

SYNTAX, SEMANTICS, AND PRAGMATICS OF ACCUSATIVE-QUOTATIVE
CONSTRUCTIONS IN JAPANESE

DISSERTATION

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ABSTRACT

This dissertation is a data-driven exploration of the syntax, semantics, and pragmatics of the Japanese accusative-quotative construction (also known as the “subject to object raising” construction, or “exceptional case marking” construction (ECM), or “prolepsis” construction). An example: *Hanako wa Tarou o baka da to omotte iru* ‘Hanako believes Tarou to be an idiot’. The construction is a special type of propositional attitude statement. The possibility of more than one context of interpretation operating in the construal of such statements is a key to understanding the epistemic specificity that these constructions exhibit. Accusative subjects are interpreted as specific *with respect to the beliefs of the agent of attitude*. This reduces to syntax in the fact that unambiguously non-specific noun phrases cannot appear as accusative subjects. This is one aspect of a semantic and pragmatic constraint formulated to cover the following observation: Accusative-quotative constructions cannot embed predications denoting existential assertions *as evaluated under the domain of the belief operator generated by the matrix verb*.

Falling out of the constraint are a variety of syntactic facts, among which are: the lack of certain scope ambiguities involving existential quantification, the inadmissability of weak cardinal floating quantifiers hosted by accusative subjects, the impossibility of embedding specificational pseudoclefts in accusative-quotative complements, and the inadmissability of *wh*-accusative subjects construed with questions embedded in accusative-quotative complements. Furthermore, many apparent restrictions on the types of predicates allowed in the complements of accusative-quotative constructions

can also be seen as falling out of the semantic/pragmatic constraint as it applies to assertions about eventualities: Predications with past or future tense reference and predications referring to events or temporary states depend on eventualities for their interpretations. Such predications can only be licensed in accusative-quotative complements through either generic quantification over eventualities or through supplying a discourse antecedent eventuality in the context, which removes the need for existential quantification over eventualities.

One simple semantic/pragmatic constraint provides a unified and more observationally adequate account than analyses that refer to the distinction between tensed and un-tensed predicates, or between stage-level and individual-level predicates, or betweenthetic and categorical judgments, or between referentially transparent and opaque contexts.

Scope ambiguity between an accusative subject and an internal argument of the complement is attested (provided neither element involves existential quantification), suggesting that “reconstruction” does occur. This supports a raising analysis over a prolepsis analysis. The accusative subject is never the thematic argument of the matrix verb in the accusative-quotative construction. Contributions are also made to the project of identifying a natural class of accusative-quotative verbs (which includes some factive verbs): In contexts independent of the accusative-quotative construction, all verbs in the class must be able to select clausal complements, and all must be able to assign accusative case. That verbs generally selecting eventuality-dependent complements (e.g., *kitai suru* ‘expect’; *oboeru* ‘remember’; *mitukeru* ‘find’, etc.) do not support the construction is indirect evidence of the operation of the semantic/pragmatic constraint.

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LIST OF IMMEDIATE CONSTITUENT TREES

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ABBREVIATIONS

Abbreviations in glosses

ACC = accusative

EMPH = emphatic

ADDR = address

FOC = focus

AUX = auxiliary

GEN = genitive

BNFV = benefactive

HON = honorific

CAUS = causative

INST = instrumental

CJTR = conjecture

IPTV = imperative

CL = classifier

LOC = locative

CMTV = committative

NUM = numeral

COMP = complementizer

NMZ = nominalizer

CONT = continuative

NOM = nominative

CTRS = contrast

PASS = passive

COP = copula

PAST = past tense

DAT = dative

PLRL = plural

DECL = declarative

POT = potential

PRES = present tense

SFP = sentence final particle

Q = question

QF = quantifier

TOP = topic

Abbreviations in phrase-markers

A = adjective

N = noun

AGRoP = object agreement phrase

NP = noun phrase

AGRsP = subject agreement phrase

P = pre-/post-position

AP = adjective phrase

PP = pre-/post-positional phrase

CP = complementizer phrase

S = sentence

V = verb

IP = inflectional phrase

VP = verb phrase

Other conventions

I have taken the liberty of transliterating (almost) all the Japanese appearing here in a uniform way, even in the cited examples, with the exception of direct quotations in block quotes or quotation marks. As for the transliteration style, (lacking any discernible universal convention among linguists for Japanese) I have adopted something in between the *Nihonsiki* romanization and *pasokon nyuuryoku* style, with some exceptions. For particles I have *wa* in place of *ha*, *o* in place of *wo*, but *he* retained as *he* (to distinguish it from the orthographical convention some use for empty categories, “e”). Where there is the innovative [vowel + *soku-on*]/__# (used

mostly in quotative phrases), I have [vowel + *thu*]. I also add a single apostrophe (“’”) at points of hiatus between morpheme boundaries (without particular regard to diaeresis or synaeresis) and between moraic *n* and a following *ya-gyou* mora or vocalic mora. My motivation for adopting these conventions is to make the mapping from the alphabet to Japanese orthography more transparent, so that examples are not too difficult to read for native speakers.

I have also tried to render the part of speech glosses in a uniform way, adapting the cited examples where necessary. In the main text, phrases in examples are aligned vertically, and functionally different segments within phrases — where indicated — are separated by a hyphen (“-”) in both the example and the part of speech gloss so there is a one to one mapping for each arrayed pair of strings. (The mapping is preserved, but alignment has been sacrificed for examples in the footnotes.)

There are of course homophonic forms as well as forms with multiple functions, so the glosses may not appear consistent on the surface to someone not familiar with Japanese. For example, the locative (LOC) post-position *-ni* has the same form as the dative (DAT) case marker *-ni* and the continuative form *-ni* of the copula (COP), but the form *ni* may also be glossed as agentive *by* in passivized contexts, as *with* for arguments of certain predicates. Likewise, the genitive case marker *-no* has the same form as one of the attributive forms *-no* of the copula (COP), and the nominalizer (NMZ) *-no*, and in some nominalizations the form *no* may mark a subject or direct object but will be glossed as genitive (GEN). On the other hand the form that functions as a topic marker (TOP) *-wa* may be glossed as contrastive (CTRS) depending on context, and the particle *-mo* may be glossed as (FOC) or (NPI) or as “-also,” depending on the context. These are just a few examples of what might appear, on the surface, to be inconsistencies in practice, but are actually attempts to

clarify syntactic function.

I have also chosen (in cases where to do so has no bearing on the particular syntactic point at issue) to collapse some longer phrases in examples into continuous strings with periods (“.”) at points of *wakatigaki* for Japanese (kono.reizi.no.toori) and at word divisions for English (in.the.manner.exemplified.here) in the interests of saving space in examples. For such collapsed phrases, string-internally, I have mostly abandoned the policy of keeping a one-to-one mapping from Japanese to English that is adopted for part of speech glosses. This is in the interests of making the semantic function of the whole Japanese phrase transparent in the English part of speech gloss.

As for full translation glosses, when they are prefaced by “(lit.)” it means that while the English gloss may be ill-formed, it is a close indication of the composition of the (well-formed) Japanese sentence to which it corresponds. When they are prefaced by “(intended)” it means that the English is not a translation (the Japanese sentence itself being ill-formed) but is only an indication of the closest plausible interpretation a speaker might try to assign to the Japanese. Under a given example, when a translation gloss appears marked “≠” the gloss is judged as being unavailable as an interpretation for that example. These are usually contrast-paired with available interpretations. Some researchers give translations for ungrammatical sentences. Occasionally I retain their original glosses and note the provenance in the citation. Otherwise, for ill-formed Japanese, the translation gloss will read “(no gloss).”

Within citations, I adopt the following practices. Where I have changed a gloss or eliminated a bracketing in a cited example, the citation appears as “(adapted from [citation]).” Where I have manipulated a researcher’s example to make a different point, the citation appears as “(derived from [citation]).” For examples with disputable judgments, I specify in the citation the source of the judgment that is indi-

cated on the example. For examples with disputable glosses, I specify in the citation the source of the gloss that is supplied in the example.

Among the examples I cite, the usual convention for judgments of examples is observed (as far as I can tell):

“*” = grammatically unacceptable.

“?” = grammatically degraded.

“#” = pragmatically anomalous.

I try to follow this practice in presenting my own judgments, while noting at the same time that the distinction between grammatical and pragmatic unacceptability has never been satisfactorily articulated for the sort of constructions that I examine here, and cannot be taken for granted here, particularly since clarifying such distinctions is part of the goal of this study. I encourage readers who have their own intuitions to judge each example on its own merits.

The possibility of discrete elements alternating with \emptyset in examples is indicated by enclosing the string in question in parentheses: “(optional)”

Unacceptability of discrete elements in examples is indicated by marking the string with an asterisk inside the parentheses: “(*disallowed)”

Indispensability of discrete elements in examples is indicated by marking the parentheses enclosing the string with an asterisk on the outside: “*(obligatory)”

Alternation between discrete elements $\langle A, B, C \rangle$ in examples is indicated by slashes between members of an underlined tuple: “A/B/C”. An asterisk on a member indicates that it is not an alternative in that context.

I also want to clarify the use of the relational operators for precedence:

Read $A \prec B$ as “ A precedes B .”

Read $A \succ B$ as “ A succeeds B .”

These should not be confused other relational operators sometimes used to describe scope relations:

Read $A > B$ as “ A has wide scope over B .”

Read $A < B$ as “ A has narrow scope under B .”

The following symbols are used in interval semantics:

Read $A \leq B$ as “interval A is a sub-part of interval B .”

Read $A \circ B$ as “interval A overlaps interval B .”

For the sake of accuracy and theory-neutrality, wherever possible I substitute my term “accusative-quotative construction” for mentions of “raising-to-object” or “ECM,” or “cognitive verb construction,” etc., with regard to Japanese, and substitute “accusative subject construction” for mentions of “raising-to-object” or “ECM,” etc., with regard to languages in general, even when discussing the theories of other researchers, to the extent that this is possible without misrepresenting what they say. Sufficiently precise working definitions for my terms can be found in Section 2.1.

CHAPTER 1

INTRODUCTION

1.1 Constraints on accusative-quotative constructions

In this dissertation I explore the syntax, semantics, and pragmatics of the Japanese accusative-quotative construction (also known as the “subject raising to object” construction, “exceptional case marking” construction, or “prolepsis construction,” etc.). I show how a variety of patterns that appear in the syntax of this class of constructions (including some patterns that have not been noted before) can be attributed to one crucial commonality in the semantics and pragmatics involved in the use of acceptable utterances employing the Japanese accusative-quotative construction.

Here is a well-known example of the class of constructions in question, presented as the second member of a minimal contrast pair:

- (1) a. Yamada-wa Tanaka-ga baka da to omotte.ita.
 Yamada-TOP Tanaka-NOM fool COP COMP thought
 ‘Yamada thought that Tanaka was a fool.’
- b. Yamada-wa Tanaka-o baka da to omotte.ita.
 Yamada-TOP Tanaka-ACC fool COP COMP thought
 ‘Yamada considered Tanaka to be a fool.’

(adapted from Kuno (1976, pg. 26, #17a,b))

Both examples in (1-a,b) appear to embed a quotative clausal complement. The overt element that alternates in (1) is the form of the enclitic on the noun phrase *Tanaka*. The alternative in (1-b), *Tanaka-o* (the “accusative subject”) is widely supposed to be an example of accusative case. Of the two members of the minimal pair in (1), (1-b) is widely supposed to be the “marked” alternative. Finally, there doesn’t appear to be any difference in the truth conditions of the propositions expressed by the members of this particular minimal pair.¹

A great many claims (often conflicting) about the syntactic derivation and structure of sentences like (1-b) have been made. Kuno (1976) claimed, for example, that (1-a) is the derivational source for (1-b), which latter is the output of a transformational rule (“Raising”) allowing movement from subordinate clause subject position to superordinate clause object position. A competing analysis (“Exceptional Case Marking”) supposed the subordinate clause in (1-b) to be defective in structure and lacking in case assigning ability, leaving its subject in need of case, and its clause boundary permeable to rule operations relating elements from higher in the structure

¹Truth conditional equivalence does not hold across all such minimal pairs, at the very least in the sense that for some pairs, one member may have an ambiguous interpretation while its corresponding member does not. Neither is it the case that every grammatical accusative-quotative construction has a corresponding nominative-quotative alternative, nor is it the case that every grammatical nominative-quotative construction has a corresponding accusative-quotative alternative.

to elements included in the subordinate clause (in this instance, case assignment by a superordinate verb to a subordinate subject noun phrase) (Oshima (1979); Kaneko (1988), *inter alia*). A third analysis (“Prolepsis”) has the accusative element in (1-b) originate in the superordinate clause, from which position it functions as the logical subject of the subordinate clause through an identity relation with a (possibly null) pronominal argument occupying subject position in the subordinate clause (Saito (1983); Hoji (1991), Ura (1994, pg. 111), Takano (2003); Hoji (2005b), etc.). Some researchers propose combinations of these approaches, one of which involves the idea that a multiple nominative sentence is the derivative source, and the leftmost nominative argument (the “major subject”) either is raised to a still higher position (J. H. Yoon (2004)) or is “exceptionally case marked” *in situ* (J. M. Yoon (1989)).

Many different arguments have been offered in support for these theories and their variations. In the process of researchers arguing their pros and cons, a growing body of data (some of it hotly disputed) has emerged, and none of the theories proffered so far has been able to cover all the data in a unified way that is observationally, descriptively, and explanatorily adequate. Nevertheless, a dispassionate look at the data suggests that there is indeed a class of constructions in Japanese (exemplified by (1-b)), the members of which share clear syntactic properties and semantic properties. While this class exhibits some complex behavior with regard to syntactic processes (scope dependencies, scrambling, binding, etc.), it also exhibits some commonalities (both in syntax and semantics) that have gone un-noticed or under-appreciated in the past.

The characteristics of this construction seem contradictory on a number of levels. For example, while the grammatical case of the accusative subject depends (demonstrably) on the transitive properties of the superordinate verb, the accusative subject is

never itself the thematic object of the matrix verb. Furthermore, while the accusative subject functions as the subject of a (particular type of) predication expressed in the complement, it is not necessarily the thematic subject of an overt predicate in the complement clause.

In addition to these and other syntactic intractabilities, this class of constructions is also subject to semantic and pragmatic restrictions that have been poorly or only partially understood up until now. Part of the confusion has been due to the complexities inherent in statements of propositional attitude, of which both (1-a) and (1-b) are examples. In the context of such statements, propositions (and the reference of arguments therein) may be evaluated in both 1) the context of the belief world set of the agent of attitude, and 2) the context of utterance as well.² An appreciation of the independence of these multiple contexts for interpretation can clarify the peculiar behavior of accusative-quotative construction with respect to reference, to quantification, and to syntactic processes sensitive to these.

A survey of the data for accusative-quotative constructions suggests that there is a restriction operative on the accusative-quotative complement:

Empirical observation: Propositions expressed by the accusative-quotative complement cannot directly assert the existence of an entity or an eventuality³ *as evaluated with respect to the contextual domain defined by the belief world of the agent of attitude.*

²This sort of idea has been around at least since Kaplan (1979) suggested that expressions are evaluated according to indices (a world w , a time t , a location p , and a coordinate for speaker and another for addressee). See Farkas (1997) for more discussion.

³An early use of the concept of “eventualities” (in a very similar application) is by Bach (1977, pg. 640).

Directly falling out of this restriction are requirements that 1) the reference of the accusative subject be (at least) specific (in the aforementioned contextual domain), and 2) that predications involving episodic/existential predicates or specific time references either a) be generic or b) refer to eventualities with discourse antecedents (in the aforementioned contextual domain). In those cases where existential predicates (e.g., *aru* ‘exist’; *iru* ‘exist’, etc.) do appear in accusative-quotative complements, they typically function as elements in the description of the property ascribed to the accusative subject (syntactically, as predicates embedded in a sentential predicate).⁴

Using notions drawn from dynamic semantics (or context-update semantics) in the tradition of Lewis (1975); Heim (1982); Kamp (1981), etc., we can say that for accusative-quotative sentences, the propositions represented by accusative-quotative complements never directly introduce novel elements into the relevant contextual domain (the set of entities in the belief world set of the agent of attitude). Under these constraints the only propositions that can be expressed are statements of set membership and statements of equality about entities within that domain. I adopt the term “property ascription” to refer to this special sub-type of property attributions.

Here is how property ascription might be defined in a model for dynamic semantics.

Property ascription: Suppose the assertion of a proposition P updates a context

C_n (a set of propositions) to a new context C_{n+1} (that is, $C_n + P = C_{n+1}$).

⁴There are accusative-quotative constructions that include accusative subjects with definite reference (e.g., proper nouns, names of kinds, etc.) and overtly existential predicates:

- i. Hanako-wa Kamisama/yuurei-o sonzai-suru to omotte.iru.
Hanako-TOP God/ghost-ACC exist-do COMP think
‘Hanako believes God/ghosts to exist.

These are not existential assertions, as they presuppose the existence of the referent of the accusative subject noun phrase. Such statements ascribe to entities the property of existing in the actual world: membership in the set of all the entities in the actual world. Such statements do not add to the contextual domain.

Suppose further that for a context C_n the set of entities that exist in C_n (the contextual domain of interpretation) is D_n . Let \mathbf{M} be a function mapping C to D (the “ontological distiller,” so to speak). So $\mathbf{M}(C_n) \rightarrow D_n$, and $\mathbf{M}(C_{n+1}) \rightarrow D_{n+1}$ and so on. A proposition Q is a property ascription if $\mathbf{M}(C_n) \rightarrow D_n$ and $\mathbf{M}(C_n + Q) \rightarrow D_n$. That is, if asserting Q makes no change in the contextual domain, then Q is a property ascription. If we further suppose that eventualities (spatio-temporal locations) are elements of the domain of entities D , then the notion of property ascription will do what we want it to.

I will not offer a model-theoretic formalization beyond what I have outlined above. The basic idea is simple to grasp without the formalism, and I spend most of my time in this work demonstrating its empirical power. Now a wide variety of seemingly disparate patterns common to accusative-quotative constructions can be unified under a simple constraint:

Semantic/pragmatic constraint: The proposition expressed by an accusative-quotative complement must be a property ascription on the referent of the accusative subject *when evaluated with respect to the belief world of the agent of attitude* (the referent of the matrix subject noun phrase).

This constraint has predictable consequences in the syntactic realm. Some examples: 1) Unambiguously non-specific indefinite noun phrases (such as those that host weak floating quantifiers, for example) cannot appear as accusative subjects; 2) Scope ambiguity between universally quantified accusative subjects and quantified noun phrases of weak form in the complement predicate is impossible; 3) Predications that are dependent on spatio-temporal location (past and future tense, eventive, or existential predications, etc.) require either a discourse-familiar antecedent eventuality or

generic quantification over eventualities in order to be licensed; 4) Questions with *wh*-accusative subjects cannot be embedded in accusative-quotative constructions; 5) Specificational pseudocleft sentences cannot be embedded in accusative-quotative constructions. Let's look at each of these briefly in turn.

The failure of accusative subjects to float weak numeral-classifiers pairs is just one aspect of a much wider pattern in which unambiguously non-specific indefinite noun phrases are ruled out as accusative subjects, and indefinite noun phrases that are (other things being equal) ambiguous between specific and non-specific readings are — as accusative subjects — always interpreted as having specific reference (when evaluated in the belief world set of the agent of attitude).

- (2) Tarou-wa singata-ga/*-o san-syurui hatubaityuu da to
 Tarou-TOP new.model-NOM/-ACC three-CL on.sale COP COMP
 omotte-iru.
 think
 'Tarou thinks that (there are) three new models (that) are on sale.'

In combination with a predicate like *hatubaityuu da*, the expression [host NP ... [weak quantifier + classifier]] has an unambiguously non-specific indefinite reference (other things being equal). If we assume that non-specific indefinite reference ("weak quantification") has existential force (i.e., that it adds (+/ -) an element to the contextual domain), the pattern is accounted for by the **Semantic/pragmatic constraint**.

Note that universal quantifiers (and other "strong" or "proportional" quantifiers) can float from both accusative and nominative subjects:

- (3) Tarou-wa tenzi.site.aru.mono-ga/-o subete hatubaityuu da to
 Tarou-TOP items.on.display-NOM/-ACC all on.sale COP COMP
 omotte-iru.
 think

‘Tarou thinks that the items on display are all on sale.’

Assume that strong quantification is defined over non-empty sets (or at least that there is a presupposition that such sets are non-empty) and the pattern is accounted for.⁵ The entities denoted by the accusative subject are already in the contextual domain, so there is no need to assert their existence. This idea of context being a factor in whether a predication is existence-asserting or not is an important feature of the distinction in predicate types that I will be articulating.

While these facts fall directly out of the **Semantic/pragmatic constraint**, explanations based on referential transparency (Takemura: 1975-1976; Kitano: 1990; Takemura: 1994; Abe: 2002a) predict obligatory specific reference evaluated in the belief world set of the speaker/hearer (the wrong contextual domain), and are easily falsified. Analyses (e.g., Hornstein (1995)) that have the accusative subject raise to the matrix verb phrase and then further to a position outside the matrix verb phrase in order to escape existential closure (Diesing: 1992) incur the same error.

There are many other examples. Some patterns that have been assumed (up until now) to be reducible to syntax can be shown to be independently accounted for by the **Semantic/pragmatic constraint** above. For example, some syntacticians (Oka: 1988; Takano: 2003; Yoon: to appear) have claimed that quantified accusative subjects cannot show scope ambiguity with respect to quantified internal arguments

⁵Actually this is an over-simplification, but for the purposes of explication I offer (2) and (3) as a sort of minimal pair. See fn. 19 on pg. 203 in Section 4.1.2.1 for a discussion of this particular point in the context of predicate type.

of the complement predicate, and infer from this claim that the accusative subject is base generated outside of the complement clause. But all such claims have been based on examples employing existential (weak or cardinal) quantification for one or the other quantified phrase in the test stimulus. The **Semantic/pragmatic constraint** predicts that no interaction is possible under such conditions. But other combinations of quantifiers (e.g., universal quantifiers and disjunctive noun phrases) do show scope ambiguity (against the predication of the syntactic account):

- (4) Kenkyuusya-wa subete no wakutin-o [byougenkin A ka B]-ga
 Researchers-TOP all COP vaccine-ACC [pathogen A or B-NOM
 teikou-ga mitomerareru to handan-sita.
 resistance-NOM observe-PASS COMP judgment-did
- a. ‘The researchers judged that for all vaccines x , x is such that either pathogen A or pathogen B is seen to have resistance to it’
- b. The researchers judged that either pathogen A or pathogen B is seen to have resistance to all x , x a vaccine.’

