*, SPEC-marked nominals more generally cannot cooccur with entities which are established to not exist. This is the case even when the nominal appears in a question (12a), in the antecedent of a conditional (12b), and under negation (12c)—NSPEC must be used instead.

(12)a. # O ai **le** **tupu** **tama'ita'i** **o** **Ameriki**?
PRES who **SPEC** **king** **lady** **GEN** **America**
Intended: 'Who is **a queen of America**?'

b. # E sili le fiafia o **le** **sau'ai** pe'a: alu i Aikupito.
NPST be.best SPEC happiness GEN **SPEC** **giant** if go LOC Egypt
Intended: '**A giant** would be happiest if he went to Egypt.'

[4] While the two registers have phonological and lexical differences, there is no evidence that the semantics of their articles is impacted, and the articles themselves are morphologically realized in the same way.

c. # Ou te le'i va'ai i **le tupu tama'ita'i o Kalefo:nia**.
1.sg NPST NEG see LOC **SPEC king lady GEN California**
Intended: 'I haven't see **a queen of California**.'

(12a)–(12c) are infelicitous as long as queens of America, giants, and queens of California are established to not be real. The fact that SPEC-marked nominals cannot occur felicitously in these particular environments indicates that SPEC does not assert nonexistence, but rather presupposes it. Beyond this, there are few restrictions on SPEC's distribution; it is permitted to mark nominals regardless of whether they have been introduced in the discourse before.

2.2.2. NSPEC introduces uncertainty

The more nuanced of the two articles is NSPEC, whose distribution is more restricted than that of SPEC and whose interpretation is more marked. While speakers tended to translate SPEC as a simple English 'a' or 'the', sentences with NSPEC often required more comment.

(13)a. Ou te iloa o **le maile** na aia le i'a.
1.sg NPST know PRES **SPEC dog** PST eat SPEC fish
'I know **a dog** ate the fish.'

b. Ou te iloa o **se maile** na aia le i'a.
'I know **a dog** ate the fish.'
SPKR *A comment:* You're like, 90% sure.
SPKR *B comment:* Maybe you're not sure which dog ate the fish.

The minimal pair sentences in (13) demonstrate the interpretational difference: speakers interpret the sentence with SPEC neutrally, while they elaborate that the NSPEC sentence creates a sense of uncertainty. The nature of this uncertainty can be seen most clearly in SPKR B's comment. The fact that a dog ate a fish is not questioned; rather, the uncertainty pertains to *which* dog, presumably of some contextually specified set of dogs, committed the act. This will become clearer in the next subsection, where I show that NSPEC nominals also involve domain-widening.

2.2.3. NSPEC and domain-widening

SPKR B's comment and similar comments made during elicitation suggest that there may be a wider set of individuals under consideration when NSPEC is uttered. In (14), both the SPEC- and NSPEC-marked utterances explicitly assert uncertainty about the identity of the dogs in question. However, the NSPEC-marked sentence still introduces a greater sense of uncertainty, as explicated in the speaker commentary.

(14)a. E iloa lelei e Simi na o:mai { **Ø** / **ni** } **maile** i totonu
NPST know well ERG S. PST come **SPEC.pl** **NSPEC.pl** **dog** LOC inside
o le fale . . . ae le: mautinoa po'o ai!
GEN SPEC house but he doesn't know which ones
'Simi knows well that **dogs** came into the house. . . but he doesn't know which ones!'

SPKR *comment with* SPEC*:* Could still be that they're his dogs, [. . .] the neighbor's dogs, or his dogs bringing their friends.

SPKR *comment with* NSPEC*:* It implies that, maybe he doesn't have dogs! So we're not quite sure where the dog prints came from.

Even though the speaker is unaware of the identity of the dogs in both utterances, their identity is more perplexing in the NSPEC utterance because the set of dogs under consideration has expanded. The speaker is no longer considering familiar dogs, such as his own or his neighbor's; rather, the set of possible dog culprits extends beyond this. Thus, although uncertainty is plainly expressed in both utterances, the uncertainty is greater in the NSPEC utterance.

A more classic case of domain-widening can be seen when NSPEC falls under operators like negation.

(15) *Context:* Tai was supposed to finish writing his essay last night.
E le'i tusia Tai **se** **upu**!
NPST NEG write T. **NSPEC** **word**
'Tai didn't write **a [single] word**!'