Apparent restrictions on core predicates in the embedded clause (e.g., against episodic-existential predicates, and against past tense morphology) can also be shown to be not restrictions against a particular class of predicate or feature thereof, but rather to be an effect of the impossibility of introducing new elements into the relevant contextual domain. For example, where a spatio-temporal location is included in the description of the accusative subject, a past tense predicate in the complement is licensed, because once that predicate is supplied with an antecedent it can be interpreted independently of any existential assertion about a past eventuality:

- (5) a. *Hanako-wa zousui-o oisikat-ta to omotte.iru.
 Hanako-TOP chop.suey-ACC delicious-PAST COMP think
 ‘Hanako considers the chop suey to have been delicious.’
- b. Hanako-wa kinou.no.zousui-o oisikat-ta to
 Hanako-TOP yesterday’s.chop.suey-ACC delicious-PAST COMP
 omotte.iru.
 think
 ‘Hanako considers yesterday’s chop suey to have been delicious.’

The (heretofore un-noted) fact that the accusative-quotative construction cannot embed specificational pseudocleft sentences may also be directly related to this semantic principle through the notion of semantic type. Consider that non-specific indefinites can be thought of as predicates, or sets of entities. Non-specific indefinite reference involves asserting existence for some unidentified member(s) of that set. The presuppositional element in a specificational pseudocleft (parallel to a question) can also be considered a set of possible answers for which the specific value of the right answer has yet to be identified:

- (6) Zirou-wa Hanako.ga.ki.o.waruku.sita-no-wa/*-o
 Zirou-TOP what.hurt.Hanako’s.feelings-NMZ--TOP/-ACC
 Mariko.no.hanamoti.naranai.taido da to suisoku-sita.
 Mariko’s.stuck.up.attitude COP COMP guess-did
 (intended) ‘Zirou guessed what hurt Hanako’s feelings to be Mariko’s stuck-up attitude.’

In some sense, an expression denoting a set cannot appear as an accusative subject in Japanese when the intended referent is an unknown member of that set.

The fact that *wh*- noun phrases cannot associate with embedded [+Q] complementizers may also be attributable to the same peculiarity.⁶

- (7) a. Zirou-wa dare-o Mariko-no hahaoya da to omotta no?
 Zirou-TOP who-ACC Mariko-GEN mother COP COMP thought Q
 ‘Who did Zirou believe to be Mariko’s mother?’
- b. Zirou-wa Mariko_i-o dare-ga e_i hahaoya da-rou to
 Zirou-TOP Mariko-ACC who-GEN mother COP-CJTR COMP
 omotta.
 thought
 ‘Zirou thought of Mariko, “Who might her mother be?”’
- c. *Zirou-wa dare-o Mariko-no hahaoya na no ka to
 Zirou-TOP who-ACC Mariko-GEN mother COP NMZ Q COMP
 omotta.
 thought
 (lit.) ‘Zirou believed about whom is Mariko’s mother?’

Evaluated with respect to the contextual domain of utterance (in (7-a)), *dare* ‘who’ is interpretable. But when the agent of attitude is asking the question (in (7-b,c)), the accusative subject must refer (as in (7-b)), or the sentence is uninterpretable (as in (7-c)). In Section 5.1, I provide an array of arguments to show that the problem is not a question of syntactic domain, so reference to a semantic principle is motivated.

Syntactic analyses have not been able to unify these disparate patterns, but semantics might offer a solution. If property ascription is a statement of set membership, then the expression on the lefthand side of the \in function has to be one logical type lower than the expression on the righthand side. Two entities of the same logical

⁶In the examples that follow, the symbol “*e*” is used to express the presence of an empty category of unspecified type. Traces left behind by movement are sometimes symbolized with “*t*”. Null pronouns are sometimes symbolized by “*pro*” or “*PRO*” or “*pron*”. When any of these empty category appears, it will be co-indexed to a phrase with a subscript.

type can't participate in a property ascription unless the statement is an equation. But whether equations are expressed as identity between entities or as a relation between two individual sublimations (the sets of properties that individuals have at a particular index) asserting that relation involves no existential force. Defining property descriptions by reference to changes in the contextual domain subsumes more than one type of relation, and as such is a parsimonious way of capturing the facts.

Finally, an analysis referring to the **Semantic/pragmatic constraint** also accounts for the availability of non-specific interpretations of indefinite accusative subjects *when evaluated in the belief world set of the speaker/hearer* (i.e., with respect to the contextual domain of the situation of utterance).

- (8) Zirou-wa nanra.ka.no kairui-o biyaku da to omotte.iru
 Zirou-TOP some.kind.of shellfish-ACC aphrodisiac COP COMP think
 rasii.
 seem

‘There is some kind of shellfish x such that Zirou seems to believe x to be an aphrodisiac.’

The reference of *nanraka no kairui* ‘some sort of shellfish’ is specific with respect to the beliefs of *Zirou*, but can be non-specific indefinite with respect to the beliefs of the speaker/hearer. That is, (8) can be read as an assertion of the existence of *some sort of shellfish* fitting the description in question (when evaluated in the contextual domain defined by the context of utterance). The (heretofore un-noted) availability of such utterance level non-specific indefinite interpretations suggests that existential closure over discourse (Heim: 1982) can bind an indefinite accusative subject, even though that accusative subject is required to have specific reference in the more

immediate belief world set of the agent of attitude denoted by the matrix subject.

A purely syntactic solution would run into problems trying to account for this. Representationally, the reasoning is as follows: If the matrix verb is what projects the belief operator, then existential closure over the matrix verb phrase (Diesing: 1990, 1992) is not where Japanese indefinite accusative noun phrases get their existential force. In Japanese, existential force for indefinite accusative subjects is only possible at the contextual domain of the speaker/hearer. While accusative subject constructions like *The husband believed a unicorn to be in the garden* are possible in English, “parallel” constructions are not available in Japanese: **Otto wa ikkakuzuyu o niwa ni iru to sinzita*. In the English accusative subject construction, existence is being asserted and evaluated under that belief operator. For Japanese, this violates the **Semantic/pragmatic constraint** on the accusative-quotative construction. Japanese accusative subjects are (unlike English ones) required to be specific, but that (epistemic) specificity is not attributable to their having been raised out of the domain of existential closure in the matrix verb phrase (as Hornstein’s (1995) analysis, for example, suggests). It is precisely within the domain of the belief operator projected by the matrix verb that their specificity is required. I submit that their specificity is a result of a particular sort of relationship between the subject, the complement predication, and the contextual domain with respect to which that predication is evaluated. A theory of existential closure for the verb phrase doesn’t account for it. Furthermore, a theory that stipulates definiteness for an argument based on a particular sort configural relation to a predicate (e.g., Mahajan (1991)) will not be able to generate both interpretations. Introducing independent contexts of interpretation, however, solves the problem. That many other syntactic facts also fall out from the **Semantic/pragmatic constraint** suggests there is some utility to the idea.

1.2 Context of research

As my conclusions are reached inductively, presenting a survey of previous research and the data assembled thereby would be ideal, but the literature on the subject of Japanese accusative-quotative constructions is vast (and inconsistent), and limitations of space and time prevent me from supplying one here.

The accusative quotative construction is much discussed as a sort of acid test for applying syntactic theories to the Japanese language,⁷ because (among other things) of the mismatch that it exhibits between case assignment and grammatical role: In embedded contexts, the canonical case marking for subject noun phrases is nominative, not accusative. Only in certain specific syntactic contexts are mismatches between grammatical role and case marking allowed. But, while it is possible to formulate a structural description that covers most of these contexts, the specifics of Japanese accusative-quotative constructions prove to include exceptions to many formulations. In the peculiar context of Japanese, this mismatch does not find an immediately apparent motivation from among well-understood principles of grammar. This situation has complicated the development of a structural description for the construction, and has put some added strain on grammatical theories that seek to unify varieties of syntactic behavior under general principles.

Part of the difficulty involved in assigning specific derivational sources for accusative-quotative constructions lies in the fact that the construction exhibits complex patterns with respect to the types of components that may appear in it and the possible com-

⁷The Japanese language is a strictly head final, agglutinative, SOV language with, among other characteristics, *wh*-words *in situ*, *pro*-drop possible for all argument types, overt case marking, and relatively free phrase order. Common productive patterns include topic/comment sentences, multiple nominative sentences, and [S + *no da*] constructions. In many respects, Japanese resembles Korean.

binations and permutations thereof.⁸ Various attempts have been made to account for what distinguishes an acceptable pattern from an unacceptable one by reference to types of embedded predicates (e.g., Kuno (1976)), matrix-level argument structures (e.g., Saito (1983); Takano (2003)), or other grammatical processes, including such things as tense (e.g., Chomsky (1973); Oshima (1979); Kawai (2006)), aspect (Travis (1992), cited in Tanaka (1999, pg. 321)), and topic/focus (e.g., Takemura (1994); Rooryck (1997); Schütze (2001)). But there has yet to be proposed an account that even approaches observational adequacy (at least for Japanese).

In the interests of contributing to a more accurate account of what is and is not possible in Japanese grammar, I have tried to use up-to-date syntactic probes to investigate Japanese accusative-quotative constructions on their own terms. As a result, I have found more differences with, say, English accusative subject constructions, than I have found similarities. I have left for other researchers the task of reconciling the facts of Japanese accusative-quotative constructions with a Universal Grammar. But a syntactic account that takes into account my findings will be much farther along on the road to observational adequacy than any previous study.

Patterns of acceptability suggest that accusative subject constructions in general are subject to semantic and pragmatic conditions, as well as strictly syntactic ones, but attempts by syntacticians to formulate such conditions have typically lacked explicitness and descriptive power. Among some of the semantic principles thought to be involved are non-factivity (Pesetsky: 1991), inherent property (Borkin: 1984), and referential transparency (Kitano: 1990; Takemura: 1994). A catch-all relation of “aboutness” (which Chomsky (1977, pp. 80–81) suggests is in operation for topicalization

⁸For example, types of matrix verbs, types of accusative subject noun phrases, types of pronominal reference, types of embedded predicates, the type and scope of quantification, the type and scope of adjuncts, and the possible linear orders among elements of these types.

and relativization) is sometimes claimed to be a necessary and sufficient condition for the $\langle \textit{subject}, \textit{predicate} \rangle$ relation in the complements of this construction class but its application to accusative subjects can be shown to badly over-generate.

While this dissertation does not provide a description of the sufficient conditions for the generation of accusative subject constructions in general, or for Japanese accusative-quotative constructions in particular, it does articulate one necessary condition, by reference to which a variety of peculiarities in the syntax of the Japanese accusative-quotative construction can be explained.

1.3 The structure of this dissertation

In Chapter 2 I give a working description of the construction that (when combined with the **Semantic/pragmatic constraint** (Section 1.1, pg. 6)) comes closer to observationally adequacy than any other explanation proffered to this point. The advantage of having such a description is the independence from any specific syntactic theory that it affords.

I outline briefly some of the differences between the Japanese construction and the English counterpart to it, the Japanese construction being distinguished (mainly) by the presence of an overt complementizer and finite tense morphology in the complement, and a restriction against existential assertion by the proposition the complement expresses.

A working description encourages one to work with a wider data set than is typically considered under the exigencies of a specific syntactic theory. This leads to a discussion of the difficulty of defining the class of accusative-quotative constructions by

reference to case alternation (a common strategy in syntactic research). I also include a brief comparison with a related class of Japanese constructions: small clauses.

I go on to introduce some of the principle analyses in more detail, and indicate some of the challenges that the data set so defined poses to these. I distill the analyses into four basic types.

1. Raising to object
2. Exceptional case marking
3. Prolepsis
4. Double nominative derivation

The various analyses are referred to occasionally in the course of this dissertation, but it will be seen that no one analysis is sufficient to cover the data.

Then I explore some basic properties of the construction, examining the question of whether there is a natural class of verbs that support this construction, and what the thematic relations between the accusative subject and the predicates with which it co-occurs might be. While a natural class is difficult to isolate, the actual class can be characterized to some extent, and several erroneous claims made in previous research can be corrected. The class of verbs that support the construction must be able to select quotative complements, and also must be able to assign accusative case (in general), and furthermore includes some factive and semi-factive verbs. The accusative subject does not have to be the thematic subject of the core lexical predicate in the complement. Furthermore, it is never the thematic object of the matrix predicate. The program of defining the class of constructions has also pointed out the need to distinguish accusative-quotative constructions from string-similar constructions in

which a cognitive verb takes an accusative thematic object and a sentential adjunct. One of the tests for distinguishing the accusative-quotative construction from this “imposter” is the inability of the complement predicate to scramble to the left of the accusative subject (except under special circumstances).

Chapter 3 focuses on the scope behavior of quantified accusative subject noun phrases, examining how facts of scope asymmetry and scope ambiguity can be used to probe the syntactic structure of the accusative-quotative construction. The peculiar behavior of existential quantification in particular points to a restriction on existential assertion under the scope of a “belief operator”. Various attempts have been made to explain *some* of the same data according to theories of scope based on syntactic configuration, but they fall short of observational adequacy. As a case in point, one of the more well-articulated syntactic accounts of quantifier scope in Japanese (Aoun and Li: 1993) is applied to the accusative-quotative construction and shown to be only partially successful. In general, new facts brought to light concerning scope dependencies seem to favor a movement analysis over a base generated analysis.

This leads us to a discussion of the referential properties of the accusative subject in general. In Chapter 4, I present syntactic arguments in support of my basic thesis that a pragmatic requirement on expressing property ascription is operative in all tokens of the class of accusative-quotative constructions. The distribution and interpretation of floating numeral classifiers associated with accusative subjects, discussed in Section 4.1, corroborates the claim that there is a restriction against existential quantification. Expressions of the form [weak quantifier + classifier] cannot appear to the right of the case marking on accusative subject noun phrases they are associated with (unless they are interpreted partitively, as pronominal expressions). In contrast, strongly quantified (“proportional”) quantifier-classifier pairs can co-refer

with accusative subjects and “float” into non-contiguous positions to the right of these.

Weak pre-nominal quantification in the accusative subject noun phrase also is only interpretable as partitive with respect to some given discourse entity. When the head of an accusative subject noun phrase takes the form [weak quantifier + classifier], the noun phrase is interpreted with definite reference. A wider survey of noun phrases shows that non-specific indefinite noun phrases in general cannot appear as accusative-subjects. Where an indefinite accusative subject can be interpreted as specific, it is so interpreted. Otherwise it is ruled out as uninterpretable.

The impossibility of non-specific indefinite reference for accusative subjects seems to parallel the referential requirements for subjects of sentences formed on what are sometimes called “individual-level” (Carlson: 1977a,b) predications in root contexts in general.⁹ The distribution pattern for accusative subject noun phrases is the complement to that of contexts where a “definiteness effect” is seen, such as in the subjects of existential sentences. But the distribution pattern for accusative-quotative complement predicates also appears to be the complement of that for existential sentences (and internally-headed relative clauses, and most complements of perception verbs, etc.).

I use various strategies of “coercion” to show that if anything subsuming the stage/-individual distinction can also account for the distribution of predicates in the accusative-quotative complement, then whatever it is cannot be a partition on members of the class of predicates, nor just $\langle \textit{subject/predicate} \rangle$ pairs (or *nexi* Svenonius (1994)), but must be considered as a distinction between particular types of relation defined

⁹For example, subjects of double nominative constructions. Cross-linguistically, similar restrictions obtain for correlatives, appositive relative clauses, and targets for antecedent contained deletion, etc.

over the triple $\langle \textit{subject}, \textit{property}, \textit{contextual domain} \rangle$. I propose a distinction between “existence-asserting” predications and “property-ascribing” predications.

The apparent restriction on predicates is analyzed as an effect of the **Semantic/pragmatic constraint** as it applies to assertions about eventualities. An examination of predication in the accusative-quotative complement starts with some well-known claims about the restrictions thereon, many of which are either too restrictive or too weak, or both. A resistance to past tense marking on complement predicates is shown to be defeasible by either 1) supplying in the definite description of the accusative subject an antecedent to temporal reference for the predicate denotation, or 2) interpreting the past tense as a resultative (perfect) predicate. This allows reference to past intervals without assertion of their existence. The notion can be extended to episodic and existential predicates by reference to the notion of an “eventuality argument” somewhat along the lines of Davidson (1967); Kratzer (1989).

These “eventuality-dependent” predications can be licensed in accusative-quotative complements by either 1) supplying a discourse familiar eventuality to function as an antecedent, or 2) generically quantifying over an eventuality variable. Examples of “coercion” or “category shift” that appear to be counter-examples to predictions for predicate distribution based on the partition of predicates into stage-level or individual-level sub-classes can be shown to exhibit either one or the other of these “definite references” to eventualities.

In Chapter 5, I examine two kinds of clauses which cannot be embedded in accusative-quotative constructions. A question with a $[+wh]$ accusative subject construed with a $[+Q]$ complementizer on the embedded clause represents one clause type that is incompatible with the accusative-quotative complement environment. But considerations of scope and agreement for negative polarity licensing suggest that agreement

between an accusative subject and an embedded complementizer is (structurally) possible. A syntactic account ruling out agreement for questions is therefore made difficult, but a semantic explanation is suggested: A *wh*-noun phrase construed as interrogative is a non-referring expression, with the logical type of a set. Property ascription seems to be impossible if the “intended” referent is an unidentified member of the set denoted by the accusative subject noun phrase. If the only predication allowed by the complement express assertions of set membership, the logical type of the subject must be “lower” than that of the predicate. A parallel can be made between *wh*-accusative subjects and non-specific indefinite accusative subjects, which can also be seen as open sentences (non-referring expressions with the logical type of a set).

I also point out the impossibility of embedding specificational pseudocleft sentences in accusative-quotative complements (a pattern heretofore un-noted for Japanese), and an explanation parallel to that for questions is proposed. The *no*-headed topic is non-referring, and it functions as a predicate partitioning the contextually restricted context: It denotes a set.

Because the subject of a specificational pseudocleft is presuppositional (as is a *wh*-phrase in an information question), a ban on direct existential quantification over the accusative subject cannot by itself account for the ungrammaticality of such embeddings. On the other hand, a requirement for “epistemic specificity” for the reference of the accusative subject will not, by itself, cover the facts about scope dependency and predication-type noted in Chapters 3 and 4. Thus the utility of a generalization like the **Semantic/pragmatic constraint** is evident.

In Chapter 6, I introduce the puzzles that were the impetus for my tackling problems surrounding the accusative-quotative construction, review some of my findings that will be interesting to syntacticians in particular, and briefly discuss some of the implications of my analysis.

CHAPTER 2

PRELIMINARIES

I offer a **Working description** of the object of study in Section 2.1. Some of the general characteristics of the accusative-quotative construction are not well-recognized, and a precise description lends itself to a program of empirical research, which I think is helpful. In following Sections I discuss the difficulty of treating the class of constructions by analyses parallel to those for English accusative subject constructions, and the inadequacy of analysis that refer solely to case alternation. In order to refer to specific analyses, I review some of the more well-explored structural analyses in Section 2.6, but I do not endorse any one analysis. In Sections 2.7 and 2.8 I correct some claims made in the literature about the characteristics of the class of accusative-quotative verbs and offer 1) the results of a survey of Japanese verbs, and 2) some simple tests to distinguish between accusative-quotative constructions and constructions consisting of a transitive cognitive verb appearing with a direct object and a quotative adjunct. The basic objective here is to clarify the data set over which i will be making generalizations.

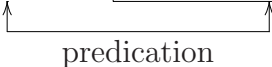
2.1 A working description

I first offer a description for the class of constructions exemplified in (1), and in (3) below.

- (1) a. Yamada-wa Tanaka-ga baka da to omotte.ita.
 Yamada-TOP Tanaka-NOM fool COP COMP thought
 ‘Yamada thought that Tanaka was a fool.’
- b. Yamada-wa Tanaka-o baka da to omotte.ita.
 Yamada-TOP Tanaka-ACC fool COP COMP thought
 ‘Yamada considered Tanaka to be a fool.’

(adapted from Kuno (1976, pg. 26, #17a,b) (repeated from (1) in Section 1.1))

Some of the details of the description above can be roughly schematized as follows:

- (2) ... NP-*o* (finite predicate) ... -*to* ... cognitive verb
- 

The schema in (2) is admittedly vague, and only gives good empirical coverage when accompanied by several provisos (e.g., it fails to include scrambling of the [predication + *to*] complex, which is allowable under special conditions — discussed in detail in Section 2.8). I present the schema as an introduction to a class of constructions that (at least for the purposes of observational adequacy) has never been defined sufficiently. Setting aside for the moment the semantic conditions for acceptability, here are some more problematic tokens of the class:¹

¹I chose the examples in (3) to give a sense of the complexity of the data: In (3-a) the accusative subject has a partitive reference in relation to some discourse referent (making it specific in one

- (3) a. Tarou-wa sono.doreka-o Mariko-ni uttetuke da
 Tarou-TOP one.or.the.other.of.them-ACC Mariko-DAT made.for COP
 to omotte.iru.
 COMP think
 ‘Tarou believes one (or the other) of them to be *just made for* Mariko.’
- b. Hanako-wa Tarou-o zenka-ga aru to
 Hanako-TOP Tarou-ACC criminal.record-NOM exist COMP
 suisoku-sita.
 guess-did
 ‘Hanako guessed Tarou to have a criminal record.’
- c. Sensei-wa sono.dansu-o ongaku-ga atte.i-nai
 Teacher-TOP that.dance-ACC music-NOM be.well.matched-NEG
 to miru.
 COMP see
 ‘The instructor reckons that dance to be such that the music is not well-
 matched.’

The sentences seem to share the properties sketched out in the schema in (2). The empirical power of the semantic generalizations that I make in subsequent Chapters needs independent grounds for the claim that sentences as diverse as those above actually constitute tokens of a well-defined class of constructions. A considerable portion of the discussion in this Chapter is meant to help make explicit the criteria for including a given token in the data set.

Assume for now that the examples in (1-b) and (3) exemplify what is known in general Japanese linguistics as the *ninsikidousi koubun* ‘cognitive verb construction’ (Masuoka: 1984).² For lack of a completely theory-neutral name, I will adopt the term

sense), but it is nonetheless indefinite in a sense. In (3-b) the overt predicate in the complement is an existential predicate, yet the proposition expressed by the complement is not an existential assertion. In (3-c) the accusative subject does not correspond to the thematic subject of the overt predicate in the complement.

²A more comprehensive list of names would include: “Subject-raising” (Kiparsky and Kiparsky: 1970), “Accusative subject construction” Wasow (1977, pg. 332), “Accusative and infinitive” (Bres-

“accusative-quotative construction” for the class of Japanese constructions in question as a working designation.³ The next challenge is how to formulate an observationally adequate description of the class. I adopt the following as a working definition of the construction:

Working description: The accusative-quotative construction is a Japanese grammatical construction built upon the argument structure of any superordinate verb of a somewhat heterogeneous class (sometimes referred to as *ninsiki dousi* ‘cognitive verbs’), some members denoting propositional attitudes (e.g., *sinziru* ‘believe’, *utagau* ‘doubt’, etc.) some denoting acts of communication (e.g., *mitomeru* ‘acknowledge’, *ituwaru* ‘misrepresent’), and some denoting actions that don’t even need sentient agents as subjects, (e.g., *syoumei suru* ‘prove’, *monogatari* ‘bespeak’, etc.). The superordinate verb takes a clausal complement (typically, a quotative *-to* phrase)⁴ that has finite morphology on the

nan: 1979, pg. 149), “Raising to Object” (RTO) (Postal: 1974), “Raising to Object Position” (ROP) (Steever (1977), “Exceptional Case Marking,” (ECM) (Chomsky: 1981), “Subject to Object Raising” (SOR), “Subject Raising to Object” (SRO), “Ascension,” (from Relational Grammar, (Perlmutter and Postal: 1983)), “Clause Reduction” (CR) (Sakai: 1996), “Transitive Quotation” (Martin: 1975, pg. 997), “Prolepsis” (Ura: 1994; Takano: 2003), “Defective Clausal Complement,” (Frank and Kroch: 1994), “Finite Small Clause” (M. Kuno (2002a)), “Accusative plus infinitive” (Runner: 2006) (and in Japanese, “*syukaku kuriage*,” “*syugo kara mokutekigo he no kuriage*,” “*zyousyou kisoku*,” “*reigaiteki kaku hyouzi*,” “*ninsikidousi koubun*” (Masuoka: 1984), “*syugo no taikaku-ka*,” “*in’you seibun no kuridasi*” (Moriyama: 1988, pg. 80), “[*-o -to*]-*gata in’youbun*” (Abe: 1997), etc.). I will refer to specific theoretical constructs by the names their authors give them. Otherwise I will refer to Japanese tokens of data (and the Japanese phenomenon in general) as “accusative-quotative constructions.”

³Wasow (1977, pg. 332) refers to the construction as the “accusative subject construction” in order to reflect a neutral position as to whether the complement subject gets “raised” or not. Regarding the noun phrase *Tanaka-o* in (3) above, it is not entirely uncontroversial as to whether its marking is accusative case (see footnote 18 on pg. 34 below), and while opinion converges on the point that its logical, semantic relation to the complement predicate is that of a “subject,” there is no consensus on the question of its grammatical function and syntactic position. I have chosen to coin the term “accusative-quotative construction” to refer to the specific properties of the Japanese data in order to avoid confusion with other Japanese constructions, such as the “small clause” construction, some “adversative passive” constructions, and the “coercive causative” construction. For other languages, and references to language typology, I follow Wasow’s usage: “accusative subject construction.”

⁴Tomoda (1976-1977, pg. 375, fn. 10, #ii) notes that there are other possibilities under special circumstances (e.g., *Haruka wa Hiroshi no koto o buzi ka dou ka anzita* ‘Haruka worried whether

rightmost inflecting element of the complement.⁵ The complement includes a predicate (not necessarily overt) associated with an accusatively marked noun phrase (which precedes the complement predicate, except under special circumstances). The accusatively marked noun phrase and the complement predicate with which it is associated are in a subject/predicate relation. The accusatively marked noun phrase is not necessarily the thematic subject of an overt predicate in the complement. The accusatively marked noun phrase is never the thematic object of the superordinate verb.

The **Working description** above by no means exhausts the generalizations that have been made about accusative-quotative constructions, and in fact only suffices to describe the class of constructions within the domain of grammatical sentences. That is, it is possible to construct sentences that satisfy the description above but nonetheless are not grammatical. This is in part due the fact that, in addition to sharing the defining characteristics listed above, the class including the examples in (1-b) and (3) are also subject to some semantic conditions, and while at least one necessary condition (specifically, the **Semantic/pragmatic constraint** defined in Section 1.1 on pg. 6) can be identified, a clear generalization about sufficient conditions remains elusive.

It is natural to suspect that a regular co-occurrence of overt characteristics (accusative arguments, quotative complementizers, the former preceding the latter, etc.) indicate the operation of a more “basic” principle. The syntactician’s initial posture is to assume that the operating principle is syntactic. Given a sufficiently articulated grammar and lexicon, a structural description might ultimately be sufficient to de-

Hiroshi was safe’).

⁵Past and present: respectively, for adjectives, *-katta*, *-i*; for verbs, *-ta*, *-(r)u*; for the copula, *datta*, *da*. The copula may be dropped in some cases (Tomoda: 1979). Further morphology for modality (the marking for futurity/probability, *-(y)ou*) may also be present.

fine the class of accusative-quotative constructions. But assigning a structure to an example or two is as far as some syntacticians get. This is common for theory-driven research, but following such a program does not always contribute to an observationally adequate description. To the extent that a **Working description** such as that above encourages us to look at a greater range of linguistic phenomena than would be examined under the exigencies of one syntactic theory or another, it is a heuristic that can help bring us closer to the goal of observational adequacy.

The definition above is just precise enough to exclude a variety of other grammatical construction types with *-o* marked subject noun phrases⁶ and so vague as to be inclusive enough for good empirical coverage. The description does not commit to the syntactic position of the accusative noun phrase beyond its order of precedence with respect to the predicate it is associated with (viz. subject \prec complement predicate).⁷

The description makes no claim about what might occupy the syntactic position for subject to the core lexical predicate of the complement phrase⁸ (if an overt predicate is indeed present).⁹ The description even makes no claim about whether the overt lexical predicate of the complement is necessarily the predicate associated with the

⁶An accusative subject can never be the thematic subject of a root predicate, but in multi-clausal constructions it finds several possible contexts in which to appear. For some examples, see fn. 13 on pg. 30. There are also other cases where the grammatical role of accusative noun phrases is unclear, such as tokens of the Japanese exclamatory construction that Konno (2004) calls the *Nani-o X-o* construction. (For an analysis of a similar construction in English, see Kay and Fillmore (1999).)

⁷The claim about precedence can be shown to be a robust empirical fact that correlates with other definitive characteristics of the accusative-quotative construction when the data set is controlled for certain exceptions. Including the claim about precedence here allows a schema like that in (2) below to be drawn. The exceptions (some constructions with “major object” accusative subjects, some with accusative subjects scrambled over variables, some complements with comparative predicates, and some concessive adjuncts) will be discussed in detail in Section 2.8.2.1.

⁸The possibilities for that syntactic position include, *inter alia*: 1) the accusative noun phrase itself, 2) a trace of its movement, 3) a resumptive pronoun (null or overt), 4) an empty category such as *pro*, 5) a referentially disjoint “major subject,” 6) a referentially disjoint thematic subject.

⁹As for the presence or absence of an overt predicate, it is observed that in the case of some nominal predicates, the copula may be dropped (Tomoda (1979); Takemura (1994)), and that in some exclamatory complements, even as little as an isolated sentential adjunct may suffice as a predicate (e.g. *Sono naiyou o masaka to omotta* ‘I thought of the contents: No way!’).

accusative subject (in order to allow for saturated complement predicates,¹⁰ perfective interpretations of past tense predicates, etc.). Furthermore, the accusative subject need not correspond to an obligatory phrase in the clausal complement:

- (4) ?Watasi-wa kono.kusuri-o [_{CP} atama-ga yoku naru to] (bakari)
 I-TOP this.medicine-ACC head-NOM good become COMP (just)
 omoikonde.ita.
 persisted.in.believing
 ‘I was so sure of this medicine that one becomes smarter.’

(adapted from Hoji (2005b, pg. 16, fn. 12, #i) citing Hoji (1991, #42) (my gloss))

The claim that the accusative subject noun phrase is not a thematic argument of the matrix verb also needs substantiating (and as a negative prediction, it is a strong claim), but as I will show in Sections 2.7 and 2.8, it patterns with the point made about syntactic precedence in a robust way, and deserves to be taken into account explicitly (as it is sometimes ignored, to the detriment of analysis).¹¹

I will substantiate the claims made in the **Working description** in subsequent Sections. When confronted by a problematic datum, the first impulse of syntacticians

¹⁰By this I reserve the possibility of “double nominative” or “multiple nominative” constructions in which a leftmost noun phrase is in a predicative relation with a saturated following clause (a “sentential predicate”) as sources for accusative-quotative constructions (first noted by Kuno (1978, pg.249, #80)). Often that noun phrase holds a thematic relation (usually genitive, and alternatively expressed by genitive marking) to an argument in the following clause (e.g., *Tarou ga asi ga itai* ‘Taro’s leg hurts’). Sometimes the following clause denotes relevant information with respect to the referent of that noun phrase insofar as it concerns the question under discussion (e.g., *Oranda no hana ga tyuurippu ga kirei da* ‘It’s Dutch flowers for which tulips are pretty’) but the semantic relation is such that the nominative case cannot be replaced by the genitive. Tateishi (1994) classified the double nominatives into two types along these lines: the “genitive raising” construction and the “major subject” construction (Kuroda: 1984). See also Kuno and Johnson (2005).

¹¹Hoji (1991, 2005b,c,a) has made enormous contributions toward extending the data set and deepening our understanding of the accusative quotative construction, but at a crucial point confuses a [thematic argument + sentential adjunct] construction (example (57) on pg. 92 in Section 2.8) with an accusative-quotative construction. The restriction on thematic role mentioned in the **Working description** is meant to safeguard researchers from generalizing over a contaminated data set.

is to test the generative power of their grammar against it. This requires assignment of a specific structural description. But the more we know about the accusative-quotative construction, the more we are led to wonder whether a faithful description of it is a purely syntactic question. It would be a mistake to begin with explicit claims about constituency, category, and configuration, if observational adequacy is a desideratum. It is expected that the general facts of the language, as they become clear, should point to a more explicit characterization of these points, and how they might be integrated into a general grammar of Japanese. The **Working description** also does not attempt to describe the semantic restrictions on this construction, and its peculiar pragmatics. These too will become clearer as we examine a broad range of data. An explicit specification of both syntactic and non-syntactic criteria for deciding membership in the class should serve as controls for syntactic experiments.¹²

2.2 Case, category, constituency, etc.

The existence of such a class of constructions poses several challenges to any analysis of Japanese syntactic structure. In (1-b) above, the proper noun *Tanaka* is construable as the subject of an embedded predicate *baka da* ‘to be foolish’. For subjects of finite predicates of embedded *to* phrases (specifically, of quotative complements), the nominative case marker most often predicted to appear is nominative *-ga*.¹³ In spite

¹²A working description complete with a **Semantic/pragmatic restriction** and sufficient conditions for “aboutness” would still need to be checked against the data. For example, in Hoji (2005a) a researcher uses an unambiguously non-specific indefinite negative polarity item [*roku na X*] (‘an *X* worth a damn’) as an accusative subject in stimulus sentences in a survey instrument. The **Semantic/pragmatic restriction** would predict all such sentences to be unacceptable or severely degraded. The fact that some informants accepted the stimulus sentence is unexpected, and suggests that there is language variation with regard to the accusative-quotative construction.

¹³ Among other possibilities for the marking of the logical subjects of Japanese embedded predicates, there are: *-no* in relative clauses and *ku-gohou* adjuncts, *-o* or *-ni* in “coercive” causatives, *-o* in indirect passives, small clauses, and *mi-gohou* adjuncts, *-ni* for “experiencer” subjects of certain stative predicates, etc. In *to* phrases specifically there is the possibility of nominative case being

of this, the proper noun *Tanaka* receives the accusative case marker *-o* instead,¹⁴ and this unpredicted marking on the subject is unaccompanied by any morphological change on the predicate with which it is associated.

Accusative marking on subjects is not in itself a rarity, but is usually restricted to certain contexts. Consider the subjects of non-finite complements of perception verbs in English (e.g., *I saw him smoke a cigarette*) or the subjects of causatives in both Japanese and English (e.g., *Kare o hayaku kaerasete* ‘I made him go home early’). In English such case-marking of subjects is associated with non-finite (or in some sense “reduced” or “defective”) predicates, and this idea can be extended to English accusative subject constructions with *to*-infinitive complements (e.g., *I believe him to smoke cigarettes*). It has often been suggested that the same idea might be applicable to Japanese. But for Japanese, what looks like nominative-accusative “case-alternation” in subject noun phrases is associated with occurrences of fully finite embedded clauses.¹⁵

Various syntactic tests have been applied to Japanese to reveal structural differences between constructions embedding clausal complements with nominative subjects and those embedding clausal complements with accusative subjects. For example, it can

“absorbed” by focus particles, including *-wa* in the case of topicalization or contrast, among others (e.g., *mo* ‘also’; *sae* ‘even’; *dake* ‘only’; *nomi* ‘only’, etc.).

¹⁴Analyzing *-o* as a case-marker is not an uncontroversial move. Mihara (1994b, pg. 139); (1994a), for example, analyses the *-o* of this construction as a post-position “performing a presentational function”. Marantz (1983); Sells (1990), and Harada (2005) deny that the accusative subject has any matrix object status at all. But a survey of accusative-quotative verbs suggests that transitivity is common to all matrix verbs supporting the construction in question (discussed in detail in Section 2.7 below).

¹⁵The idea that the boundary of a finite clause is a boundary to movement from inside the clause, and to case-marking from outside the clause is a theory-internal one due to Chomsky (1971a, 1973, 1981, 1986) and proponents of his Revised Extended Standard Theory. In order to reconcile the facts of Japanese with the broad outlines of the theory, either some assumptions about case and category need to be challenged, or a parallel analysis will have to be abandoned. The latter option seems to be enjoying some popularity, as more researchers adopt a “prolepsis” analysis for Japanese accusative-quotative constructions.

be shown that with respect to binding reciprocals and pronouns in matrix adjuncts, the accusative subject behaves like a matrix object argument, although it functions semantically as would a nominative subject of an embedded clause. Furthermore, in some respects (e.g., with respect to clefting, and in special cases, scrambling) the accusative subject and its associated predicate do not behave as a single constituent. Nevertheless, the accusative subject is required (in all but a few configurations) to precede its associated predicate, and shows evidence of occupying a higher structural position than the quotative phrase including that predicate.

Semantically, the subject-predicate pair embedded in (1-b) above functions as a proposition that is truth-functionally equivalent to that expressed by the clause *Tanaka ga baka da* ‘Tanaka is a fool’. Furthermore, in (1-b) above the matrix verb *omou* ‘think’ seems to take such a proposition as its theme. This verb is commonly said to belong to the class of “propositional attitude verbs”. In other contexts this verb can also take a direct object (albeit under strict selectional restrictions) and assign it accusative case. Verbs of this class can express (among other things) attitudes held by agents toward propositions.

Syntactically, this matrix verb can take a sentential complement in a *to* phrase. In such cases, *to* is commonly categorized as a complementizer (analogous to English *that* in the sequence [*that* + S]).¹⁶ As is often assumed for complementizer phrases (CPs) in general (Stowell: 1981), in Japanese, *to* phrases do not receive case markings

¹⁶Analyzing *to* as a complementizer is also not an uncontroversial move. Fukui (1986) also assumes that *to* is not a complementizer. Fukui (1995b,a) notes co-occurrence with question marker *ka* as problematic. Sakai (1998) does not treat it as a complementizer, but refers to it as a “quotative marker.” It might be possible to treat it as a post-position. Motomura (2003) gives several arguments for treating *to* as inherent case on CP, marking the semantic role of “content.” Oka (1988, pg. 192) also likens *to* to a case particle. Sells (1990) supposes that the *to* phrase is the direct object of cognitive verbs, but does not claim that *to* marks case. Unlike English CPs, a *to* phrase cannot appear as a predicate nominal in root context unless it is nominalized by an appropriate verb and nominal head (e.g., *iu koto* ‘said fact’ or *iu no* ‘said fact’).

(although they can appear with focus-markers such as the topicalizer *-wa*, with negative concordance markers such as *sika*, and with an attributive form of the copula *no* (sometimes analyzed as a genitive case marker)).¹⁷

One of the most disputed questions in the syntactic analysis of sentences like (1-b) above involves the constituency relation between the accusative-marked noun phrase and the quotative complement. For example, one might ask whether the accusative-marked noun phrase is included in the phrase headed by the complementizer *to*. If so, in what position? And, for some theories, we might also ask, at what level of representation? If the accusative subject is not included in the quotative complement, is it “higher up” in the structure? If so, how is it associated with the complement predication so that it may be construed as the subject (or as identical with the subject)? And what is the syntactic process by which the accusative subject winds up in its surface position? Is it base generated there? Does it move there from some lower position? Many of the recent arguments against a movement analysis have cited an apparent inability of a quantified accusative subject to take narrow scope with respect to a quantified internal argument in the complement predicate. But the negative evidence offered in support for this argument so far has always taken forms that can be ruled out by reference to an independent restriction against existential assertion in the proposition expressed by the complement predication (discussed in Section 3.6.1).

This question of syntactic derivation is of course related to an analysis for how the accusative case-marking is carried out. Does the matrix verb mark the noun phrase as it would any direct object (for example, as a sister to the verb)? Or does the matrix verb somehow “reach into” the sentential complement to mark the leftmost

¹⁷An indirect question in a *ka* or *ka dou ka* phrase (a CP) can take case (and can also appear as a predicate nominal), but a direct question in a *ka* phrase cannot Martin (1975, pp. 924–926).

noun phrase therein? Or is accusative case assigned in some other way? Or is *-o* not a case marker but rather a post-position, and the subject noun phrase a complement in a “proleptic” adjunct?¹⁸ There is support for the notion that the *-o* marking on accusative subjects is dependent on transitivity of the matrix verb. There are no accusative-quotative verbs that are unable to assign accusative case to thematic arguments in other contexts (discussed in Section 2.7).

In the earlier days of transformational syntax, researchers accounted for correspondences between constructions embedding clauses with nominative subjects and truth-conditionally equivalent “raised” sentences by relating one sentence type to another through movement transformations (according to a long established methodology (Katz and Postal: 1964, pg. 157)). Extending this method to analogous Japanese sentence pairs, it was supposed that (1-a) is the counterpart to (1-b) (or its “derivational source”). In the context of this type of contrast, sentences of the first type will hereafter be referred to as “nominative-quotative constructions”.¹⁹

The identity (or near-identity) of truth conditions for contrast pairs such as that in ((1-a), (1-b)) is a large part of the motivation for these analyses. One analysis proposed an optional rule for “subject raising (to object)” noun phrase movement.

¹⁸ Although not generally noted by the researchers who propose that the *-o*-marked noun phrase is in a base-generated matrix-level position, positing a post-position *-o* (Mihara: 1994b) solves the problem of disassociating the case-marking function of the matrix verb with the assignment of thematic role. However, the post-positional phrase analysis offers nothing in the way of an explanation for 1) the transitivity requirement on accusative-quotative verbs, and 2) the semantic constraints on the construction (a point completely neglected until J.H. Yoon (to appear, 2007)). Compare the accusative-quotative construction with those based on “proleptic” adjuncts such as *ni kansite wa* ‘with respect to’; *ni tuite wa* ‘about’; *ni tinande* ‘regarding’; *to ittara* ‘if you take’; *to ieba* ‘if you take’; *to iu to* ‘if you take’; *to kitara* ‘when it comes to’; *to kuru to* ‘when it comes to’; *to kite wa* ‘when it comes to’; *ni kagitte iu to* ‘when it comes to’; etc. There are no restrictions for these. A more likely possibility to consider is that the Japanese accusative subject originates from the adjunct phrase construction *-o motte* ‘taking’. There is some historical support for this (see discussion in Chapter 6 with regard to data in Kokuritu Kokugo Kenkyuuzyo (1951)).

¹⁹ The existence of pairs like ((1-a), (1-b)) suggests that this kind of case alternation is optional within the right structural description. The possibility of optional movement or optional application of rules is problematic for theories such as the Minimalist program (Chomsky: 1992, 1993, 1995).

Another viewed the noun phrase's adjacency to the verb as a condition for the optional application of a case assignment rule and adopted this as the explanation for case alternation.²⁰ At their earliest stage of theorization, transformations were assumed by many to be meaning-preserving (i.e., to have no effect on truth conditions). Given a contrast pair like the one formed by (1-b) and (1-a) then, the first burden for analysis was to account for 1) the apparent case-alternation between the sentence with embedded nominative subject and that with the accusative subject, and 2) in the case of English, the alternation between a fully inflected (finite) embedded predicate (as in the gloss of (1-a)) and the infinitive predicate (as in the gloss of (1-b)). But such analyses cannot be extended to the case of Japanese without considerable qualification.