In (15), the speaker is emphatically expressing that Tai did not a single word of the entire domain of possible words. The interpretation of NSPEC in this environment is similar to that of the English negative polarity item (NPI) *any*.

2.2.4. NSPEC and episodic sentences

The final and most perplexing characteristics of NSPEC-marked nominals pertain to their usage in episodic sentences. I define "episodic sentence" here as a simple, positive, non-modal assertion. Exclusion from such sentences is a "hallmark property" of NPIs (Giannakidou 2011), and at first glance, it appears that NSPEC is also unacceptable in episodic sentences.

(16) *Sa fafaga e le tama **se** **maile**.
PST feed ERG SPEC boy **NSPEC** **dog**
Intended: 'The boy fed **a dog**.'

a. *Acceptable as question:*
Sa fafaga e le tama **se maile**?
'Did the boy feed **a dog**?'

b. *Acceptable with RC modifier:*
Sa fafaga e le tama **se maile Chihuahua**.
'The boy fed **a dog that was a Chihuahua**.'

In (16), the NSPEC-marked episodic sentence is unacceptable. However, speakers will often repair such sentences by making them interrogative (16a), or through subtrigging (16b). As shown already in (15), NSPEC can also occur felicitously under negation. These three environments, along with NSPEC's domain-widening effect, are emblematic of NPIs.

However, a third repair speakers may use for sentences such as (16) is simply adding context. The speaker in (17), for instance, was able to come up with a somewhat surreal background situation on the fly to render the NSPEC-marked sentence acceptable.

(17) ??Sa fafaga e tama:loloa **se** **malie**.
PST feed ERG man.pl **NSPEC** **shark**
Intended: 'The men fed **a shark**.'
Acceptable with the following context:
The men are supposed to feed someone's shark; they feed *some* shark, but evidently it was the wrong shark.

The speaker allows this episodic sentence as long as it is not out-of-the-blue. Specifically, the context contributed by the speaker functions to add more sharks to the common ground. That is, he posits that in the scenario in which (17) is uttered felicitously, multiple shark alternatives are under consideration (hence the ability for one of the sharks to be the wrong choice).

With these five characteristics laid out, I turn to the original notions of specificity presented.

3. Samoan specificity is unique

3.1. Not wide scope

Of the three types of specificity, scopal specificity has the most compelling potential to describe Samoan article distribution, as it has been argued as the guiding factor previously by Collins (to appear). To resummarize, Collins proposes that SPEC represents a choice function obligatorily scoping high, whereas NSPEC represents a choice function obligatorily scoping below any present operators. Collins's analysis is meant to capture data like the following:

(18)a. E le'i fia fa'alogo mai 'iai **le** **tagata ao aitalafu**.
NPST NEG want listen DIR to.it **SPEC** **debt collector**
'**The debt collector** does not want to listen to it.'
not 'No debt collector wants to listen to it.' (Collins to appear, ex. (13b), citing Consumer Credit Legal Centre)

b. E le'i iloa ā e **se** **isi** lenā mea.
NPST NEG know EMPH ERG **NSPEC** **one** that thing
'**No one** yet knows that thing.'
not 'There is someone who doesn't yet know that thing.' (Mosel and Hovdhaugen 1992:765)

Collins's scopal hypothesis neatly captures the fact that NSPEC has a domain-widening interpretational effect in sentences with negation, such as the one in (18b), where the domain of possible individuals has expanded beyond a single person. However, contrary to his notes about interpretational possibilities in (18), Collins's arguments do not actually factor in any negative data. Rather, Collins's conclusions are drawn from corpora such as the Consumer Credit Legal Centre website in (18a) or the Samoan grammar in (18b). Because corpora don't often feature speaker metalinguistic commentary, the true interpretational possibilities of sentences like (18) are unknown. The only conclusion that can be drawn is that, in the presence of other operators, SPEC tends to be interpreted with wide scope, and NSPEC with narrow scope.

With the benefit of elicitations with speakers, this conclusion can be shown to be inaccurate. Specifically, it appears that SPEC can indeed take narrow scope. For instance, the following sentence was volunteered without prompting by a speaker.