2.3 Differences with English

The Japanese accusative-quotative construction differs from its English counterpart in a variety of ways. The most obvious syntactic differences are in tense morphology (the Japanese construction exhibiting the morphology of finite clauses) and category (the Japanese construction carrying on overt complementizer). But the Japanese construction also differs with English in patterned ways with respect to the variety of predicates that are allowable in the complement, the sort of noun phrase that is admissible as the subject of those predicates, and the inventory of verbs that can accept such constructions. To the extent that these are restrictions on what constitutes a possible sentence in the language, they must either be accounted for somehow in

²⁰There are other contexts where alternation between *-ga* and *-o* marking (i.e., alternation unaccompanied by other surface changes) is attested: in object arguments of certain stative predicates (*Sore ga/o hosii* 'I want that'), and in indirect passive constructions (*Kare wa musume ga/o homerareta* 'He had his daughter be praised'). Sells (1990) suggests that the accusative-quotative construction is an extension of this phenomenon.

the syntax, or find a plausible explanation in semantic selection or pragmatics. Here are a few salient differences between accusative subject constructions in English and Japanese accusative-quotative constructions:

1. The set of English cognitive verbs does not map completely onto cognates in Japanese, and vice-versa. For example, verbs such as *expect*, *remember*, and *discover* do not find counterparts in the set of Japanese accusative-quotative verbs. On the other hand, factive Japanese verbs that support accusative-quotative constructions (such as *koukai suru* ‘regret’, *yorokobu* ‘celebrate’, etc.) don’t have counterparts in the set of English accusative subject verbs.
2. A comparison with English with regard to complement type shows the Japanese construction to be less restricted in some ways. For example, it can embed questions (e.g., *Hanako wa musume no koto o hatasite moraite ga iru darou ka to omotta* ‘Hanako thought about her daughter, “Could there be any takers?” ’) and exclamations (e.g., *Hanako wa musume no koto o nante bukiyou da to omotta* ‘Hanako thought about her daughter, “How clumsy!” ’). On the other hand, specificational pseudoclefts can be embedded in English accusative subject constructions (e.g., *We figured out what smelled so bad to be a dead opossum in the crawlspace*), whereas this is impossible in Japanese.
3. With regard to complement predicates, the Japanese construction exhibits an *apparent* restriction against episodic/eventive predicates, predicates denoting temporary states, and existential predicates, while English allows these fairly freely: **Kanozzyo o ima ni mo koko ni mukatte iru to omou* ‘I believe her to be on her way even now’.

4. While expletives and (unmodified) subjects of idioms can appear as accusative subjects in English (e.g., *I suspect it to be snowing in Denver*; *They discovered the cat to be already out of the bag*, etc.), there is no corresponding phenomenon in Japanese.
5. The predicates of clausal complements in English accusative subject constructions must be infinitive in form, and the clausal complements themselves lack complementizers, but in Japanese, the predicates show tense morphology and the clausal complements show overt complementizers.
6. Accusative subjects in English only correspond to subject positions in the associated predicate, but in Japanese there is no such restriction. Only elements that are indispensable elements of the property attributed by the predicate are absolutely ruled out as candidates to become accusative subjects. (But note that positions for *-ga* marked objects are generally bad candidates for gaps corresponding to accusative subjects.)
7. The attitudes expressed in English accusative subject constructions can be interpreted as attitudes about propositions expressing existential assertions about entities (e.g., *Bill believes there to be a mistake in the derivation*). This is impossible in the Japanese accusative-quotative construction.
8. The attitudes expressed in English accusative subject constructions can be interpreted as attitudes about propositions expressing existential assertions about eventualities (e.g. *A traffic-light camera photo proves Dan Williamson to have run a red light at the intersection of N. Fourth Street and E. Nationwide Boulevard at 3:04 p.m. on October 23, 2007* (Williamson: 2007, pg. 5)). This is also impossible in the Japanese accusative-quotative construction.

2.3.1 A note on idioms

Regarding the differences between between English and Japanese with respect to the ability of idioms to appear as accusative subjects (no. 4 in the list above), observe the Japanese:

- (5) a. ?Tarou.ni.kansite-wa watasi-wa kao-o hiroi to omou.
 Regarding.Tarou-TOP I-TOP face-ACC wide COMP think
 (i) ‘As for Tarou, I believe his face to be wide.’
 (ii) \neq ‘I believe Taro’s popularity to be widespread.’
- b. Watasi-wa Tarou-no kao-o hiroi to omou.
 I-TOP Tarou-GEN face-ACC wide COMP think
 (i) ‘I believe Taro’s face to be wide.’
 (ii) \approx ‘I believe Taro’s popularity to be widespread.’
- c. Watasi-wa Tarou-no kao-ga hiroi to omou.
 I-TOP Tarou-GEN face-NOM wide COMP think
 (i) ‘I believe Taro’s face to be wide.’
 (ii) ‘I believe Taro’s popularity to be widespread.’
- d. Watasi-wa Tarou-o kao-ga hiroi to omou.
 I-TOP Tarou-ACC face-NOM wide COMP think
 (i) ‘I believe Taro’s face to be wide.’
 (ii) ‘I believe Taro’s popularity to be widespread.’
- e. Watasi-wa Tarou-ga kao-ga hiroi to omou.
 I-TOP Tarou-NOM face-NOM wide COMP think
 (i) ‘I believe Taro’s face to be wide.’
 (ii) ‘I believe Taro’s popularity to be widespread.’

In (5-a) the noun phrase *kao* that corresponds to the subject of the idiom chunk *kao ga hiroi* ‘be popular’ appears unmodified as an accusative subject, and as such it can only receive a literal interpretation. It appears that elements that are indispensable

parts of the description of the property in the predication cannot “raise” directly. Alternatively, it may be that Japanese accusative subjects (unlike English ones) are required to *refer* (or at least be discourse-connected, as in the somewhat degraded (5-b)).²¹ This is in contrast to English, which allows sentences like *The lobbyist believes the cat to be out of the bag*.

The proposal about indispensable elements of predicates is reminiscent of Tanaka’s (1992, pg. 55) proposal for explaining the inability of some internal arguments in the complement to scramble to the left of the accusative subject (e.g., Kaneko’s **[Eigo ni]_i Tanaka ga Yamada o t_i kuwasii to omotte iru* (intended) ‘In English Tanaka thought Yamada to be well-versed’ (1988, pg. 284, #51b)). Extracting all the arguments from a given predicate is disallowed:

(6) **[t_i t_j PREDICATE]*

(Tanaka (1992, pg. 55, #43))

The pattern seems to extend to other predicates not necessarily idiomatic. For example, *kaedemitu no nioi* ‘a smell of maple syrup’ is an indispensable argument in the predicate *kaedemitu no nioi ga suru* ‘have a smell of maple syrup’. Therefore it is ruled out as an accusative subject in a sentences like **Ano serori ni kansite wa kaedemitu no nioi o suru to watasi wa omou* (intended) ‘With regard to that celery, I believe a smell of maple syrup to be in evidence’.²²

²¹Lappin (1984, pg. 243) notes that idiom constituents are not referring expressions.

²²Predicates like *oto ga suru* ‘make a sound’; *azi ga suru* ‘have a taste’, etc. are arguably “eventuality dependent” (for a definition, see discussions in Chapter 4). This alone can be sufficient to rule out their appearance as accusative subjects, assuming a semantic constraint against existential assertion (in the relevant domain) by the proposition expressed in the complement.

Of the well-known syntactic analyses proposed for the Japanese accusative-quotative construction, some (e.g., Oshima (1979); Ohta (1997); Kawai (2006), *inter alia*) look for ways to reconcile the syntactic differences between English accusative subject constructions and Japanese accusative-quotative constructions by redefining categories in Japanese to allow parallel explanations. This theoretical tension has only increased as more data has come to light and syntactic probes of greater delicacy have been developed. In some cases programs of research that strive to unify both languages under one analysis have actually gotten in the way of giving an observationally adequate description to the class of grammatical constructions. In the process, the Japanese side has often suffered most neglect.

2.4 Nominative-quotatives vs. accusative-quotatives

A little examination will show how problematic it is to describe the class of constructions in only syntactic terms. Approaching the problem methodically (and without carrying along too many theoretical assumptions) is a challenge. Comparing minimally different sentence pairs is a traditional place to start.

- (7) a. Saisyo-wa gakuseitati-ga ano siken-ga muzukasi-i to
 At.first-TOP students-NOM that test-NOM difficult-PRES COMP
 omotta.
 thought
 ‘At first students thought that that test was difficult.’
- b. Saisyo-wa gakuseitati-ga ano siken-o muzukasi-i to
 At.first-TOP students-NOM that test-ACC difficult-PRES COMP
 omotta.
 thought
 ‘At first students considered that test to be difficult.’

On the surface, the two sentences above differ only in the case-marking of the noun phrase *siken* ‘test’. They are both perfectly grammatical, and they are truth-conditionally equivalent.²³

There are indefinitely many pairs of sentences in Japanese such that their members differ from each other only in this minimal way. For each such pair one might be tempted to ask, “Is one derived from the other?”²⁴

²³Truth-functional equivalence does not hold for minimal pairs with quantified noun phrases in the complement. On the pragmatic level as well, interpretational possibilities can differ in a variety of ways, depending on the sentence and its context of use.

²⁴In the methodology of transformational grammar, the challenge would be to assign a “structural description” for the application of a transformational rule to the primitive member of the pair, then posit a rule that relates two members of any given pair, obtaining one (derivative) form through a manipulation of the other (primitive) form.

Suppose the members with the nominative embedded subjects are in some sense more basic. We can define a set of ordered pairs such that elements with nominative-marked embedded subjects (let it be G) comprise the domain, and elements with accusative embedded subjects (let it be O) comprise the range. We may then describe a relation (\mathbf{S}) between the domain and the range in the form of a transformational rule \mathbf{S} ($\mathbf{S} \subseteq G \times O$).

In this case (because of the way we have set up our domain and range, by definition), the rule would be a bijective function from a set of nominative-quotative constructions to a set of accusative-quotative constructions. From the standpoint of pure descriptive adequacy, we could (given our original idealization) just as well write a rule that is the inverse of \mathbf{S} : \mathbf{S}^{-1} . Of course, any rule would preferably conform to (and exploit) the principles that determine case-marking in general. Assuming we can formulate such a rule, that rule would be descriptively adequate for the phenomenon of nominative/accusative case-alternation in clauses embedding quotative complements, *given our idealized data set*. But for all the plausibility of the program I have just outlined, we have assumed almost all of what we had to prove: The real data set is much more messy.

But it would be a mistake to assume that any such analysis could “cover” the construction in an observationally adequate way. Why? First, not every (grammatical) nominative-quotative construction maps “truth-condition-equivalently” onto a structurally comparable (grammatical) accusative-quotative construction.²⁵ This is easily demonstrated by a variety of minimal pairs:²⁶

- (8) a. John-wa itigo-ga uridasityuu da to omotte.ita.
 John-TOP strawberries-NOM on.sale COP COMP thought
 ‘John thought that (there were) strawberries (that) were on sale.’
- b. *John-wa itigo-o uridasityuu da to omotte.ita.
 John-TOP strawberries-ACC on.sale COP COMP thought
 (intended) ‘John believed there to be strawberries to be on sale.’
- (9) a. John-wa sinkiroku-no zyuritu-ga muzukasii to
 John-TOP new-record-GEN establishment-NOM difficult COMP
 omotta.
 thought
 ‘John thought that an establishment of a new record would be difficult.’

²⁵This point was made by Bresnan (1979, pg. 177, #56a,b [1972]) with respect to English *that*-complements and accusative subject complements:

- i. (a) She believes that these problems are beginning to be more generally recognized.
 (b) ?She believes these problems to be beginning to be more generally recognized.

Borkin (1984) does an extensive study of the question in English, and is essential reading for studies of the semantics of accusative subject constructions.

²⁶I will leave an explicit formulation for why minimal pairs such as these include unacceptable members until Section 4.2.

- b. *John-wa sinkiroku-no zyuritu-o muzukasii to
 John-TOP new-record-GEN establishment-ACC difficult COMP
 omotta.
 thought
 (intended) ‘John considered an establishment of a new record to be difficult.’

(adapted from Marantz (1983, pg. 39, #28c) citing M. Saito (p.c.))

- (10) a. Kanozyo-wa [_{IP} sono.otoko-ga katute sagisi da-ta] to
 She-TOP that.guy-NOM once swindler COP-PAST COMP
 sitte.iru.
 knows
 ‘She knows that that guy used to be a swindler.’
- b. *Kanozyo-wa [_{IP} sono.otoko-o katute sagisi da-ta] to
 She-TOP that.guy-ACC once swindler COP-PAST COMP
 sitte.iru.
 knows
 (intended) ‘She knows that guy to have been a swindler.’

(derived from Kitagawa (1986, pg. 264, #39b) (my gloss))

It is relatively easy to construct minimal pairs for which the accusative counterpart is bad. The conditions for constructing grammaticality pairs where the situation is reversed are more subtle. Still, it can be shown that not every (grammatical) accusative-quotative construction maps onto a structurally comparable (grammatical) nominative-quotative construction. The first researcher to note the existence of accusative-quotative sentences without nominative-quotative counterparts is Takemura (1975-1976):

- (11) a. *Kurayami.de.mituketa.toki, boku-wa Tarou-ga dorobou da
 In.the.dark.found.when I-TOP Tarou-NOM thief COP
 to omotta.
 COMP thought
 ‘When I found him in the darkness, I thought (it was) Tarou (who) was
 a thief.’
- b. Kurayami.de mituketa toki, boku-wa Tarou-o dorobou da
 In.the.dark found when I-TOP Tarou-ACC thief COP
 to omotta.
 COMP thought
 ‘When I found him in the darkness, I thought Tarou to be a thief.’

(adapted from Takemura (1975-1976, pg. 185, #18))

As Takemura notes, (11-b) is quite natural with focus stress on *dorobou* ‘thief’. The same cannot be said for (11-a), or more specifically, a different context would have to be invoked for the nominative-quotative alternative: If the focus stress is on *dorobou*, the presupposition is that *boku* ‘I’ knew *Tarou*’s identity at the time of discovery.

Tomoda (1976-1977) also gives some early examples, of which the following is particularly interesting because of anti-veridical the nature of the matrix verb:

- (12) a. *John-wa Mary-ga Betty da to kantigai.sita.
 John-TOP Mary-NOM Betty COP COMP mistake
 ‘John wrongly thought that Mary was Betty.’
- b. John-wa Mary-o Betty da to kantigai.sita.
 John-TOP Mary-ACC Betty COP COMP mistake
 ‘John mistook Mary to be Betty.’

(adapted from Tomoda (1976-1977, pg. 362, #5,6) (Tomoda’s judgements))

In (13) below is another example that should illustrate the same point about the state of mind of the agent of attitude and how this can be expressed:

- (13) a. ??Watasi-wa sono hosi-ga anata da to omotte ansin-suru
 I-TOP this star-NOM you COP COMP think feel.relieved-do
 no.
 NMZ
 (Lit.) ‘So I think this star is you and I am comforted.’
- b. Watasi-wa sono hosi-o anata da to omotte ansin-suru
 I-TOP this star-ACC you COP COMP think feel.relieved-do
 no.
 NMZ
 ‘(So), imagining this star to be you, I am comforted.’

The three minimal pairs above seem to share a common characteristic: The nominative-quotative construction seems to encourage a *referentially opaque* interpretation of the embedded clause, which leads to an interpretation in which the agent of attitude is described as holding an untenable belief.

“Referential opacity” (in this context) refers to interpretations without the possibility of substitution of names: The assumption is that the descriptions of the entities referred to in the object of attitude (i.e., in the proposition expressed by the complement clause) are also part of the understanding of the agent of attitude. The intended counterfactual nature of the belief is only preserved in a *referentially transparent* context, which the accusative-quotative construction allows.

A different sort of example that uses temporal reference to force the issue is the following:

- (14) Me.no.mae.ni.sita.ima-wa anata??-ga/-o
 Now.with.you.before.my.eyes-TOP you-NOM/-ACC
 gen'eki.no.toki-wa tuyok-atta da-rou to miru.
 when.still.on.the.job-TOP strong-PAST COP-CJTR COMP see
 ‘Seeing you now, I see you to be such that you must have been strong in your
 prime.’

Here the object of perception referred to in the temporal adjunct (an object fixed in the narrative present) can’t be co-extensive with the subject of a past tense complement predicate. But these matrix level restrictions on reference seem to be defeasible in accusative-quotative constructions: The description of the accusative subject doesn’t impinge on content of the proposition which is the object of belief.²⁷

It is also worth noting that imperative mood will also produce the same sort of contrast: an ungrammatical nominative-quotative construction (15-a), a grammatical accusative-quotative construction (15-b) (and, incidentally, a grammatical small clause construction (15-c)).

- (15) a. *Sore-ga arigata-i to omo-e!
 That-NOM rare-PRES COMP think-IPTV
 (no gloss)
- b. Sore-o arigata-i to omo-e!
 That-ACC rare-PRES COMP think-IPTV
 ‘Consider it to be a blessing!’

²⁷I will return to the question of referential transparency and opacity briefly in Section 3.4 in order to show that referential transparency is a potential — but not a necessary — interpretation of the accusative-quotative construction. There are various cases where the description of the accusative subject does turn out to be very important to the interpretation of the accusative-quotative complement predication: One has to do with the scope of quantification, and another has to do with providing antecedents for temporal reference of past tense predicates.

- c. Sore-o arigata-ku omo-e!
 That-ACC rare-CONT think-IPTV
 ‘Consider it a blessing!’

A survey of contrast pairs in which one member or another is ungrammatical suggests that while the assumption of truth-conditional equivalence between members of grammatical pairs may obtain, the context of interpretation may have a bearing on whether one or the other member is appropriate. At the level of meaning, there are also scope ambiguities and scope asymmetries evident in accusative-quotative constructions that don’t match the scope interpretations for corresponding nominative-quotative constructions (discussed in detail in Chapter 3).

In addition, there are patterns that suggest differences in syntactic structure between accusative-quotative constructions and their corresponding nominative constructions. For example, binding requirements (e.g., for a reciprocal pronoun in a matrix verb phrase adjunct, as in (16)) can rule out a nominative-quotative construction where an accusative-quotative construction can work:

- (16) Mieko-wa huta-ri-no kibousya*-ga/-o titioya-ga
 Mieko-TOP two-people-GEN applicants-NOM/-ACC father-NOM
 douitu.zinbutu da to otagai-no rirekisyo-niyotte
 identical.person COP COMP each.other-GEN resume-by.means.of
 dantei-si-ta.
 determine-do-PAST

‘Mieko determined the two applicants — by means of each other’s resumes — to be such that their father is the same person.’

Resumptive pronouns co-indexed with the accusative subject are possible in some accusative-quotative complements, while corresponding nominative-quotative constructions are ruled out:

- (17) John-wa [Mary-no yokogao]_i*-ga/-o [_{S'} [_S sore_i-ga totemo
 John-Top Mary-GEN profile--NOM/-ACC that-NOM very
 utukusi-i] to] omot-ta.
 beautiful-PRES COMP think-PAST
 ‘John thought of Mary’s profile that it was very beautiful.’

(derived from Takezawa (1987, pg.117, fn. 18, #ii))

In addition, “major objects” (viz. noun phrases having undergone “*no koto* incorporation,” i.e., expressions of the form [_{NP} NP + *-no koto*]) can appear as accusative subjects, but not as embedded subjects of corresponding nominative-quotative constructions:

- (18) a. *Yamada-ga musuko-no koto-ga baka da to
 Yamada-NOM son-GEN matter-NOM fool COP COMP
 omot-te i-ta.
 think-CONT be-PAST
 (no gloss)
- b. Yamada-ga musuko-no koto-o baka da to
 Yamada-NOM son-GEN matter-ACC fool COP COMP
 omot-te i-ta.
 think-CONT be-PAST
 ‘Yamada thought his son to be a fool.’

(Kuno: 1976, pg. 42, #97a,b)

Furthermore, an accusative-subject can be scrambled to the left of the matrix subject, while an embedded subject of a corresponding nominative-quotative construction cannot:

- (19) a. *Tanaka_i-ga, Yamada-wa e_i tensai da-to
 Tanaka-ACC Yamada-TOP genius COP-COMP think-CONT
 omot-te i-ta.
 be-PAST
 (no gloss)
- b. Tanaka_i-o, Yamada-wa e_i tensai da-to
 Tanaka-ACC Yamada-TOP genius COP-COMP think-CONT
 omot-te i-ta.
 be-PAST
 ‘Tanaka, Yamada considers to be a genius.’

(adapted from Kuno (1976, pg. 26, #28b, 29b))

There are yet other types of non-correspondence, but at this point it should be clear that the relationship between grammatical nominative-quotative constructions and grammatical accusative-quotative constructions is too complicated to be captured in a simple rule for case alternation under the assumption of truth-conditional equivalence.²⁸

²⁸Consider more realistic data sets: Let the set of grammatical nominative-quotative constructions be domain N and the set of grammatical accusative-quotative constructions be codomain A . We can propose a “raising” rule \mathbf{R} , but \mathbf{R} applied to N will not yield A . For the real set of data, our rule \mathbf{R} is neither a function nor even a relation. The same must be said for any “lowering” rule \mathbf{L} applied to A . Expressed set-theoretically,

$$\mathbf{R}(N) \cup A \neq A$$

$$\mathbf{R}(N) - A \neq \emptyset$$

$$\mathbf{L}(A) \cup N \neq N$$

$$\mathbf{L}(A) - N \neq \emptyset$$

The fact that there is no relation in one direction could mean a variety of things. Suppose the rule applies to the whole domain but part of the range is filtered out by some condition or other.

2.5 Comparison with small clauses

Comparing the distribution of accusative-quotative constructions with other very similar constructions is illuminating as well. There is in Japanese a construction analogous to what is called the “small clause” construction in English. As the small clause construction also involves verbs denoting propositional attitudes and accusative marking of subjects to embedded predicates, it is reasonable to ask to what extent there is a correspondence between accusative-quotative constructions and small clause constructions in Japanese.