(19) So'o se aiga **le tagata pisa**.
every NSPEC family **SPEC person noisy**
'In every family there's **a noisy person**.' $\forall >$ SPEC

In (19), it is not the case that the speaker is referring to a single person who is present in every family (SPEC $>\forall$). Rather, the speaker is describing the fact that each family has its own unique noisy member ($\forall >$ SPEC). The fact that such a sentence can be naturalistically produced calls a scopal analysis of Samoan specificity into question.[5]

Aside from this, Collins's analysis does not appear to account for the strange behavior of NSPEC nominals with respect to episodic sentences. In his view, NSPEC should be licit in sentences both with and without operators, regardless of context, as long as it is interpreted as scoping low when an operator is present. This is not the case; as shown in §2.2.4, NSPEC is degraded or unacceptable in episodic sentences if there are no contextually available alternatives in the discourse.

3.2. Not referentiality

That the Samoan article system does not reflect referential specificity is perhaps more straightforward. Referential specificity requires that a speaker have a specific referent in mind, whereas referential nonspecificity requires that the speaker be unaware of the identity of the referent. The following sentences show that neither of these are satisfied in Samoan.

(20) SPEC *nominals need not refer to a particular entity:*
Ou te iloa o **le maile** na aia le i'a. . . ae ou te le: iloa po'o ai!
1.sg NPST know PRES **SPEC dog** PST eat SPEC fish but I don't know which one
'I know **a dog** ate the fish. . . but I don't know which one!'

(21) NSPEC *nominals can refer:*
Ae te'i, ua tamo'e mai **se tama:loa** ia: te a'u.
but suddenly PST.PERF run to.1p **NSPEC man** to me
Fai mai tama:loa ua ou ma:lo: ile miliona tala!
the man told me I won a million Tala
'But suddenly, **a man** ran up to me. The man told me I won a million Tala [Samoan currency]!'

In (20), the speaker explicitly states that he does not know the identity of *le maile* 'the dog', despite the fact that it is marked with SPEC. Thus, SPEC need not be referential. In contrast, in (21), the speaker uses the NSPEC-marked nominal *se tama:loa* 'the man' to represent a particular, identifiable man who offers him a million Tala. Here, NSPEC appears to refer. Such examples confirm that Samoan specificity is not referential specificity.

[5] The speaker noted that NSPEC can also be acceptable in (19), with no discernible effect on meaning.

3.3. Not partitivity

Finally, I argue that the Samoan article system does not exhibit partitive specificity. Recall that a partitive specific nominal is one which belongs to a larger or singleton set of definite (pre-identified) entities. A partitive nonspecific, meanwhile, is not part of a contextually familiar or unique group.

In the case of Samoan, it appears that if anything, it is NSPEC which shows partitive specific properties. In (22), both SPEC and NSPEC are possible; however, the speaker notes that using an NSPEC nominal implies that the nominal is being singled out from a salient group.

(22) *Context:* You are in the street, and a lady suddenly shouts that a man stole her bag.
Na vala'au le tama'ita'i ua gaoi e **se** **tama:loa** lana atou.
PST shout SPEC lady PST.PERF steal ERG **NSPEC** **man** 3sg.POSS bag
'A lady shouted that **a man** stole her bag.'
SPKR *comment:* [SPEC means] it was a *man* who stole the bag, or a particular man. But, [NSPEC] is more like 'one of the men'. [. . .] We identify the crowd of men, and one of them.

Is it possible to simply reverse the labels of SPEC and NSPEC to get a pattern of partitive specificity? After all, these are merely descriptive labels meant to clarify that the article distinction in Samoan is not based on definiteness, so it is not outrageous to suggest an analysis in which Samoan SPEC represents partitive nonspecificity and NSPEC represents partitive specificity. Under this view, a Samoan NSPEC-marked nominal should always refer to a member of a definite set of other such individuals. Modifying a nominal with NSPEC should not result in an expansion of the domain of individuals being considered. However, this is exactly what occurs:

(23) Fai mai Mikaele na ta'e le fa'amalama i **se** **tamaititi**.
say to.me M. PST break SPEC window by **NSPEC** **child**
'Mikaele told me the window was broken by **a kid**.'
a. *Felicitous context:* Mikaela is an old man who thinks one of the kids in the neighborhood broke his window.
b. *Infelicitous context:* Mikaele thinks one of his three children—Soi, Mani, or Malama—broke his window.

In (23), using 'NSPEC kid' is felicitous as long as there is a large number of alternative kids available in the discourse. On the other hand, 'NSPEC kid' is infelicitous when there are exactly three known children in the domain of possible kids. This latter context, where 'NSPEC kid' is a subset of definite individuals, is exactly the sort expected to be acceptable for partitive specificity. Because it is unacceptable, NSPEC cannot be said to be a partitive specific marker either.

4. An alternative semantics analysis

I have thus far demonstrated that none of the three prominent definitions of specificity yield promising analyses for Samoan articles. In this section, I lay out an alternative analysis—namely, one based in Hamblin alternative semantics. In doing so, I aim to capture speaker intuitions like the following, reprinted from (22).

(24) Context: You are in the street, and a lady suddenly shouts that a man stole her bag.
Na vala'au le tama'ita'i ua gaoi e { **le** / **se** } **tama:loa**
PST shout SPEC lady PST.PERF steal ERG **SPEC** **NSPEC** **man**
lana atou.
3sg.POSS bag
'A lady shouted that **a man** stole her bag.'
SPKR *comment:* [SPEC means] it was a *man* who stole the bag, or a particular man. But, [NSPEC] is more like 'one of the men'.

In the example above, the speaker relates that NSPEC implies the existence of other entities with the same property ("one of the men"), while SPEC does not, instead emphasizing the property of a nominal ("it was a *man*"). Given this, I argue that the primary difference between these two articles lies in their ability to generate alternatives.

In the next subsections, I propose a simple analysis in which NSPEC nominals introduce alternatives of the same property, while SPEC nominals denote a choice function over a property. SPEC nominals further come with a presupposition of existence. I will then demonstrate how this analysis can account for the five generalizations guiding Samoan article distribution, making a few assumptions about how sets of alternatives are closed in order to derive them.

4.1. Overview of Hamblin alternative semantics

Before diving into the specifics of this proposal, a quick sketch of the Hamblin alternative semantics framework is warranted. The idea originates in Hamblin (1973), who proposes that *wh*-words should be considered as sets of members of the same type, rather than as singular individuals, properties, or propositions. Kratzer and Shimoyama (2002:6) exemplify this analysis with a derivation of *Who slept?*,[6] which I simply below.

(25)a. *who* denotes the set of individuals containing all humans:
$\{ a, b, c, \ldots \}$
b. *slept* denotes a singleton set whose member is the property 'slept':
$\{ \lambda x.$ slept'$(x) \}$
c. *Who slept?* denotes a set of propositions:
$\{ a$ slept, b slept, c slept, $\ldots \}$

The *wh*-word *who* represents a set of individuals—in this case, humans—and composes with the singleton set represented by *slept* via pointwise function application, resulting in the set in (25c). This final set must eventually be closed by some other operator, in this case the question operator Q, to render it interpretable.

Importantly, Kratzer and Shimoyama (2002) and Kratzer (2005) expand Hamblin's proposal to account for indefinites, namely, Japanese "indeterminate pronouns" and German *irgendein*. When no Q operator is available to compose the final set of alternatives, other operators ($\neg$, $\exists$, etc.) may do so. In a plain episodic sentence with no operators apparent, Kratzer and Shimoyama (2002:10) assume that an assertoric operator may close the set. While they leave the precise semantics of this assertoric operator up to interpretation, I propose a simple operator carry-

[6] Kratzer and Shimoyama (2002) actually derive Japanese *Dare nemutta?* 'Who slept?', but the analysis is the same.

ing existential force such as the following, where α is the unclosed set of alternative propositions:

(26) $[\![\exists\alpha_{st}]\!]^{w,g} = \{\ \lambda w'.\ \exists p\ [\ p \in [\![\alpha]\!]^{w,g}\ \&\ p(w') = 1\ ]\ \}$
"the singleton set containing the proposition that is true in all worlds in which some proposition in α is true"

The denotation in (26) will allow any type of episodic sentence generating alternatives to be composed, no matter whether it is out-of-the-blue. While this is the case for German *irgendein* sentences, Samoan episodic sentences containing NSPEC have been shown to require additional context. Specifically, a Samoan NSPEC sentence requires a context containing alternatives. I therefore propose a condition on the assertoric operator in (26).