- (20) a. Saisyō-wa gakuseitai-ga ano siken-o muzukasi-ku omotta.
At.first-TOP students-NOM that test-ACC difficult-CONT thought
‘At first the students considered that test difficult.’
- b. Saisyō-wa gakuseitai-ga ano siken-o muzukasi-i to
At.first-TOP students-NOM that test-ACC difficult-PRES COMP
omotta.
thought
‘At first the students considered that test to be difficult.’

The Japanese small clause construction (as in (20-a) above) typically embeds an [accusative subject + non-finite predicate] pair, where the predicate is either adjectival or a nominal predicate.²⁹

Alternatively, suppose that the members of the domain must satisfy some condition in order for the rule to apply in the first place. This second possibility is actually how Chomsky proposed to keep the case assignment rule from applying to subjects of finite complement clauses. It is only when we see that there is no relation in either direction (in particular, when we see that there are also accusative-quotative constructions that don’t have nominative-quotative counterparts) that these strategies are seen to be insufficient. It is not hard to posit a syntactic system that over-generates pairs, but devising a descriptively adequate system is another matter.

²⁹There are various conditions on the sorts of predicates — adjectives and predicate nominals — that can appear in this context.

Clearly there exist pairs of truth-conditionally equivalent sentences where one member is a small clause construction and the other is an accusative-quotative construction. But the types of predicates and the types of matrix verbs that can be embedded in this kind of small clause construction are both severely limited, whereas the constraints on the accusative-quotative construction allow for a much greater variety of matrix verbs, complement predicates, and a freer distribution of adjuncts.³⁰

There are (fairly unusual) instances where small clause sentences don't find corresponding reflexes among accusative-quotative sentences on the basis of predicate type:

- (21) a. Titi'oya-wa musume-no sotugyou-o uresi-ku omotta.
 Father-TOP daughter-GEN graduation-ACC happy-INF thought
 'The father thought happily of his daughter's graduation.
- b. *Titi'oya-wa musume-no sotugyou-o uresi-i to
 Father-TOP daughter-GEN graduation-ACC happy-PRES COMP
 omotta.
 thought
 ??'The father considered his daughter's graduation to be happy.'

DeWolf (1984–1985, pg. 200) suggests that (in general) it is the more “subjective” predicates like *urayamasii* ‘be envious’ that appear embedded in small clause constructions but not in accusative-quotative constructions.

³⁰For more details on the limitations of small clauses, see Sode (1999) and S. Abe (2002b, pp. 5–6). Various researchers have tried to formulate the semantic condition on small clause subject/predicate pairs, none with much success. Sode (1999, 2002), for example, supposes that in small clause predication the predicate denotes “subject feeling,” the external argument takes the role of “experiencer,” and the internal argument denotes the “cause of the feeling experienced,” a formulation that, it turns out, is too narrow.

Kobayashi and Maki (2001, 2002) claim that the fact that set of matrix verbs supporting small clauses is small and the set of matrix verbs supporting accusative-quotative subjects is large, that the latter construction is “lexically ungoverned”. This is debatable, as I will show in Section 2.7.

In addition, small clauses won't accept resumptive pronouns, whereas accusative-quotative constructions will:

- (22) a. John-wa [Mary-no yokogao]_i-o [_{S'} [_S sore_i-ga totemo
John-Top Mary-GEN profile-ACC that-NOM very
utukusi-i] to] omot-ta.
beautiful-PRES COMP think-PAST
'John thought of Mary's profile that it was very beautiful.'
- b. *John-wa [Mary-no yokogao]_i-o [sore_i-ga totemo utukusi-ku]
John-Top Mary-GEN profile-ACC that-NOM very beautiful-CONT
omot-ta.
think-PAST
(no gloss)

(adapted from Takezawa (1987, pg.117, fn. 18, #ii,iii))

Incidentally, the complement of the small clause can pair with non-accusative subjects in constructions with matrix cognitive verbs taking potential morphology:³¹

- (23) a. Saisyo-wa gakuseitai-ga ano.siken*-ga/-o muzukasiku
At.first-TOP students-NOM that.test-NOM/-ACC difficult
omotta.
thought.
'At first the students felt that test to be difficult.'
- b. Saisyo-wa gakuseitai-ni ano.siken-ga/*-o muzukasiku
At.first-TOP students-DAT that.test-NOM/-ACC difficult
mi-e-ta/omo-e-ta.
see-POT-PAST/think-POT-PAST
'At first that test appeared/felt difficult to the students.'

³¹For discussion of these issues, Takezawa (1987); Takezawa and Whitman (1998) are good places to start.

In (23-b) a dative subject (with the thematic role of “experiencer”) appears with a non-finite “small clause” phrase in a subject/predicate relation, the two functioning as a clausal complement of a cognitive verb in the potential form.³²

The relationship between sentences with small clause complements of accusative verbs and sentences embedding accusative-subject complements is worth exploring, but lies beyond the scope of this study. Some of the observations I make with regard to the semantics of the accusative-quotative construction appear to be applicable to Japanese small clauses as well, but I leave examination of that to future research.

2.6 Structural assignments

With regard to the derivation of accusative-quotative constructions, various proposals have been made, each with their own set of assumptions. As will become clear in Chapter 3, the class of accusative-quotative constructions seems to be divided into three main subclasses, according to surface form and syntactic behavior:

1. **accusative thematic subjects:** cases where the accusative subject is a) the thematic subject of the lexical predicate in the complement, b) unaccompanied

³²Related to this, there are even cases where major objects can appear (presumably as accusative subjects) associated with finite complements, but get nominative case (presumably from a potential predicate on the matrix verb).

- i. Saisyō.mita.toki, Tarou-wa Hanako-no koto-ga utukusii to-sae
 At.first.glance, Tarou-TOP Hanako-GEN matter-NOM is.beautiful COMP-even
 omo-e-ta.
 think-POT-PAST.
 ‘At first glance Tarou found Hanako to be even beautiful.’

As far as I can tell, sentences like (23) have never been discussed in the literature. Their existence may shed light on the question of when in a derivation *no koto* incorporation can apply. But they fall outside the purview of this study.

by a resumptive pronoun in the complement clause, and c) not a “major object” (i.e., a [NP + *no koto*] complex)

2. **accusative major subjects:** cases where the accusative subject is associated with a saturated sentential predicate (including cases with resumptive pronouns) or is a non-subject thematic argument of the lexical predicate in the complement
3. **major object accusative subjects:** cases where the accusative subject takes the form of a “major object,” including a) thematic subjects of the complement predicate, and b) major subjects (note that resumptive pronouns are sometimes licensed, for both sub-cases, and sentences with resumptive pronouns behave syntactically as members of the class described in # 2.)

Although the possibilities suggest a heterogeneous set of derivational sources, most proposals for syntactic derivations of accusative-quotative constructions concentrate on a particular structural schema and a set of principles constraining it.

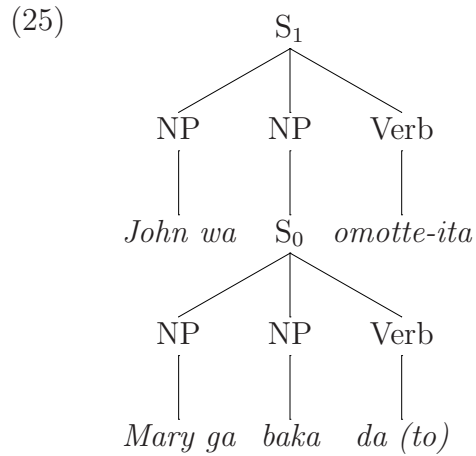
2.6.1 Raising

Postal (1974), with S. Kuno as informant, developed the first explicit structural assignment for Japanese accusative-quotative constructions. (24) is the structural description that is input for a “subject raising to object” transformational rule.³³

$$(24) \quad [_{S_1} [_{NP} \text{ John-wa }] [_{NP} [_{S_0} [_{NP} \text{ Mary-ga }] [_{NP} \text{ baka }] [_{Verb} \text{ da (to) }]]] [_{Verb} \text{ omotte ita }]]$$

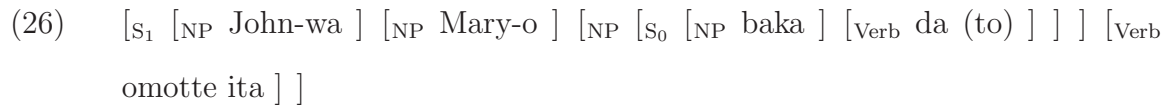
³³Postal (1974) was not working in the framework of so-called Standard Theory. The reader may consider his analysis and notational style here as the immediate forerunner to Relational Grammar.

(25) below is the same structure as (24), but expressed in an immediate constituent tree:

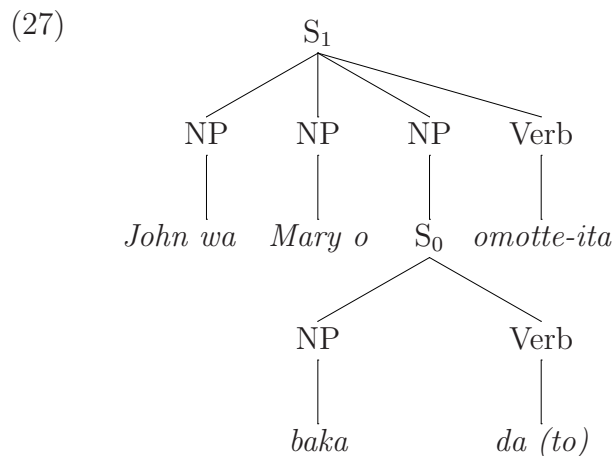


(Postal: 1974, pg. 376, #27)

The application of the raising rule to the input above yields the following structure as output:



The immediate constituent tree corresponding to the structure in labelled brackets in (26) is as follows:



(Postal: 1974, pg. 376, #29)

Note that in (27), the noun phrase *Mary* is sister to the verb. This satisfies one of the conditions for assignment of accusative case.

In the same study, Postal (1974, pp. 284-288) outlines a theory of relational grammar in which the notions of subject, object, and indirect object, etc. are adopted as theoretical primitives. It is assumed that in the subject-to-subject raising construction, the derived subject is raised out of a sentential subject, whereas in the subject-to-object raising construction the derived object is raised out of a sentential object. The NP node over S_0 in (25) and (27) allows S_0 to assume a grammatical role (of object). According to the raising rule, the raised argument inherits the grammatical role of the phrase out from which it raises. Kuno (1972, 1976), in the first comprehensive examination of the accusative-quotative construction, does not assume NP over S_0 . But Kuno concludes with Postal that the accusative subject has raised from embedded subject position to matrix object position.

Occupying the matrix object position allows the accusative subject to precede matrix verb phrase adjuncts:

- (28) a. *Yamada-wa [Tanaka-ga orokanimo tensai da] to
 Yamada-TOP Tanaka-NOM stupidly genius COP COMP
 omotte.ita.
 thought
 (lit.) ‘Yamada didn’t consider Tanaka to stupidly be a genius.’
- b. Yamada-wa Tanaka-o orokanimo [tensai da] to
 Yamada-TOP Tanaka-ACC stupidly genius COP COMP
 omotte.ita.
 thought
 ‘Stupidly, Yamada didn’t consider Tanaka to be a genius.’

(adapted from Kuno (1976, pg. 25, #21d, 22d))

When the adverb is placed after the nominative embedded subject *Tanaka ga* in (28-a) above (i.e., unambiguously inside the subordinate clause), it modifies only the embedded predicate, incurring a conflict in meaning. But with accusative subject *Tanaka o*, as in (28-b), the following adverb can modify the matrix predicate, and avoid the paradoxical interpretation “to stupidly be a genius”. Kuno takes this contrast to show that both the accusative-marked *Tanaka* and the adverb *orokanimo* in (28-b) are direct constituents of the matrix clause.³⁴

³⁴A comparison with the small clause construction is in order. The small clause complement is in some senses similar to a matrix verbal adjunct (an adverb of manner). Interestingly, a sentence-level adjunct like *tabun* ‘probably’ can’t be interposed between the accusative subject and a small clause complement as in ex. (i.a), but can be interposed between the accusative subject and a quotative complement as in ex. (i.b).

- i. (a) *John-wa [Mary-o tabun kasiko-ku] omotta.
 John-TOP Mary-ACC probably intelligent-CONT considered
 ‘John considered Mary probably intelligent.’
- (b) John-wa [Mary-o tabun kasiko-i to] omotta.
 John-TOP Mary-ACC probably intelligent-PRES COMP considered
 ‘John considered that Mary probably was intelligent.’

(Tang: 1998, pg. 172, #68,69)

Postal (1974); Kuno (1972, 1976) also cite the possibility of scrambling the accusative-quotative to sentence initial position, and the fact that “subject to object raising” of a quantified noun phrase produces scope ambiguity with respect to a quantified matrix subject noun phrase (Postal: 1974, pg. 379, #37) as evidence that the accusative subject is a constituent of the matrix clause (discussed in detail in Section 3.3).

Furthermore, the structural height of the accusative subject allows it to bind reciprocals in matrix verb phrase adjuncts:

- (29) a. ?*Rie-wa karera_i-ga muzitu da to otagai_i-no
 Rie-TOP they-NOM innocent COP COMP each.other’s-GEN
 syougen ni.yotte sinzite.iru.
 testimony by believe
 (lit.) *‘Rie believes that they are innocent based on each other’s testimony.’
- b. Rie-wa karera_i-o muzitu da to otagai_i-no
 Rie-TOP they-ACC innocent COP COMP each.other’s-GEN
 syougen ni.yotte sinzite.iru.
 testimony by believe
 ‘Rie believes them to be innocent based on each other’s testimony.’

(adapted from (Sakai: 1996, pg. 197, #9a,b), following Lasnik and Saito (1991))

In (29) only the accusative subject *karera-o* in (29-b) is high enough in the structure to c-command the reciprocal *otagai* contained in the verb phrase adjunct. The conclusion is that *on the level of representation at which the binding conditions apply*, “subject raising to object” (or something like it) occurs.

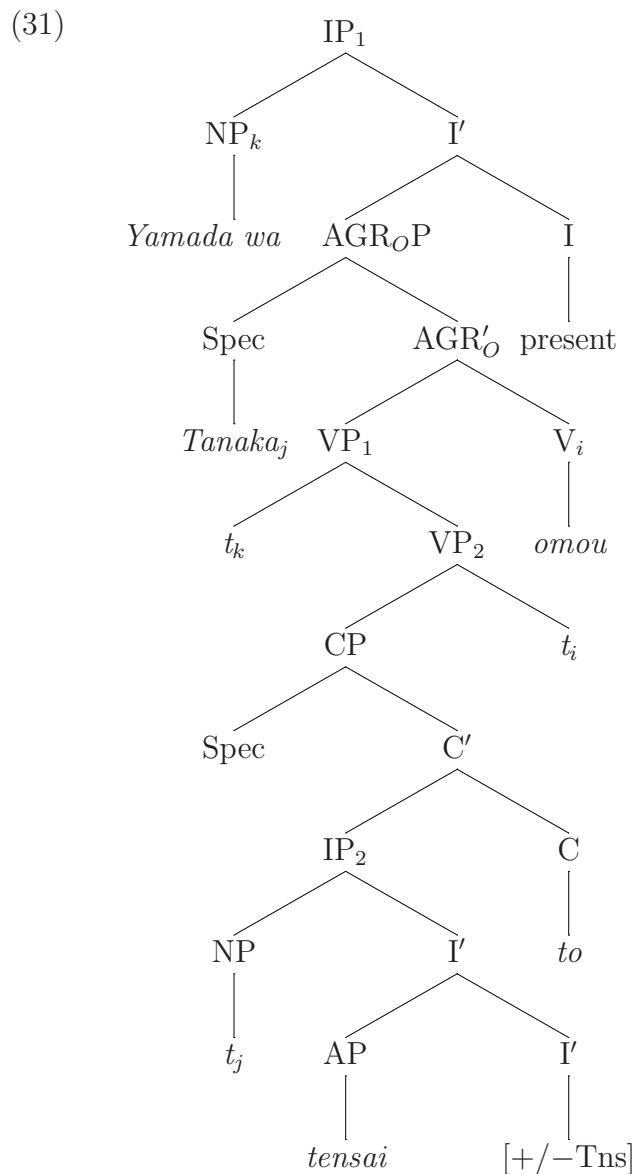
Takemura (1994) recasts the basic facts of accusative-quotative constructions in the framework of the Minimalist program (Chomsky: 1992), adopting the split agree-

ment-phrase hypothesis and the VP-internal subject hypothesis, the distinction between A-movement and A'-movement, and a variety of principles designed to remove the need for the notion of “government” from the grammar. “Subject raising to object” predicates can select IP complements, while “Control” verbs only select CP complements.

- (30) Yamada-wa Tanaka_i-o [t_i tensai da] to omotte.iru.
Yamada-TOP Tanaka-ACC genius COP COMP think
'Yamada considers Tanaka to be a genius.'

(adapted from Takemura (1994, pg. 106, #51a) (my gloss))

The accusative subject is assumed to move to [Spec, AGR_{OP}] to check off case features.



(Takemura: 1994, pg. 107, fig. 4)

The movement posited for English accusative subject constructions is motivated by the necessity to check case features: English *to*-infinitive complements of “subject raising to object” verbs are assumed to have defective case-assigning capabilities as a consequence of either lacking tense or having “null tense”. But when transferred to Japanese, such an analysis fails to motivate comparable movement, as the inflectional

heads of accusative-quotative complement predicates (when they appear overtly) regularly carry finite tense morphology. Takemura (1994) never resolves this question, and it remains a stumbling block to “raising” analyses in the generative tradition. Nevertheless, the complex movement assumed in the analysis does explain Postal’s (1974) and Kuno’s (1976) observations about scope ambiguity, and we will revisit Takemura’s (31) in Section 3.8 to instantiate an analysis of quantifier scope under the analysis proposed by Aoun and Li (1993).

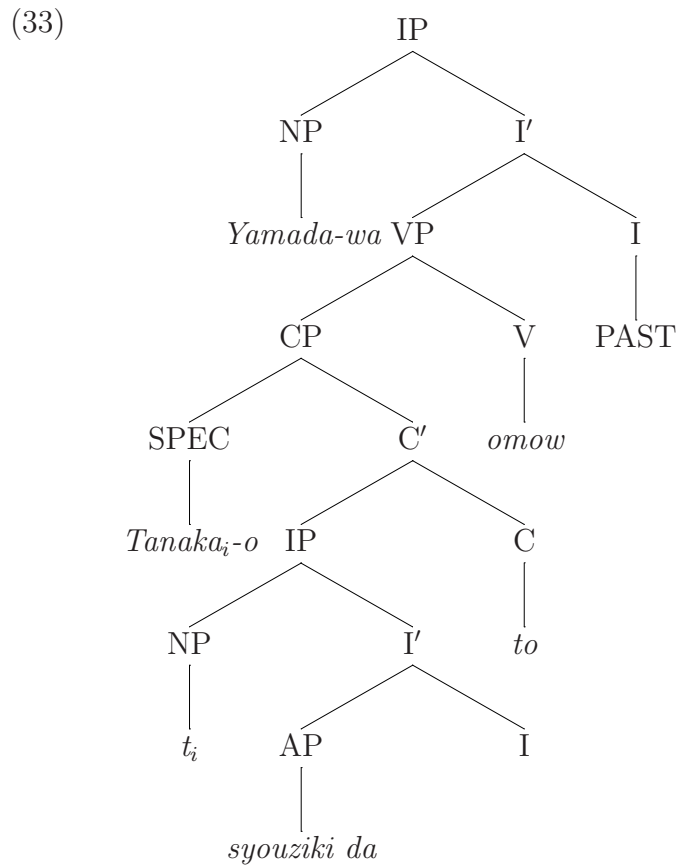
2.6.2 Exceptional Case Marking

The lack of tense morphology in infinitive complements of accusative subject constructions in European languages was exploited in another way by Chomsky (1971a, 1973, 1986). Government (and case assignment) by a matrix verb was assumed to be possible over a defective clause boundary in a process called “exceptional Case marking” (ECM).

This sort of analysis was able to explain case assignment and some facts concerning binding condition A (i.e., the requirement that an anaphor be locally bound: e.g., *Rudy expects himself to win*), but fails to explain the interpolation of matrix verb phrase adjuncts in between accusative subjects and their embedded predicates (as in (28) above), and fails to explain binding by accusative subjects of reciprocals in matrix verb phrase adjuncts (as in (29) above). Adaptations of this theory to Japanese faced two serious challenges, in that 1) the complement clause is accompanied by an overt complementizer (typically *-to*), and 2) the complement predicate shows finite tense morphology (either past, or present, or tentative mood).

Kaneko (1988) adapted this analysis to Japanese (which has an overt complementizer in the accusative complement) by proposing movement from [Spec,IP] to [Spec,CP]. In the theory of the day, CP was assumed to not be a barrier for [Spec,CP].

- (32) Yamada-wa [_{VP} [[_{CP} Tanaka_i-o [[_{IP} *t_i* [_{VP} syouziki da]] to] omotte.iru]]].
 Yamada-TOP Tanaka-ACC honest COP COMP
 think
 ‘Yamada considers Tanaka to be honest.’



(adapted from Kaneko (1988, pg. 278, #25), tree from Tanaka (1992, pg. 51, #33)

But Kaneko’s schema shows the same weaknesses as those noted for English, and fails to convincingly motivate the needed movement.³⁵

2.6.3 Prolepsis

The proleptic analysis of accusative-quotative constructions attributes to them a structure similar to that assumed for English sentences such as *Robin thought about Terri that she was a fool*, with the possible difference that in the case of Japanese, the accusative object is not the complement of a post-position but is a direct object of the matrix verb. Such constructions are widely attested in many languages of the world (Massam: 1985).