(27) *Non-trivial Alternative Generation:* There must exist discourse-available alternatives.

The importance of the existence of discourse-available alternatives can be seen in other work implementing alternative semantics (e.g., Villalta 2008:480). The need for (27) will become apparent as it interacts with the denotation of NSPEC introduced in the following subsection.

4.2. Denotations of SPEC and NSPEC

The distribution of SPEC is relatively unconstrained; it can occur with or without sentential operators in out-of-the-blue sentences or in sentences with context. Its primary characteristic, as outlined in §2.2.1, is that it introduces a presupposition of existence. That is, SPEC-marked nominals must be presupposed to exist in order to be felicitous. Below, the denotation for *le malie* 'SPEC shark' includes a definedness condition to account for this.

(28) $[\![\text{SPEC shark}]\!]^{w,g}$ is defined only if $\exists x$ in w such that shark$'(x) = 1$
When defined: $[\![\text{SPEC shark}]\!]^{w,g} = \{f(\lambda x.\ \text{shark}'(x) \text{ in } w)\}$

The nominal *le malie* 'SPEC shark' is only defined if sharks exist in the world. When it is defined, it denotes a singleton set containing a choice function over the property SHARK. I specifically employ the choice function proposed in Reinhart (1997), which allows existential closure to occur above or below other operators. Thus, SPEC-marked nominals will be able to take wide or narrow scope. This specification, along with the presupposition of existence, is what distinguishes my analysis of Samoan SPEC from that of Collins (to appear).

So far, alternative semantics has not played a major role, because SPEC does not introduce alternatives to the discourse. Thus, a SPEC nominal can be represented by a singleton set. However, I have argued that speaker commentary indicates NSPEC does bring alternative entities of the same property into consideration. I propose the denotation for the NSPEC-marked nominal *se malie* 'NSPEC shark' below:

(29) $[\![\text{NSPEC shark}]\!]^{w,g} = \{x \mid \text{shark}'(x) \text{ in } w\}$

According to (29), NSPEC takes a property and picks out all entities of that property. This set of alternative entities must be closed at some point in the derivation, through an operator such as ¬, Q, or the assertoric operator defined in (26). Note that (29) does not specify whether the alternative entities introduced must be found in the established common ground; the role of contextual availability for episodic sentences will be accomplished through the condition of Non-trivial Alternative Generation placed on the assertoric operator.

The denotations above indicate that the meaning difference between SPEC and NSPEC nominals can be explained by two things: a) whether the indefinite is presuppositional (where SPEC introduces a presupposition of existence and NSPEC does not), and b) whether it introduces alternatives (where NSPEC introduces alternatives and SPEC does not).

4.3. Deriving the key generalizations

The specifications described above derive each of the five generalizations introduced in §2.2. I begin with the properties of NSPEC, followed by those of SPEC, additionally showing how they interact to produce pragmatic inferences.

4.3.1. Properties of NSPEC

In §2.2, NSPEC was shown to have a number of unique, often NPI-like properties. Its usage introduces a sense of uncertainty about the identity of the referent; it increases the number of entities under consideration; and it is acceptable in episodic sentences only if there exist other entities of the same property in the background context. These traits point to the importance of alternatives in the meaning of an NSPEC nominal. The proposed denotation in (29) captures this, as it states that an NSPEC nominal represents a set of alternative entities of the same property.

The fact that an NSPEC nominal denotes a set of alternatives first explains why it has a domain-widening effect, in which the set of entities under consideration is greater when NSPEC is used rather than SPEC. In a downward-entailing environment such as negation, this can produce a classic NPI-like interpretation.

(30) E le'i tusia Tai **se upu**!
'Tai didn't write **a [single] word**!'

a. $[\![\text{NSPEC word}]\!]^{w,g} = \{$'a', 'aardvark', 'abacus', ... $\}$
b. $[\![\text{Tai wrote NSPEC word}]\!]^{w,g} = \{$Tai wrote 'a', Tai wrote 'aardvark', Tai wrote 'abacus', ... $\}$
c. $[\![(30)]\!]^{w,g} = \{\ \lambda w'.\ \neg\exists p\ [\ p \in [\![$Tai wrote 'a', Tai wrote 'aardvark', Tai wrote 'abacus', ... $]\!]^{w,g}\ \&\ p(w') = 1\ ]\}$[7]

In (30), the NSPEC-marked nominal denotes the set of all words. Since negation operates over the entire set, the denotation of the full utterance is such that there does not exist a true p in the world, where p represents a proposition that Tai writes any word. The result is the domain-widening

[7] A conference attendee rightly asks why there should be an existential quantifier in addition to the negation operator in (30c). This is actually how Kratzer and Shimoyama (2002:8) define negation as a sentential quantifier. Because Kratzer and Shimoyama have a more complete system of alternative semantics, I adopt their operator semantics.

interpretation and the possibility of translating (30) with a minimizer: 'a *single* word'.

Widening the domain of possible entities under discussion is related to NSPEC's tendency to relay uncertainty about the entity in question. Because SPEC introduces no alternatives and presupposes the existence of an individual, it is more informative than NSPEC. Thus, following an assumption such as Maximize Presupposition! (Heim 1991), choosing to use NSPEC results in an implicature of uncertainty. In (31a), the speaker indicates awareness of this Gricean calculation, stating that one should utter SPEC when possible. The specifics of this pragmatic calculation are hypothesized in (31b).

(31)a. Sa fai mai Simi na 'ai e **se** **maile** le i'a.
PST say to.me S PST eat ERG **NSPEC** **dog** SPEC fish
'Simi told me **a dog** ate the fish.'
SPKR *comment:* He's not sure. . . otherwise he would have said *le* [SPEC].

b. *Pragmatic effect:* X could have said *le* 'SPEC', in which case there would be no alternatives. But, X chose to introduce alternatives. ∴ X is uncertain about which dog did it.

In (31a), the speaker relates that using NSPEC instead of SPEC is significant, and that her interlocutor must therefore not be certain enough to use SPEC. Based on other speaker commentary, I hypothesize that the interlocutor is specifically not certain of the dog's identity.

Thus far, I have not discussed the assertoric operator or its condition on discourse-available alternatives. This operator and its condition are not in play in sentences such as (30), where negation closes the set of alternatives, rendering it interpretable. Rather, they become important when other operators are not present—namely, episodic sentences.

When the assertoric operator is required to close the alternatives introduced by NSPEC, as in episodic sentences, Non-trivial Alternative Generation must be satisfied. This means that an episodic sentence uttered out-of-the-blue will not be felicitous, because without context, there are no alternatives available in the discourse. We can now see why (17), reprinted below, was initially judged as infelicitous, and why the speaker's invented context resolves the issue.

(32) ??Sa fafaga e tama:loloa **se malie**.
Intended: 'The men fed **a shark**.'
Acceptable with the following context:
The men are supposed to feed someone's shark; they feed *some* shark, but evidently it was the wrong shark.

When (32) is uttered, there are no operators to close the set of alternative sharks produced by *se malie* 'NSPEC shark', and the assertoric operator must render the set interpretable. This means that there must be discourse-accessible alternative sharks. When (32) is out-of-the-blue, this will not be the case; there is no discourse at all surrounding the utterance, so discourse-accessible alternatives do not exist. The context which renders the utterance felicitous supposes that a particular shark is designated as the "correct" shark, and that incorrect sharks also exist in the context. This means that there are now shark alternatives to satisfy Non-trivial Alternative Generation, and the sentence becomes felicitous. The final denotation for the sentence is in (33).

(33) $[\![\exists(32)]\!]^{w,g} = \{\lambda w'.\ \exists p\ [p \in [\![$the men fed shark$_1$, the men fed shark$_2$, the men fed shark$_3$, $\ldots]\!]\ \&\ p(w') = 1]\}$

The sentence is true if at least one proposition in the set is true—that is, if the men fed some shark in the discourse. With the observed characteristics of NSPEC nominals accounted for, I turn to SPEC nominals.

4.3.2. Properties of SPEC

Samoan SPEC nominals were shown to only represent entities that exist, and specifically, that are presupposed (rather than asserted) to exist. Additionally, the existential force of these nominals can take scope above or below other operators, contra Collins (to appear).