Sakai (1998, pg. 488, fn. 5) cites C. Kitagawa (1977) as being the first to suggest that the accusative subject is base-generated in a matrix argument position (as a sub-case of Equi-NP deletion), but Tomoda (1976-1977) is probably the first to propose a prolepsis account for the accusative-quotative construction, likening the nominative-quotative construction to direct discourse by way of contrast. Her representation of the meaning of the accusative-quotative construction in (34-a) is in (34-b).

³⁵Furthermore (among other problems) the landing site for the accusative subject precludes *wh*-movement from inside the complement clause, under the assumption that [Spec,CP] is the target of *wh*-movement.

- i. Tarou-wa doremo-o nani-de dekite.iru da-rou to kangaeta.
 Tarou-TOP all-ACC what-out.of be.made COP-CTJR COMP thought
 ‘Tarou thought about all of them, “What might they be made of?”’

A syntactic account of the wide scope interpretation for *nani* ‘what’ in ex. (i.) above would require *wh*-movement to a position above [Spec,CP] of the embedded clause, with a barrier between the landing site and the trace. A syntactic account of the narrow scope interpretation for *nani* ‘what’ in ex. (i.) above would require interpretation *in situ*, as the usual landing place for *wh*-movement is already occupied.

- (34) a. John-wa Mary-o baka da to omotte.ita
 John-TOP Mary-ACC fool COP COMP thought
 ‘John considered Mary to be a fool.’
- b. John(-wa) Mary (ni.tuite) baka da to omotte.iru +PAST
 (about) fool is thinking +PAST
 (no.de.arimasu)
 I.tell.you
 (no gloss)

(adapted from Tomoda (1976-1977, pg. 372, #52,54))

Saito (1983) is considered the first to formally propose what was once referred to as a “control construction” analysis (also referred to occasionally as the “extra NP analysis”), an early formulation of the “prolepsis analysis”. The decisive piece of evidence is the acceptability of an accusative-quotative construction (35) in which the accusative subject (*John*) co-refers to a resumptive pronoun (*kare*) in the (saturated) complement clause:

- (35) Mary-wa John_i-no koto-o [kurasu-no naka-de kare_i-ga
 Mary-TOP John-GEN matter-ACC class-GEN middle-LOC he-NOM
 itiban baka da to] omotte.iru.
 most fool COP COMP think.is
 *‘Mary thinks of John that he is the most stupid in his class.’

(Saito (1983, pg. 88, #30)(Saito’s gloss, Saito’s judgment))

From this evidence Saito suggests that the construction may not be a “subject raising to object” construction, but might in fact have a noun phrase base generated in its accusative-marked position.³⁶ Saito (1985) assumes that this means the noun phrase

³⁶This is perhaps the first presentation of the idea that there might be more than one sort of derivational source for accusative-quotative constructions. Homma (1998) forwards this view per-

would accept a θ -role from the matrix verb. That the prolepsis analysis entails this is also assumed by J. M. Yoon (1991, pg. 47). But there are good reasons to think that the accusative subject is never the thematic object of an accusative-quotative matrix verb (discussed in Sections 2.7 and 2.8).³⁷

More recently, Y. Takano (2003) has proposed a prolepsis analysis for accusative-quotative constructions:

suasively.

³⁷Chomsky (1973) argued that English accusative subjects could not be matrix objects because they could not become subjects of *tough*-constructions:

- i. (a) *Bill_i is hard to believe *t_i* to be insane.
- (b) Bill_i was tough to force *t_i* to leave.

Tanaka (1992, pg. 42, #12a,b), citing Chomsky (1973)

The same reasoning can't be applied to Japanese. The predicate *omoinikui* 'hard to think' takes a sentential subject:

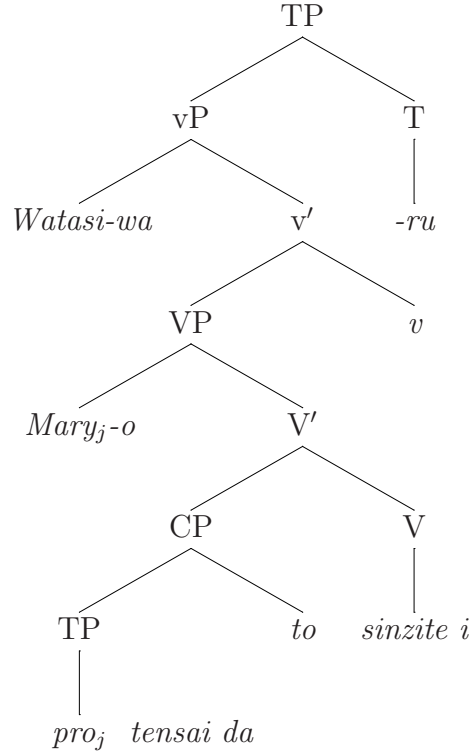
- ii. Bill-ga ki.tigai da to omoi-nikui.
 Bill-NOM crazy COP COMP think-difficult.
 'That Bill is crazy is hard to think.'

The parallel with English infinitive complements doesn't follow either:

- iii. (a) For him to be crazy is hard to believe.
- (b) *Kare-o ki.tigai da to omoi-nikui.
 Kare-ACC crazy COP COMP think-difficult.
 (no gloss)

This could be taken as evidence that the [accusative subject + complement predicate] complex is not a constituent.

(36)



(Y. Takano (2003, pg. 804, #47))

Theories likening the accusative subject to topic phrases (e.g., Oka (1988); Homma (1998) *inter alia*) share some of the same features of the prolepsis proposal. Hoji (1991) is also a proponent of this analysis.

But one fact that is not generally appreciated among proponents of this analysis is that, while subjects in more common “prolepsis” complements, specifically those with an adjunct such as *ni tuite* ‘about’ or *to ie ba* ‘speaking of’ are regularly specific in reference, parallel to accusative subjects, there are no restrictions on the predicates that can appear with these adjuncts, while the predicates in accusative-quotative complements are restricted.³⁸

³⁸Here are some adjunctive Japanese reflexes of proleptic phrases: *ni kansite wa* ‘with respect to’; *ni tuite wa* ‘about’; *ni tinande* ‘regarding’; *to ittara* ‘if you take’; *to ie ba* ‘if you take’; *to iu to* ‘if you take’; *to kitara* ‘when it comes to’; *to kuru to* ‘when it comes to’; *to kite wa* ‘when it comes to’; *ni kagitte iu to* ‘when it comes to’; etc.

Furthermore, as we will see in Section 2.8, it can be demonstrated that accusative subjects are never the thematic arguments of the matrix verb, and we will see in Section 2.7 that accusative-quotative constructions are only supported by transitive verbs. Then, how can a transitive cognitive verb license an NP object and assign it case without assigning it a thematic role?

The base generated (prolepsis) approach also has trouble explaining reconstruction effects of the accusative subject. The evidence for such effects can be seen in scope ambiguity between, for example, a universally quantified accusative subject and a disjunctive internal argument of the complement predicate (discussed in more detail in Section 3.6). This removes one of the principle arguments in support of Y. Takano’s (2003) analysis in (36) above.

2.6.4 Double nominative sentences

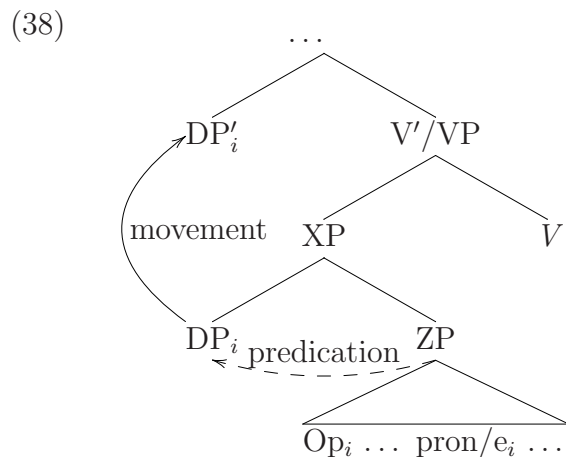
Perhaps the first example of its kind in the literature on accusative-quotative constructions, Kuno (1978, pg. 249) gives a minimal pair with a double nominative sentence as the nominative-quotative counterpart to an accusative-quotative construction:

- (37) a. Minna-wa Toukyou-ga sekai.iti hanzai.ritu-ga
 All-TOP Tokyo-NOM number.one.in.the.world crime.rate-NOM
 hikui to omotte.iru rasii ga ...
 be.low COMP think seem but
 ‘Everyone seems to think that Tokyo is such that the crime rate is the
 lowest in the world but ...’
- b. Minna-wa Toukyou-o sekai.iti hanzai.ritu-ga
 All-TOP Tokyo-ACC number.one.in.the.world crime.rate-NOM
 hikui to omotte.iru rasii ga ...
 be.low COMP think seem but

‘Everyone seems believe Tokyo to be such that the crime rate is the lowest in the world but ...’

(adapted from Kuno (1978, pg. 249, §80a,b) (my glosses))

J. H. Yoon (to appear, 2007) proposes that double nominative sentences are the derivational sources for accusative-quotative constrictions in both Korean and Japanese. He proposes operator movement within the complement that creates an island for other syntactic processes. (The assumption is justified by an apparent lack of “reconstruction” to a complement-internal position by the accusative complement, but reconstruction effects are in fact attested, as discussed in Chapter 3.) It is co-indexed with either a resumptive pronoun (“pron” in (38)) or an empty category.



(adapted from Yoon (to appear, #15))

J. M. Yoon (1989) proposed something similar, but without movement, so that the accusative case is assigned by exceptional case marking across a clause boundary, but the movement proposal of J. H. Yoon (to appear) does a better job of accounting

for some word order facts, such as the interpolation of matrix verb phrase adjuncts between the accusative subject and the complement predicate. Both approaches allow a unification of the predicative relation between subject and sentential predicate seen in both double nominative sentences and accusative-quotative constructions. As there appear to be similar semantic restrictions on the subject/predicate relation in both cases, this is well-motivated.³⁹ For example, eventive/episodic predicates are awkward in both cases. Furthermore, a double nominative sentence can (almost) never be used to make an existential (or “presentational”) statement about the “major subject”:

- (39) Sika-ga asi-ga kega-site.iru.
 Deer-NOM leg-NOM injury-do
 a. It is the aforementioned deer whose is injured.
 b. \neq There is a deer whose leg is injured.

The same restrictions also hold for accusative-quotative complements with respect to the accusative subject. However there are some problems. First, in Japanese (at least), there are indefinitely many accusative-quotative constructions that don’t correspond to nominative-quotative constructions: Kobayashi and Maki (2001) offer one such sentence.

- (40) a. Boku-wa Uno.san_i-o [kokumin-ga [e_i namae-o] wasurete.iru]
 I-TOP Mr.Uno-ACC citizens-NOM name-ACC have.forgotten
 to omou.
 COMP think
 ‘I believe Mr. Uno to be such that the populace has forgotten his name.’

³⁹This idea was also hinted at in Kitano (1990), and in Heycock (1994), and again in Heycock and Doron (2003).

- b. *Boku-wa Uno.san_i-ga [kokumin-ga [e_i namae-o] wasurete.iru]
 I-TOP Mr.Uno-NOM citizens-NOM name-ACC have.forgotten
 to omou.
 COMP think
 (no gloss)

(derived from Kobayashi and Maki (2001, pg. 107, #56b))

Kobayashi and Maki (2001) also observe that the nominative-quotative counterparts to sentences like (41) are bad:

- (41) Bill-ga [Mary_i-o [John-ga e_i horete.iru]] to omotte.iru.
 Bill-NOM Mary-ACC John-NOM is.in.love COMP thinks
 ‘Bill thinks of Mary_i, that John is in love with e_i.’

(adapted from Oka (1988, pg. 192, #15) (Oka’s gloss))

Here is the example corresponding to (41) that would constitute counter-evidence to an analysis deriving accusative-quotative constructions from double nominative constructions:

- (42) *Bill-ga Mary-ga [John-ga horete.iru] to omotte.iru.
 Bill-NOM Mary-NOM John-NOM in.love.with COMP
 think
 (no gloss)

(derived from Kobayashi and Maki (2001, pg. 107, #57b))

Hoji (1991) gives an example in which the accusative subject corresponds to the direct object argument in the embedded clause:

- (43) IBM-wa [soko-no atarasii konpyuutaa-no himitu]_i-o asita-no
 IBM-TOP there-GEN new computer-GEN secret-ACC tomorrow-GEN
 kisyakaiken-de [_{CP} Hitati-ga (supai-o tukatte) pro_i/sore_i-o
 press.conference-LOC Hitati-NOM (spy-ACC using) pro/it-ACC
 nusunda to] happyou-suru tumori da.
 stole COMP announce-do intention COP

‘IBM intends to announce about the secret of their new computer at tomorrow’s press conference that Hitachi stole it (using spies).

(adapted from Hoji (1991, pg. 9, #43a) (my gloss, Hoji’s judgment))

Sentences of the sort in (40-a), (41), and (43) do not have corresponding double nominative sentences, which complicates claiming such as their derivational source.

In addition to the existence of accusative-quotative sentences without corresponding double nominative counterparts, there is another problem: Double nominative constructions in Japanese are accompanied by focus effects (most notable among them, “exhaustive listing” focus) that are not necessarily present in corresponding accusative-quotative constructions.⁴⁰

Finally, an analysis that takes a double nominative construction as the derivational source for all accusative quotative constructions is not well motivated when we consider cases where the accusative subject is the thematic subject of the overt predicate in the accusative complement (viz. # 1 in the list at the top of this Section on pg. 54).

⁴⁰Although Borkin (1984, pp. 61, 69) considers exhaustive listing to be a sufficient condition for some kinds of raising, Kitano (1990) assumes such focus effects are regularly present, and Takemura (1994) also argues that the accusative subject assumes some kind of special focus.

One of the advantages of starting research with a **Working description** is the wide-ranged data-set that can be generated. But good empirical coverage poses challenges to every syntactic theory proposed so far.

2.7 Matrix verbs

Is it possible to describe the set of Japanese verbs that support accusative-quotative constructions as a natural class? Masuoka (1987), for example, sees this as a step toward the basic goal of articulating the lexicon explicitly, an obvious desideratum for anyone concerned with observational adequacy or practical applications of linguistics.⁴¹

To explore the idea, we also need a clear understanding of what constitutes the set of accusative-quotative constructions. Without a set of criteria, it would be difficult to rule out various apparent counterexamples to what otherwise would be useful generalizations. For example, the difference between complements and adjuncts (often described as obligatory vs. optional) is sometimes hard to distinguish (Dowty: 2000), but that difference is crucial when it comes to accusative-quotative constructions, and furthermore, in these constructions the obligatory/optional distinction is often not a probe (discussed in Section 2.8). An explicit set of criteria also sharpens the tools of the syntactic experimenter. So in pursuing the first question, we will expose the need to make gains on the second.

⁴¹Dowty (1978, 415 -416) suggests category-changing rules that operate on the lexicon to generate “raising to object verbs” as an improvement on Thomason’s (1974; 1976c; 1976b; 1976a) semantic treatment of accusative subject constructions in the framework of Montague Grammar. The implementation would be much easier if the set of verbs that are candidates for the lexical rule constituted a natural class.

Recent syntactic theories that assume structural projections are generated to discharge features would also benefit from an independently motivated classification of “accusative subject verbs”.

Kobayashi and Maki (2001, 2002) claim that the accusative-quotative construction is so richly productive that it should be derived as a general principle for all verbs having the same general categorical selection possibilities. They interpret the differences in the sets of verbs supporting the small clause construction and those supporting the accusative-quotative construction as a situation where the former is “lexically governed” and the latter is not.⁴²

Kobayashi and Maki (2001) offer examples of accusative-quotative constructions paired with lists of alternative verbs that can (they claim) substitute freely in matrix verb position (2001, pp. 101–102; 109, fn. 11). Among the alternatives are verbs that cannot assign accusative case, and verbs of saying that are commonly thought unacceptable in accusative-quotative constructions.⁴³ Kobayashi and Maki assume that the ability to select quotative clausal complements is the sole sufficient condition for qualifying as an accusative-quotative verb.⁴⁴

Generalization 1 Any verb selecting a clause in Japanese occurs as matrix verbs [sic] in “ECM” constructions.

(Kobayashi and Maki: 2001, pg. 102, #42)

I will interpret this to mean that 1) if a Japanese verb is capable of selecting a clause, then 2) it is also capable of supporting an accusative-quotative construction.

⁴²Morikawa (1990, pg. 87, #18,19) also notes that the size disparity between these two verb classes is another argument against the attempt by Takezawa (1987) to derive accusative marking in a generalized way for both accusative-quotative constructions and small clauses. However, Dowty (1978, pg. 416) uses the sentence **John realizes Bill to have left* to argue that accusative subject constructions are indeed lexically governed for English. The same argument holds for Japanese.

⁴³Kobayashi and Maki (2001, pg. 101) admit that the native speakers will reject some of their examples as unacceptable.

⁴⁴Hoji (1991, pg. 5) makes an identical claim.

Actually it is easily established that both sets of Japanese verbs (small clause and accusative-quotative) are non-disjoint proper subsets of a wider class of verbs able to take quotative phrases as complements. As one example of a class of verbs that falls under Kobayashi and Maki's (2001) condition but not the consequence of their **Generalization 1**, I can give the verb *kiduku* 'to become aware of, to realize'. This is one of a class whose members select clausal complements but fail to support the accusative-quotative construction (and the accusative subject variety of the small clause construction as well).

Here is the aggregate of the verbs that Kobayashi and Maki (2001, pp.101–102, #35–41; 2002, pp.95–96, #15a–f) present as accusative-quotative verbs, in the classifications from Kobayashi and Maki (2001):

Recognition *omou* 'think'; *sinziru* 'believe'; *minasu* 'deem'; *mitomeru* 'acknowledge';

Manner of speaking *iu* 'say'; *sakebu* 'shout'; *tubuyaku* 'mutter'; *sasayaku* 'whisper'; *ronziru* 'argue'; *wameku* 'wail'; *nonosiru* 'scold';

Selecting dative objects *kansin suru* 'be moved (by)';

Performatives *yakusoku suru* 'promise'; *tikau* 'vow'; *kakeru* 'bet';

Perception *odoroku* 'be surprised (at)';⁴⁵ *yorokobu* 'be glad (about)'; *nageku* 'lament'; *kuyamu* 'regret'; *satoru* 'realize'; *kanziru* 'feel';

⁴⁵Endo and Zushi (1993, pg. 30) assume that verbs of the class including *urotaeru*, *odoroku*, *tomadou*, etc. are unaccusative, assuming that they 1) take dative objects only, 2) take only "cause of emotion objects," and 3) do not undergo *-asii*-affixation: **odorokasii*. They assume the latter fact is due to the *-asii*-affix requiring a predicate with an external argument.

i. Hanako-wa sono.kekka-o yorokob.asii to omotta.
Hanako-TOP this.result-ACC rejoice-inducing COMP thought
'Hanako considered this result deserving of rejoicing.'

But the fact is that all of these can assign accusative case in some contexts.

Reporting *houkoku suru* ‘report’; *hiromeru* ‘spread’; *tutaeru* ‘convey’; *setumei suru* ‘explain’;

Interrogatives *kiku* ‘ask’; *tazuneru* ‘inquire’; *utagau* ‘doubt’; *zimon suru* ‘ask one-self’.

The fact is, many native speakers will reject at least some of these verbs as unacceptable in accusative-quotative constructions. The verbs that are unacceptable fall into several classes, definable according to a variety of (apparently heterogeneous) factors. Notwithstanding, Kobayashi and Maki (2001, 2002) do not note these tendencies in judgments, but only the fact that judgments may vary.

In an expansion of their earlier (2001) work, Kobayashi and Maki (2002) modify their generalization to the following:

Generalization 2 Any verb selecting a clause as its sole object can “ECM” the embedded subject.

Kobayashi and Maki (2002, pg.96, #17)

Although their second generalization includes a penetrating insight, it is perhaps more problematic than the first.

That accusative-quotative verbs must be able to select a clausal complement seems to be a necessary condition for the class of verbs. But it is not a sufficient condition (as can be seen from the list of verbs I give in # 1 from the categories of unacceptable verbs on pg. 82 below). I noted above that the verb (e.g., *kiduku* ‘to realize’) can take clausal complements but doesn’t support accusative-quotative constructions. In fact, verbs that select clausal complements but do not assign accusative case under any

circumstances are all counterexamples to a claim that selecting a clausal complement is a sufficient condition for supporting accusative-quotative constructions.⁴⁶

However, the claim is that every construction in which the clausal complement is selected as the *sole object* of a verb maps onto an analogous accusative-quotative construction. If you interpret the claim as implying that in the accusative-quotative construction the matrix verb does not select the accusative subject as a thematic argument, then it is a claim with some empirical support. (I will discuss this in more detail below in Section 2.8).

But it can be easily shown that the claim as it stands is still too broad. Take a verb from Kobayashi and Maki's (2001) category of **Interrogative verbs**: *kiku* 'ask'.

- (44) a. Zirou-wa Tarou-ga eezu.kyariyaa ka.(dou.ka) to
 Zirou-TOP Tarou-NOM A.I.D.S.carrier Q.(how.Q) COMP
 (sensei-ni) kiita.
 doctor-DAT asked
 'Zirou asked the doctor whether Tarou was an A.I.D.S. carrier.'
- b. Zirou-wa Tarou-ga eezu.kyariyaa ka.*(dou.ka)-o (sensei-ni)
 Zirou-TOP Tarou-NOM A.I.D.S.carrier Q.(how.Q)-ACC doctor-DAT
 kiita.
 asked
 'Zirou asked the doctor whether Tarou was an A.I.D.S. carrier.'
- c. *Zirou-wa Tarou-o eezu.kyariyaa ka.(dou.ka) to
 Zirou-TOP Tarou-ACC A.I.D.S.carrier Q.(how.Q) COMP
 (sensei-ni) kiita.
 doctor-DAT asked
 (no gloss)

⁴⁶Heycock (1994, pp. 53–43; 149–150) discusses ECM verbs with regard to **Burzio's generalization** that a verb can assign a θ -role to its subject if and only if it has the property of assigning accusative case, assuming (but not demonstrating) that all ECM verbs can take direct objects independently of the ECM construction.