The denotation in (28) transparently accounts for the presupposition of existence found on Samoan SPEC nominals. Because a SPEC nominal is only defined if there exists an entity with the relevant property in the world, nominals such as *tupu tama'ita'i o Ameriki* 'queen of America' (12a) or *sau'ai* 'giant' (12b) should not be permitted to cooccur with SPEC (as long as it is established knowledge that there are no queens of America or giants). (28) specifies that the condition of existence is presupposed, rather than asserted—this means that the problematic SPEC-marked nominals should continue to be infelicitous in questions, conditional antecedents, and under negation. As shown in §2.2.1, this prediction holds empirically.

When a SPEC-marked nominal is defined, it is denoted as a choice function over a property. I have further clarified that this choice function should be of the sort proposed in Reinhart (1997), in which existential closure may occur above or below other operators. This explains why speakers can licitly utter sentences such as (19), reprinted in (34), where the existential force of SPEC takes scope under the universal operator.

(34) So'o se aiga **le tagata pisa**.
'In every family there's **a noisy person**.' $\forall >$ SPEC

Although SPEC can be interpreted with narrow scope, Collins's (to appear) data, as well as speakers' tendency to translate SPEC as English definite 'the' or 'a particular', do demonstrate SPEC more often takes wide scope than narrow scope—all else being equal. If the choice function can be closed below an operator just as easily as above it, why should this be the case?

I propose that the trend observed in Collins (to appear) is the result of pragmatic inference, rather than an intrinsic semantic distinction between SPEC and NSPEC. Take, for example, Collins's data point in (18b), where NSPEC rather than SPEC is used to mean 'No one yet knows that thing' ($\neg > \exists$). NSPEC nominals represent sets of alternatives and result in a domain-widening interpretation; they will always have narrow scope with respect to negation, so it is therefore natural to employ NSPEC to mean 'no one'. Meanwhile, SPEC nominals are ambiguous between narrow and wide scope readings. Thus, using SPEC in this case, when NSPEC unambiguously results in the same interpretation, would not be communicatively expedient. However, outside of downward-entailing contexts like negation, the advantage of using NSPEC for narrow scope disappears. Thus, in the presence of universal quantification in (34), SPEC just as well as NSPEC can be used to indicate narrow scope. In this way, SPEC's tendency to take wide scope can be derived from properties of NSPEC that are independently motivated.

5. Conclusions

This article has proposed that Western Samoan articles, labeled as "specific" and "nonspecific", cannot be analyzed under any traditional view of specificity. That is, their distribution is not based on scopal differences, referentiality, or covert partitivity. Rather, I have proposed a simple analysis in which the primary distinction between SPEC and NSPEC is whether they produce alternatives. SPEC nominals are denoted by a singleton set containing a choice function over a property; NSPEC nominals are meanwhile denoted by a set of individuals, which an operator such as negation or the hypothesized assertoric operator must reduce to singleton. In addition, SPEC introduces a presupposition of existence, while NSPEC does not. The analysis suggests that interpretational effects of these articles are the result of not only semantic, but also pragmatic factors.

5.1. Positive outcomes

The analysis proposed not only accounts for the observed data, but it also explains speaker commentary (e.g., why SPEC nominals seem to emphasize property and NSPEC nominals emphasize individual) and why SPEC tends to take wide scope, despite not being required to. This latter point in turn explains why Collins's (to appear) corpora data overwhelmingly show SPEC taking wide scope over certain operators. I have argued that probing this further through speaker elicitation reveals SPEC's wide scope is merely a tendency, rather than a rule, and I suggest that it stems from pragmatic factors.

One additional positive outcome is that the observations made here are rather similar to Chung and Ladusaw's (2004) observations about the article system in related Māori, also in the Nuclear Polynesian family. While the Māori articles in question—*tētahi* and *he*—have a different distribution than the Samoan articles observed here, they nevertheless have an interpretational resemblance. Māori *he*-marked nominals emphasize an entity's property, representing "nonindividuation", while *tētahi*-marked nominals emphasize an entity's "individuation". The likeness to Samoan becomes apparent as Chung and Ladusaw neatly illustrate the contrast in a trip to the Te Papa Tongarewa Museum of New Zealand, where they describe exhibit labels:

> When an object is exhibited along in a display case or is the only object of its type on display, then it is typically labeled by an indefinite headed by *he*, not *tētahi* (e.g., *He Mere* 'Short Club Weapon', *He Tiki* 'Greenstone Pendant'). On the other hand, when several objects of the same type are exhibited together in a display case, the entire display, or each object in it, is typically labeled by an indefinite headed by *tētahi*, not *he* (e.g., *Ētahi Tiki* 'Greenstone Pendants', *Tētahi Tiki* 'A Greenstone Pendant' (in a display of several such pendants)). (Chung and Ladusaw 2004:68–69)

Chung and Ladusaw's observations lead them to analyze *he* indefinites as "composed as properties", while *tētahi* indefinites are "composed as (relevant but arbitrarily selected) individuals" (2004:69). Their phrasing hearkens back to some of the commentary made by Samoan speakers—notably, it recalls the distinction highlighted between emphasis on property and emphasis on individual of a group (in, e.g., (24)). The interpretational effect of SPEC is similar to that of *he*: the speaker highlights the property of the individual, as there are no alternatives being introduced of the same property. Meanwhile, NSPEC and *tētahi* are similar in that they insinuate the existence of other entities of the same property. For instance, the fact that a greenstone pendant is displayed alongside other, alternative greenstone pendants results in its modification by *tētahi*,

just as usage of NSPEC relates to the presence of alternatives of the same type.[8]

While Samoan articles and Māori articles certainly do not have identical distributions, their interpretational resemblance in conjunction with their genetic relation is confirmation that the intuitions developed here from speaker commentary are on the right track.

5.2. The outlook of "specificity"

It is important to note that the arguments presented do not advocate for a definitive definition of specificity, but rather an analysis for a particular language in which a characteristic called "specificity" has been said to play a role. That is, I do not claim that specificity is always related to the presence or absence of alternatives, as it is in Samoan. The contrasts observed in indefinites with respect to their scope, referentiality, or partitivity may indeed be real contrasts. They simply do not describe the contrast in Samoan articles.

In an attempt to unify "the motley family of non-specific markers" (3), Farkas and Brasonveanu (2021) propose a framework to assess indefinites (and determiners in general) as imposing either "stability" or "variation" across the assignment values of alternatives. For instance, the scopally specific interpretation of *Every student read a book* occurs when *a book* is assigned only one assignment value with respect to each of the students; in this case, the specific interpretation enforces "stability" across assignment values. On the other hand, scopal nonspecificity is obtained when the set of assignment values for *a book* with respect to each student is non-singleton. Here, variation is enforced.

The Farkas and Brasonveanu framework offers a radically expanded view of what specificity means in order to capture the "motley family" of specificity definitions originally observed by Farkas (1994). As a result, the Samoan article system could easily be described in their terms. SPEC introduces a singleton set, and thus stability; NSPEC, meanwhile, introduces alternatives and therefore variation. However, the benefit of lumping Samoan specificity in with, for example, Turkish partitive specificity and English scopal specificity is somewhat uncertain. Each analysis still requires unique additional details; the only factor which seems to motivate Farkas and Brasonveanu's quest for unification is the fact that each phenomenon has been labeled as "specific". One wonders whether the problem would have needed to be addressed at all had scopal, referential, and partitive specificity simply been given three different names when they were originally analyzed.

I conclude with the tentative thought that, given specificity systems can differ extremely, characterizing them as one phenomenon might not be so explanatory. Beyond definiteness, semantic contrasts in nominal interpretation appear to be extraordinarily diverse, with the Samoan article system representing just one way nominals might differentiate themselves. I suggest that the Samoan article system, labeled as a system based on "specificity", is unique from other systems identically labeled—and, by separating the label from the actual phenomenon, one can see this uniqueness.

[8] Incidentally, the descriptive literature tends to label *tētahi* as "specific" and *he* as "nonspecific"—the inverse of what we would expect if the parallel to Samoan articles were perfect. However, as has already been made clear, descriptive names can be vague or even erroneous; for example, *tētahi* and *he* have also been described as representing definiteness (Biggs 1969). In any case, my goal is not to claim that the semantics of Māori and Samoan articles are identical; rather, I intend to show that the same sort of deep linguistic intuition is present in both languages, and could plausibly be present in a common ancestor.

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