- d. *Zirou-wa Tarou-o eezu.kyariyaa ka.(dou.ka)-o (sensei-ni)
 Zirou-TOP Tarou-ACC A.I.D.S.carrier Q.(how.Q)-ACC doctor-DAT
 kiita.
 asked
 (no gloss)

(inspired by Takemura (1994, pg. 112, #63))

That *kiku* satisfies Kobayashi and Maki's (2002) **Generalization 2** can be seen in (44-a) and (44-b).⁴⁷ Interrogative verbs can take direct *ka* questions as quotative complements (44-a), but typically only indirect questions (*ka* and *ka dou ka*) can appear as direct objects and receive case (44-b). These facts notwithstanding, neither of these constructions maps onto an accusative-quotative counterpart ((44-c), (44-d)). This is negative evidence for a positive prediction, so I will demonstrate that the counterevidence is controlled for outside factors.

That the complement predication (i.e., the predicative relationship between accusative subject and embedded complement) in (44-a,b,c,d) itself satisfies the semantic conditions on accusative-quotative constructions can be seen by the grammaticality of (45).

- (45) Zirou-wa Tarou-o eezu.kyariyaa ka.(dou.ka) to utagatte.ita.
 Zirou-TOP Tarou-ACC A.I.D.S.carrier Q.(how.Q) COMP doubted
 'Zirou wondered about Tarou whether he was an A.I.D.S. carrier.'

⁴⁷The copula in the embedded direct question is deleted. For some more detail about the copula and *ka* in embedded questions (but not on this particular point), see Takahashi and Nakayama (1995).

For those speakers who accept embedded questions as quotative complements in construction with non-*wh* accusative subjects,⁴⁸ a verb like *utagau* ‘doubt’ is able to embed an accusative-quotative complement. But for many of those same speakers, a verb like *kiku* ‘ask’ is not able to do so.

With regard to the status of accusative subjects as thematic arguments, let’s consider a verb like *sasyou suru* ‘falsify, misrepresent’, which takes as direct objects noun phrases denoting such things as statuses (46-b) and documents, but not people (46-a).⁴⁹

- (46) a. *Tarou-wa toukyoku-ni zibun-no syatyou-o sasyou-sita.
Tarou-TOP authorities-DAT self-GEN boss-ACC falsify-did
(intended) ‘Tarou misrepresented his boss to the authorities.’
- b. Tarou-wa toukyoku-ni zibun-no syatyou-no sikaku-o
Tarou-TOP authorities-DAT self-GEN boss-GEN credential-ACC
sasyou-sita.
falsify-did
‘Tarou falsified his boss’s credentials to the authorities.’

⁴⁸This construction is impossible in English, and many of the its tokens in Japanese are difficult to gloss in English.

⁴⁹The fact that subject/predicate inversion is only degraded and not outright rejected in the following examples is a problem for my contention that subject/predicate inversion can be used as a syntactic probe in the absence of major objects, variable binding requirements, or concessive adjuncts.

- i. (a) ??Tarou-wa toukyoku-ni [sikaku.moti da to] zibun-no syatyou-o sasyou-sita.
Tarou-TOP authorities-DAT credentialed COP COMP self-GEN boss-ACC falsify-did
(intended) ‘Tarou falsified his boss to be credentialed to the authorities.’
- (b) ??Tarou-wa [sikaku.moti da to] toukyoku-ni zibun-no syatyou-o sasyou-sita.
Tarou-TOP credentialed COP COMP authorities-DAT self-GEN boss-ACC falsify-did
(intended) ‘Tarou falsified his boss to be credentialed to the authorities.’
- (c) ??[Sikaku.moti da to] Tarou-wa toukyoku-ni zibun-no syatyou-o sasyou-sita.
Be.credentialed COP COMP Tarou-TOP authorities-DAT self-GEN boss-ACC falsify-did
(intended) ‘Tarou falsified his boss to be credentialed to the authorities.’

Not even the verb *minasu* ‘deem’ allows this kind of subject/predicate inversion.

- c. Tarou-wa toukyoku-ni zibun-no syatyou-o sikaku.moti da
 Tarou-TOP authorities-DAT self-GEN boss-ACC credentialed COP
 to sasyou-sita.
 COMP falsify-did
 (lit.) ‘Tarou misrepresented his boss to be credentialed to the authorities.’

The fact that in the accusative-quotative construction (46-c) the matrix verb does not select the accusative subject as a thematic argument is a crucial fact, but it is a fact of the construction, not a property of the particular verb.⁵⁰ It is possible for an accusative-quotative verb to select a given noun phrase as a thematic argument in a non-accusative subject construction, and still be able to include the same noun phrase as the accusative subject in its complement in another context. For many such $\langle verb, noun\ phrase \rangle$ pairs, the distinction between functioning as a thematic argument and functioning as an accusative subject can actually depend on the nature of the property predicated in the accusative subject construction. And an accusative-quotative verb can, of course, assign the case to an accusative noun phrase that would not be selected by it in isolation. In fact, the example of a verb assigning dative case to its object *kansin suru* ‘to be moved (by)’ is also capable of assigning accusative case in some contexts to some sorts of noun phrases (e.g., *Senpou no motenasi o kansin sita* ‘(I) was impressed at their hospitality’).

One more potential problem with **Generalization 2** is that it fails include those cases where a non-subject argument is “promoted” to an accusative subject role.

⁵⁰Kobayashi and Maki (2002, pg.96, #16) claim (mistakenly) that the noun phrases that can appear as accusative subjects are not selected by accusative-quotative matrix verbs in general. The fact is that they are not selected by the matrix verb specifically when the accusative-quotative construction. Thus for a given accusative-quotative verb, the range of potential accusative subjects is greater than the range of potential thematic objects (by virtue of not being constrained by selection). But for any number of accusative-quotative verbs, these ranges are demonstrably not disjoint sets.

In Section 2.4 we have already seen cases of dative objects (and in rare cases direct objects) promoted to accusative subject position, and we’ve also seen a case where the accusative subject doesn’t seem to have any direct role in the complement predicate (ex. (4) on pg. 29 in Section 2.1).

One more piece of evidence to show that **Generalization 2** is too broad concerns semantic restrictions on the predication. Let’s borrow the verb *utagau* ‘doubt, suspect, wonder’ again:

- (47) a. Mariko-wa Tarou-ga/*-o yakusoku-o mamotta
 Mariko-TOP Tarou-NOM/-ACC promise-ACC kept
 ka.dou.ka-o utagatta.
 whether-ACC doubted.
 ‘Mariko doubted that Tarou had kept his promise.’
- b. Mariko-wa Tarou-ga/??-o douse yakusoku-o yaburu
 Mariko-TOP Tarou-NOM/*-ACC anyway promise-ACC break
 da-rou to utagatta.
 COP-CJTR to COMP doubted.
 ‘Mariko doubted Tarou, thinking “He’ll just break his promise, anyway.”’

The example in (47-a) satisfies the description in **Generalization 2** but can’t “ECM” the embedded subject (arguably, either because of a violation of the double-*o* constraint — accusative subject and clausal complement being both *-o* marked — or because the (past tense) predicate is interpreted in reference to a time not supplied in the context. (47-b) also satisfies the description in **Generalization 2** but can’t “ECM” the embedded subject because of semantic restrictions on the type of complement predication an accusative-quotative construction can support: Again, the predicate is interpreted in reference to a (future) time not supplied in the context

(the details of this reasoning are discussed in Section 4.2.) If the accusative-quotative alternative in (47-b) is interpretable, then it is as an example of a thematic argument of *utagau* appearing with a sentential adjunct (more on this in Section 2.8).

One last problem is with the category of verbs that take indirect objects, a category that Kobayashi and Maki (2002) include among those for “raising” verbs. They fail to notice that while some accusative-quotative verbs can assign dative case to the sort of noun phrase that can also appear in its complement as an accusative subject, that those verbs are also capable of assigning accusative case (to at least some noun phrases, nominalizations, and clausal complements).

In sum, **Generalization 2** excludes some types of accusative-quotative constructions, and predicts others that are in fact unacceptable. The only generalization we can make at present is as follows:

Observation All accusative-quotative verbs must be able to both 1) select a clausal complement in contexts other than the accusative-quotative construction, and 2) assign accusative case in contexts other than the accusative-quotative construction.⁵¹

Were it not a natural consequence of their research program (which has as its goal the identification of general principles by which to derive accusative-quotative constructions) Kobayashi and Maki’s claim that the construction is not lexically governed should be quite startling. In actuality, it can be shown that whole sub-classes of verbs satisfying the description in **Generalization 1** are nevertheless excluded from the class of accusative-quotative verbs. Whether the construction is “lexically governed”

⁵¹The condition is a necessary condition, but not a sufficient one: Satisfaction of the condition does not necessarily qualify a verb as an accusative-quotative verb, and the properties required are thus not exclusively particular to accusative-quotative verbs.

or not is still open to argument, especially without any grounds for establishing a natural class of verbs (i.e., without being able to refer to a distinctive feature common to all members of the class). But the way that Kobayashi and Maki jump to conclusions is perhaps due to the fact that they approach the problem under the assumption that the core phenomenon is one of case alternation.

While accepting the judgments of Kobayashi and Maki (2001, 2002) for what they are worth, an objective approach must also recognize that there are many native speakers of Japanese with a more restrictive view of just what can be done within the context of an accusative-quotative construction. As an observational generalization of the language behavior of speakers of Japanese, we can approximate a characterization of the actual situation much more closely than Kobayashi and Maki (2001, 2002) do in the following way:

Taking as domain the class of nominative-quotative verbs, exclude the following subclasses:

1. all verbs lacking the ability to assign accusative case to arguments in root contexts (e.g., *kiduku* ‘notice’; *omoi’ataru* ‘think of’; *wakaru* ‘understand’, etc.), including stative verbs denoting “spontaneous” apperception in potential form (e.g., *kikoeru* ‘be audible’; *mieru* ‘be visible’; *kanzireru* ‘be felt’, etc.) and in passivized form (e.g., *omowareru* ‘be evocative of’; *miukerareru* ‘be suggestive of’, etc.);
2. certain transitive verbs denoting reception of propositional content (e.g., *kiku* ‘hear’; *komimi ni hasamu* ‘happen to hear’, etc.), and certain transitive verbs denoting requests (e.g., *tazuneru* ‘inquire (about, after)’; *meirei suru* ‘command’; *tyuumon suru* ‘request’, etc.);

3. certain transitive verbs denoting transmission of propositional content (e.g., *osieru* ‘teach’; *kotaeru* ‘answer’; *siraseru* ‘let know’, etc.), and certain transitive verbs that denote manner of speech without stressing propositional attitude (e.g., *sakebu* ‘shout’; *sasayaku* ‘whisper’; *naku* ‘cry’, etc.);⁵²
4. certain transitive verbs denoting discovery of propositional content (e.g., *haken-suru* ‘discover’; *oboeru* ‘feel’, etc.);
5. certain transitive verbs specifying either a) a future time or b) a past time for evaluation of the embedded predicate (e.g., *kitai-suru* ‘expect’; *yoken-suru* ‘predict’; *omoidasu* ‘recall’; *ki’oku suru* (“remember”), etc.).

The remainder approximates a class of verbs that can assign transitive case to direct objects in some contexts, can take quotative complements in other contexts, and can embed accusative-quotative complements under some special conditions.⁵³ One of the necessary syntactic conditions is that the accusative-marked element not be a thematic argument of the matrix verb. I will discuss this in more detail in Section 2.8.

I would also like to point out the possible need to include certain “illocutionary specificational verbs” (e.g., *sitei suru* ‘specify’) as a sixth category. I just haven’t been able to find a sentence headed by *sitei suru* with an accusative noun phrase and a quotative phrase in the complement for which the accusative noun phrase is not the thematic argument. I suspect there are other verbs like this as well.⁵⁴ The

⁵²There are some accusative-quotative verbs (such as *mitomeru* ‘acknowledge’ which denote transmission of information, and can even select a dative argument (denoting a receiver of information), so this is not a general restriction on accusative-quotative constructions. This is in contrast to English, where dative experiencer arguments are regularly bad (Rooryck: 1997, pg. 2, fn. 1).

⁵³Included among these circumstances are, of course, semantic conditions on the relationship between the accusative subject and the clausal complement, and their relationship to the context of evaluation.

⁵⁴Non-illocutionary specificational verbs can support accusative-quotative constructions (e.g., *Kekkon o hadan ni sareta riyuu to site, nakoudo wa dansei no hou o hontou wa syuran datta to*

rather complex set of considerations that led to this observation are at the end of Section 5.2.

The verb *husigigaru* ‘be quizzical (about), be mystified (by)’ also appears to not belong the class of accusative-quotative verbs, for the same sort of reason as I exclude *sitei suru*. But while it is difficult to think of a situation in which a matrix-level accusative noun phrase corresponding to an argument in a complement of *husigigaru* can not also be construed as the thematic argument of *husigigaru*, it is not impossible:

- (48) Tarou-wa ziron-o douyara huninki da to
 Tarou-TOP pet.theory-ACC somehow unpopular COP COMP
 husigigatte.i-ta.
 be.mystified-PAST
 (lit.) ‘Tarou was mystified at his pet theory to be somehow unpopular.’

One’s own pet theory is not an object of puzzlement for oneself. The accusative subject is not the thematic argument of the matrix verb in (48).

I have grouped verbs that 1) take clausal complements, but 2) don’t support accusative-quotative constructions into several classes according to loose categories that are semantic or pragmatic in nature. The next step would be to explore each of those categories, compare the exceptions within each one, and, hopefully, get a better picture of what can license an accusative-quotative construction and what can’t. I will leave this project for further research, but offer a partial list of accusative-quotative verbs in Appendix A.

atete mita ‘As a reason for having had the wedding be cancelled on him, the matchmaker guessed the man of the pair to have been, actually, a mean drunk’). Even some specificational verbs that entail the truth of the proposition expressed in their complement (e.g., *tukitomeru* ‘ascertain’) can function in this way as well.

The constitution of the verb class can be used to support various theories. Stowell (1982) claims that the dependency that tense interpretations of English accusative subject complements have on matrix predicates in sentences like *I expect him to win the competition* and *I remember her to be the smallest* is directly due to the lack of tense in the *to*-infinitive clauses these verbs select. Ohta (1997, pp. 366–367) claimed this to be support for the argument that there is no tense in the Japanese accusative complement. But as we have seen, verbs specifying either a) a future time or b) a past time for evaluation of the embedded predicate are actually excluded from the class of accusative-quotative verbs. As there are many independent arguments for claiming that accusative complements indeed carry tense (including examples like (49) below), this is not an unwelcome piece of evidence.

While we are discussing how to define a natural class of accusative-quotative verbs, I should point out that the claim that the class of accusative-quotative verbs is non-factive (originally made by Kiparsky and Kiparsky (1970) as a language universal, and suggested for Japanese by C. Kitagawa (1977) in particular) does not in fact hold up. For example the factive verbs *koukai suru* ‘regret’, *nageku* ‘lament’, *rikai suru* ‘understand’, *omonziru* ‘take seriously’, etc., can support accusative-quotative constructions. Here is a well-known example:

- (49) John-wa sono.toki-no zibun-no koudou_i-o [_S PRO_i amari.ni.mo
 John-TOP that.time-GEN self-GEN actions-ACC altogether.too
 keisotu dat-ta] to koukai-site.iru.
 frivolous COP-PAST COMP regret-do
 ‘John regrets the actions of himself at that time to have been altogether too
 frivolous.’

(adapted from Saito (1982, pg. 21, #42) (my gloss))

Only by paying close attention to the facts of usage will we get closer to characterizing the class of accusative-quotative verbs.⁵⁵

Before I move on, I'd like to consider one of the ramifications of my **Observation** above. The fact that accusative-quotative verbs must be able to assign accusative case (at least in some context other than that of accusative-quotative constructions) is an argument against the prolepsis account (at least insofar as a prolepsis account may require some separate projection to include accusative subjects). J. Abe (2002a) observes (with Takezawa and Whitman (1998); Mihara (1998)) that if the matrix verb in the small clause construction is changed to a potential form (adding the morpheme *-e-*), the embedded subject must be nominative marked. I observed above that such potential verbs cannot support accusative-quotative constructions. This dependence on the case marking abilities of the matrix verb is also an argument against Mihara's (1994b; 1994a) post-position analysis of *-o* marking. I have already argued that the kind of semantic restrictions on predication seen in accusative-quotative constructions (and small clauses) are not seen in paraphrastic and adjunct proleptic constructions in Japanese. The constitution of the class of accusative-quotative verbs is a further challenge to a prolepsis analysis.

2.8 Thematic argumenthood

I have claimed (with Marantz (1983); Harada (2005), *inter alia*) that the accusative subject is never the thematic argument of the verb selecting the accusative-quotative complement. Takano (2003, pg. 782; pp. 821–823) claims that the accusative subject (his “accusative proleptic object”) occupies a θ -position on the basis of the fact

⁵⁵For a partial alphabetized list, see Appendix A.

that idiom chunks are excluded from this position (in contrast to English accusative subjects, but parallel to English “proleptic objects”), attributing the argument to Potsdam and Runner (2001).⁵⁶ Takano (2003, pg. 823, fn. 25) supposes that the matrix predicate selects a “theme-rheme relation,” selecting a proposition and a theme of that proposition (similar to what Raposo and Uriagereka (1995) propose for small clauses). A challenge to this analysis is presented in the clear difference in the function of the embedded clause, which behaves as an adjunct when the accusative element receives a θ -role and behaves as a complement when the accusative element does not.⁵⁷

2.8.1 Entailment test

Given a sentence with the surface form of an accusative-quotative construction [NP₁ NP_{2-o} [... predicate]-to cognitive verb], if the accusative noun phrase can also appear as a direct object of that matrix verb independently [NP₁ NP_{2-o} ... cognitive verb] (i.e., if it satisfies the selectional requirements of the verb as a direct object), then it is worth asking whether [NP₁ NP_{2-o} [... predicate]-to cognitive verb] entails [NP₁ NP_{2-o} ... cognitive verb].

⁵⁶As will become clearer in the course of my argumentation, a more likely explanation is simply that accusative subjects are required to *refer*.

⁵⁷Another problem Takano (2003) needs to explain is how certain semantic restrictions on the predicative relation between the accusative subject and the complement are present in the accusative-quotative construction but absent in proleptic adjunct constructions in both English and Japanese. A third challenge is how explain the fact that focus (or information state) patterns in the accusative-quotative construction are not constrained to conform with the theme-rheme pattern proposed. None of these questions are addressed in the proposal.

- (50) a. Mary-wa John-ga syougen-sita no-o sinzitu da to
 Mary-TOP John-NOM testimony-did NMZ-ACC truth COP COMP
 mitometa.
 admitted
 ‘Mary admitted what John testified as being true.’
- b. \Rightarrow Mary-wa John-ga syougen-sita no-o mitometa.
 Mary-TOP John-NOM testimony-did NMZ-ACC admitted
 ‘Mary admitted what John testified.’

If the entailment goes through, then you may conclude that the first sentence is analyzable as a containing a transitive verb with direct object and a quotative adjunct. By way of confirmation, other tests can be conducted to show that such a sentence does not obey the usual restrictions on accusative-quotative constructions.⁵⁸

2.8.2 Subject/predicate inversion test

For example, take the generalization that there is a restriction against the complement predication directly asserting the occurrence of events or the existence of entities. Complement predications asserting future events are particularly bad in an accusative-quotative context. But a verb like *houkoku* ‘report’ seems to support such constructions, if we judge from the superficial form.

⁵⁸There are other factors that complicate this. For example, *atete miru* ‘try and guess’ can select an indirect question, covert question, or pseudoclefted presuppositional element, but because it cannot support a resultative secondary predicate, when it appears with a pseudoclefted presuppositional element and a quotative adjunct in the canonical position for quotative complements (as in (76-a) below on pg. 330 in Section 5.2), the resulting construction is degraded. However other verbs, such as *sitei suru* ‘specify’, can support a resultative secondary predicate in the position a quotative complement also appears in. The result is something that looks on the surface like a thematic argument accusative subject, something I maintain is impossible. Such “impostors” are discussed in more detail in Section 5.2.6 below.

- (51) Tenki.yohou-wa kyou-no saikou.ki'on-o 30-do-o
 Weather.report-TOP today-GEN high.temperature-ACC 30.degrees-ACC
 koeru to houkoku-sita.
 exceed COMP report-did
 'The weather report reported today's high temperature (saying) it will exceed
 thirty degrees.'

Do we throw away the generalization, or is this not an accusative subject construction in the strict sense? The entailment test for thematic argumenthood tells us that (51) \Rightarrow (52).

- (52) Tenki.yohou-wa kyou-no saikou.ki'on-o houkoku-sita.
 Weather.report-TOP today-GEN high.temperature-ACC report-did
 'The weather report reported today's high temperature.'

This suggests that we can retain the generalization. To confirm that (51) is not an accusative subject construction in the strict sense, we might apply a controlled test for subject/predicate inversion. Kuno (1976, pg. 35) notes that the string comprised of the embedded predicate stripped of its subject cannot be pre-posed to the left of the accusative subject:

- (53) *Yamada-wa baka da to Tanaka-o omot-te i-ta.
 Yamada-TOP fool COP COMP Tanaka-ACC think-CONT be-PAST
 (no gloss)

(Kuno: 1976, pg. 35, #66)

Kuno does not attempt an explanation as to why such subject/predicate inversion should be dis-allowed. But we can apply the idea to our example in (51):

- (54) [30-do-o koeru to]_i Tenki.yohou-wa kyou-no
 30.degrees-ACC exceed COMP weather.report-TOP today-GEN
 saikou.ki'on-o *t_i* houkoku-sita.
 high.temperature-ACC report-did
 ‘(Saying) it will exceed thirty degrees, the weather report reported today’s
 high temperature.’

Subject/inversion is possible, so we conclude that (51) is not an accusative-quotative construction.

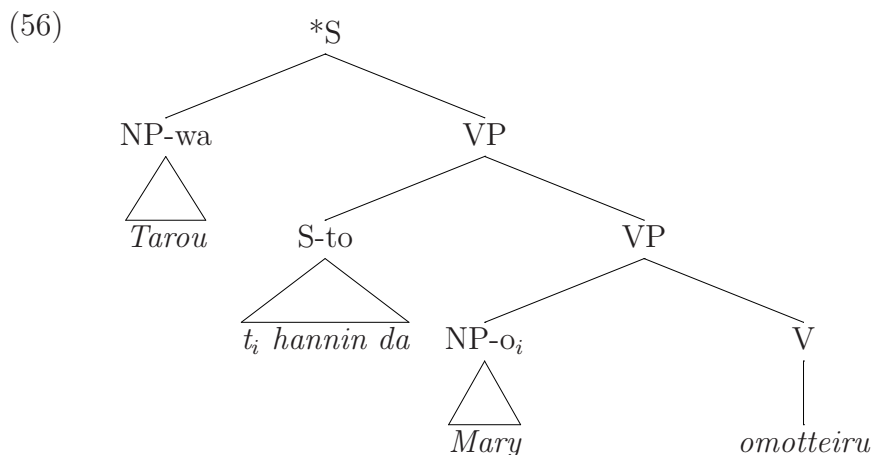
Some researchers have argued that this restriction on scrambling the clausal complement stripped of its subject (the “complement remnant”) demonstrates that the string in question is not in fact a constituent or a maximal projection, under the assumption (following Williams (1983a, pp. 297–298)) that *wh* movement only affects maximal projections: **To be how stupid do you consider me?*⁵⁹ Under the assumption that only constituents in general can move, the data would be accounted for. Some common tests for constituent status are 1) the ability to appear as focus NP in pseudocleft sentences, and 2) right-node-raising. The predicate in accusative subject constructions fails both of these tests in English.

But there is another way to explain the badness of subject/predicate alternation using the notion of “proper binding.”

⁵⁹Stowell (1989, pg. 259, fn. 1) argues that the fact that the small clause predicate can be moved (e.g. *How stupid do you consider Bill?*) is support for arguing that it *is* a maximal projection.

- (55) *Hannin da to John-ga Mary-o kangaete.iru.
 Culprit COP COMP John-NOM Mary-ACC think
 (no gloss)

(Sells: 1990, pg. 452, #19b)



(Sells: 1990, pg. 453, #21)

Sells (1990, pg. 452) cites Saito (1985) as saying, “if the *to*-clause is itself scrambled, the accusative phrase *Mary o* no longer c-commands its trace, which violates the proper binding condition on traces.”⁶⁰ Sells (1990, pg. 453) notes that this analysis equally supports both a scrambling analysis and a subject raising (to object) analysis.

Tanaka (2002, pg. 639) also holds there is a trace (left by the moved accusative subject) left in the predicate phrase, which latter can’t be scrambled, lest the trace it contains fail to be bound by its antecedent. In later analyses this is referred to as a violation of the empty category principle (ECP).⁶¹

⁶⁰First formulated by (Fiengo: 1977), the proper binding constraint (PBC) is a requirement that traces must be c-commanded by their antecedents.

⁶¹The empty category principle (Chomsky: 1981, 1986) has several formulations, one of which is as follows: A non-pronominal empty category (a trace) must be either θ -governed or antecedent-

Hoji (1991, 2005b) has called into question whether the inability for subject/predicate inversion to take place is a hallmark of accusative-quotative constructions, but uses as part of his support a [thematic argument + quotative adjunct] construction.

- (57) $[_{IP} [_{CP} t_i \text{ hoka.no.dono.biiru.yori.mo umai to}]_k [_{IP} \text{ Santorii-ga } [_{NP}$
 More.than.any.other.beer tasty COMP Suntory-NOM
 sono.dorai.biiru] $_i$ -o t_k senden-site.iru]] koto
 that.dry.beer-ACC advertise-does fact
 ‘Suntory is advertising that Dry Beer, saying that it is tastier than any other
 beer.’

(adapted from Hoji (1991, pg. 2, #5d)

This pattern parallels that for verbs of naming. Masuoka (1987); Abe (1997) note that for namings there is no single required order of precedence between a direct object and a *-to* phrase:

- (58) Touzi-wa [zouge.no.tou to] daigaku-no koto-o
 At.that.time-TOP Ivory.tower COMP university-GEN matter-ACC
 yonda.
 called
 ‘At that time we called universities “ivory towers.” ’

(Abe: 1997, pg. 129, #14)

The thematic argument criteria are meant to safeguard against exactly this kind of “noise” in data. The entailment test would exclude Hoji’s (1991) example in (57)

governed. A θ -governs B iff A governs B and A θ -marks B . A antecedent-governs B iff A binds B , no more than one bounding node dominates B but not A , and there is no filled complementizer position governing B . A binds B iff A is co-indexed with B and A c-commands B . A bounding node is a maximal projection. A θ -marks B if B is sister to A and A assigns a θ -role to B . Only lexical heads can assign θ -roles.

above. It is, in fact, an “imposter,” but not by virtue of containing the wrong kind of verb or the wrong kind of complement predicate. It is the fortuitous combination of these that allows the [direct object + quotative adjunct] analysis, and the subject/predicate inversion.

While movement analyses favor a proper binding condition account, there are some problematic exceptions to the general ban on subject/predicate inversion. For the purposes of using the subject/predicate inversion test as a way to refine the data set for accusative-quotative constructions, these exceptions also have to be taken into account.

2.8.2.1 Licensing subject/predicate inversion

Nemoto (1993); Sakai (1996); Fukuda (1997); Ohtani (1998, 2005), and Homma (1998) observe that subject/predicate inversion is possible in sentences embedding “major object accusative subjects” (my term):

- (59) a. Mary-ga John_i-no koto-o pro_i mukasi puroresuraa
 Mary-NOM John-GEN matter-ACC long.time.ago pro.wrestler
 dat-ta to omotte.iru.
 COP-PAST COMP think
 ‘Mary believes of John that he was a professional wrestler a long time ago.’

- b. ? pro_i Mukasi puroresuraa dat-ta to Mary-ga
 Long.time.ago pro.wrestler COP-PAST COMP Mary-NOM
 John_{*i*}-no koto-o omotte.iru.
 John-GEN matter-ACC think

‘That he was a professional wrestler a long time ago Mary believes of John.’

(adapted from Homma (1998, pg. 33, #56a,b) citing Nemoto (1993, #56) (my glosses))

The presence of *no koto* incorporation in the accusative subject, then, has to be controlled for if subject/predicate inversion is to be used as a test.

One of the more controversial claims that Bruening (2001, pg. 295) makes is that when an accusative subject is forced to scramble to remedy a Condition A violation (such as the need for variable binding, or as in (60) below, reciprocal binding), the clausal complement can then scramble further to the left without incurring a proper binding condition violation:

- (60) [_{CP} t_i Baka da to] [Tarou to Hanako]_{*i*}-o otagai-no
 Fool COP COMP Tarou and Hanako-ACC each.other-GEN
 sensei-ga t_{CP} omotte.iru.
 teacher-NOM think
 (lit.) ‘As fools, Tarou and Hanako, each other’s teacher consider.’

(adapted from Bruening (2001, pg. 295, #769c) (Bruening’s judgment))

Although Bruening claims that three native speakers OK’ed this example, Tanaka (2002, pg. 648, #43) finds a structurally identical sentence ungrammatical, and questions the conclusions Bruening draws from the assumption that it is acceptable.

Tanaka (2002, pg. 650) further wonders how the forced A-movement can avoid violating the proper binding condition upon fronting the clausal complement (given the presence of a trace in [Spec,CP]). Nevertheless, to the extent that sentences such as these allow subject/predicate inversion, they will have to be controlled for in tests for lexical categorization.

Here is a new entry in the list of configurations that allow subject/predicate inversion in accusative-quotative constructions, involving *wh* in a concessive adjunct:

- (61) Donna.ni [t_i aho da to] $_j$ seito $_i$ -o sensei-ga t_j
 However idiot COP COMP student-ACC teacher-NOM
 omotte.i-te-mo ...
 think.be-CONT-mo ...
 ‘Her/his student, no matter how stupid the teacher thinks her/him to be ...’
- a. ...sore-dake de-wa zissai.ni aho-ni nara-nai.
 ...that-only COP-TOP actually idiot-LOC become-NEG
 ...‘that alone won’t make her/him an idiot.’
- b. ...soko-made aho zya-nai da-rou.
 ...there-until idiot COP-NEG COP-CJTR
 ...‘he/he couldn’t be *that* much of an idiot.’

This pattern hasn’t been noted in the literature to date, but it seems to allow subject/predicate inversion fairly productively. It too will have to be controlled for if we are to use subject/predicate inversion as a test.

Finally, Hoji (1991, pg.1, #5b,c) finds that subject/predicate inversion is allowed for accusative-quotative constructions embedding comparative complements:⁶²

⁶²The bracketing in the example is meant to show the syntactic relations that a subject raising to object analysis would entail.

- (62) ??[_{IP} [_{CP} *t_i* Hoka.no.dare.yori.mo baka da to]_k [_{IP} John-ga [_{VP}
More.than.anyone.else fool COP COMP John-NOM
Bill_i-o *t_k* dantei-si- [_{INFL} ta]]]]
Bill-ACC determined.

‘John determined Bill to be more stupid than anyone else.’

(adapted from Hoji (1991, pg.1, #5c) (Hoji’s judgment))

Because (62) shows no violation of the proper binding condition (that is, because it fails to show the badness expected from *Bill-o* failing to c-command its trace in the left-scrambled complement), to the extent that it is acceptable, (62) seems to indicate that movement of *Bill* out of the complement cannot be entertained as a possible analysis. So goes Hoji’s (1991) argument.

Setting the question of what actually licenses subject/predicate inversion in each of these four cases, if we control for these factors, the subject/predicate inversion test is still viable for determining, for example, whether a given predicate can support accusative-quotative constructions. The syntactic structure of the exceptions, of course, still needs to be explored.

Before moving on I offer one final caveat: As noted in the previous Section 2.7, there are several verbs that seem as though they ought to be able to support accusative-quotative constructions, but for which it is difficult to find instances where the matrix accusative noun phrase is not construable as a thematic argument. One is *sitei suru* ‘specify’. The inversion we’ve been looking at here seems to be regularly acceptable for constructions built on the arguments structures of verbs like these. In the case of *sitei suru* there is added evidence that it is not an accusative-quotative to be found in its ability to embed specificational pseudocleft sentences with accusative marking on the presuppositional element, which is impossible for “true” accusative-

quotative constructions (discussed in Section 5.2). This is more corroboration that the accusative subject is never the thematic argument of the matrix verb.

2.8.3 Semantic restriction test

The **Semantic/pragmatic constraint** defined on pg. 6 in Section 1.1 has consequences for sort of noun phrase that can appear in the accusative subject position, the sort of scope relations that are possible between quantified accusative subject noun phrases and other scope-sensitive elements in a given accusative-quotative construction, and the sort of predication allowed in an accusative-quotative complement. For the sake of lexical categorization, one further test that can be applied to a given construction to determine whether it is indeed a token of the class of accusative-quotative constructions is to test whether the constraints are operative. The use of the example in (51) above could be considered one instantiation of this idea: The acceptability of the construction in spite of the dependence of its complement predication on the existence of some future eventuality was a clue that the construction was not a token of the class of accusative-quotative complements.

Here is another instantiation that looks at a matrix verb phrase thematic argument and a sentential adjunct using a construction involving the verb *sitei suru* ‘to specify’.

- (63) Tarou-wa otouto.no.sita’uke.gaisya-sika
 Tarou-TOP little.brother’s.sub.contracting.company-NPI
 tukuranai.buhin-o hukaketu da to sitei-sita.
 don’t.make.part-ACC indispensable COP COMP specify-did
 ‘Tarou specified a part made only by his little brother’s sub-contracting company to be indispensable.’

By the tests outline in this Section above, the example in (63) is not an accusative-quotative construction, but an “impostor.” The proposition *Tarou wa otouto no sita’uke gaisya sika tukuranai buhin o sitei sita* ‘Tarou specified a part only his little brother’s sub-contracting company makes’ is entailed by (63), indicating that the accusative noun phrase is thematic argument of the matrix verb. Subject/predicate inversion is possible: *Hukaketu da to Tarou wa otouto no sita’uke gaisya sika tukuranai buhin o sitei sita* ‘Saying it is indispensable, Tarou specified a part made only by his little brother’s sub-contracting company’. Furthermore, the familiar semantic restrictions do not apply to the predicate in the sentential adjunct, as can be seen by the acceptability of an inchoative predicate in (64):

- (64) Tarou-wa otouto.no.sita’uke.gaisya-sika
 Tarou-TOP little.brother’s.sub.contracting.company-NPI
 tukuranai.buhin-o hukaketu-ni naru to sitei-sita.
 don’t.make.part-ACC indispensable-LOC become COMP specify-did
 ‘Tarou specified a part made only by his little brother’s sub-contracting company to become indispensable.’

Inchoative predications are normally ruled out for accusative-quotative complements because their interpretations depend on eventualities, and when such eventualities are not discourse familiar, either 1) their existence either has to be asserted, or 2) there has to be generic quantification over said eventualities. A fuller treatment of this idea is offered in Section 4.2.

The consequences of the **Semantic/pragmatic constraint** have only been touched on briefly in Chapter 1, but will be articulated in detail in subsequent Sections, so I won't attempt other semantic tests here. But their correlation with the other tests mentioned in this Section is to the best of my knowledge, robust.

2.9 The data set

In order to distill the semantic facts from a complex body of data, I have had to develop tests to refine the data set in a rigorous way. As it turns out, most research into the accusative-quotative construction has been directed at example sentences that fall within the data set. But as syntactic probes and semantic interpretations increase in complexity and delicacy, so do marginal judgments and marginal data increase. So the tests presented here have their utility, even when we might be satisfied that what we are looking at walks and quacks like an accusative-quotative construction.

Take a verb like *utagau* 'doubt'. It can support accusative-quotative constructions:

- (65) Hanako-wa sono.zibun.ni.totte.atarimae.no.koto-o amari.hiroku
 Hanako-TOP that.point.so.obvious.to.herself-ACC very.widely
 sir-arete.i-nai no de-wa-nai ka-to utagai-dasita.
 know-PASS-NEG NMLZ COP-CRST-NEG Q-COMP doubt-began.
 (lit.) 'Hanako began to wonder about this point so obvious to herself: whether
 it was not very widely known.'

(65) passes the entailment test, the subject/predicate inversion test, and the semantic restriction test, so we can include *utagau* in the list of accusative-quotative verbs. But even given this, with regard to any construction built on the argument structures of *utagau*, we still need to apply the tests:

- (66) Sensei-wa saisyo.no.soutei-o matigatte.iru no
 Professor-TOP initial.assumption-ACC be.mistaken NMLZ
 de-wa-nai ka-to utagai-dasita.
 COP-TOP-NEG Q-COMP doubt-began.

‘The professor began to doubt the initial assumptions: whether they might not be mistaken.’

That *The professor doubts the initial assumptions* is entailed by (66), so (66) fails the entailment test (parallel to what we saw in (50) above). Subject/predicate inversion is possible (witness: *Matigatte iru no de wa nai ka to sensei wa saisyo no soutei o utagai dasita*), so (66) fails this test too. The semantic restrictions also do not apply (witness: *Sensei wa saisyo no soutei o komatta naa to utagai dasita* ‘The professor began to doubt the initial assumptions, thinking, “Now I’m in trouble.” ’), so (66) also fails this test.⁶³

There is, then, a discernible class of constructions, but it is not definable in terms of verb classes or (as will be demonstrated in Section 4.2 below) predicate classes. The generalizations that the rest of this study is concerned with are generalizations over the data set defined by these tests and the **Working description** in Section 2.1.⁶⁴

⁶³The thematic objects of these cognitive verbs all seem to be definite in reference. For example, you cannot doubt a thing without knowing what it is you are doubting. Consequently, a semantic test for non-specific indefinite reference is not in the offing. Incidentally, the complement noun phrases of “proleptic” adjuncts (e.g., *ni tuite* ‘about’; *to kitara* ‘when it comes to’, etc.) are also regularly specific.

⁶⁴There is obvious circularity in using the semantic restrictions as tests to define the data set, then inferring the semantic restrictions from that data set. The semantic tests can in fact be dispensed

I have begun my exposition by defining the class of accusative-quotative constructions in a (mostly) theory-independent way. Such an approach is, I think, warranted given the many disparities between claims made by researchers over the years, claims that fit the predictions of one syntactic theory or another, but only hold over unrepresentative or corrupted data sets. A diachronic study of how *Hanako wa Tarou o baka da to omou* ‘Hanako considers Tarou to be a fool’ and sentences like it have been analyzed in modern linguistics would show how, in many cases, theory drives data collection to the detriment of observational adequacy.⁶⁵ Even the relatively modest goal of identifying which verbs can support the construction and which cannot has rarely been attempted, and no formulation to date has come close to articulating a natural class of accusative-quotative verbs on syntactic or semantic principles. In the process of investigating the question, the existence of constructions that share surface similarities but behave differently (viz. [thematic argument + sentential adjunct + cognitive verb]) has become apparent. I proposed the entailment test, the subject/predicate inversion test (with controls), and a test on semantic restrictions on predication as ways to distinguish between accusative-quotative constructions and these impostors. Hopefully, these observations will contribute to progress toward observational adequacy.

Concerned with the difficulty of reconciling the co-occurrence of accusative subjects and finite complement clauses in Korean with the assumptions of the Minimalist program, Kim and Kim (2003) write that, “Many problems such as those with languages like Korean have been put aside because scrutinized investigations of a specific language sometimes obstruct establishment of an entire project” (Kim and Kim: 2003,

with at the stage of data collection, although semantic effects were instrumental in leading me to the syntactic distinctions I invoke here. However my methodology may be faulted, the important point is the high degree of correlation between the three tests.

⁶⁵A survey of the data itself would also reveal considerable variation in judgments, suggesting that there is areal and generational variation with regard to this construction.

pg. 47). Their concern about the neglect of facts that don't fit the theory is natural for anyone concerned with empirical science. Japanese presents exactly the same pattern of accusative subjects and finite complement clauses, and (much like Korean) there are a variety of other more subtle patterns that co-occur with accusative-quotative constructions. An inquiry into the nature of the phenomenon can take advantage of many of the tools of up-to-date syntactic theory without clinging to its assumptions, and such an inquiry can clarify the goals of observational and descriptive adequacy that any syntactic theory of natural language should strive for.

Some of the syntactic complexities of the accusative-quotative construction should be clearer at this point. The discussion in this Section has only scraped the surface of the research that has been done to date on the subject, but hopefully it will suffice as context for what is to come. The rest of this study will concentrate on substantiating the claims I made in Chapter 1 concerning the **Semantic/Pragmatic constraint** on accusative-quotative constructions. Assumption of the constraint makes clear predictions that can be tested and supported by reference to syntax as well as semantics. The approach also clarifies many questions about reference, quantification, and predication type that should help focus the problems for syntactic treatments to come.

CHAPTER 3

SCOPE INTERACTIONS

In this Chapter I assemble most¹ of the primary arguments concerning scope dependencies as used to examine questions of constituency and relative structural position of accusative subjects.² I start here, first, because the theme of scope touches on many points of contention with regard to the structures of accusative-quotative constructions, but more importantly for the central thesis in this dissertation, because an overview of the scope taking behavior of Japanese accusative subjects throws into relief a much misunderstood pattern concerning quantified expressions taking narrow scope with respect to the matrix predicate in accusative-quotative constructions.

¹I reserve the subject of embedded questions for discussion in Section 5.1.

²Understood broadly, the topic of scope dependency encompasses a variety of phenomena. Here is a list of some of the sorts of syntactic entities that can show scope interactions:

proportionally quantified noun phrases, weakly and cardinally quantified noun phrases, noun phrases formed from disjunctions

wh-phrases

focus phrases such as [$XP \dots$]-*dake*

pronouns (receiving bound variable readings)

adverbs

negation

belief operators and modality (e.g., possibility, probability, etc.)

tense

3.1 Scope of quantified accusative subjects

In brief, accusative-quotative constructions exhibit the following patterns of scope behavior in general:³

1. A universally quantified accusative subject can take either wide or narrow scope with respect to a quantified matrix subject, whereas a universally quantified nominative embedded subject takes only narrow scope with respect to a quantified matrix subject (Kuno: 1972, 1976; Postal: 1974).
2. Quantified accusative subjects can take scope over un-negated matrix predicates.
3. A universally quantified accusative subject cannot take wide scope with respect to a negated matrix predicate.
4. All universally quantified accusative subjects take only wide scope over complement predicate negation, whereas (at least some) universally quantified nominative embedded subjects can show scope ambiguity with respect to complement predicate negation.
5. Accusative subjects that are not thematic subjects of the overt complement predicate do not take scope under focus marked on the complementizer of the embedded clause (Homma: 1998).
6. Quantified accusative subjects can take narrow scope with respect to quantified arguments in the complement predicate, as long as neither quantifier involves existential quantification.

³In this Chapter, I test universal quantifiers (of several types), weak quantifiers (of several types), and disjunctions. A broader survey would be desirable, but the basic patterns exhibited in this limited study are quite clear, and I suspect, generalizable.

7. Existential interpretation of indefinite accusative subjects with narrow scope under the matrix predicate is impossible. Universal (and other kinds of proportional) quantification for accusative subjects is allowed. Indefinite accusative subjects that can be interpreted as having specific reference under the matrix predicate are so interpreted. Unambiguously non-specific indefinite accusative subjects are ruled out as uninterpretable.

The point I want most to establish here is that patterns # 6 and # 7 in the list above fall under the following observation:

Empirical observation: Propositions expressed by the accusative complement cannot directly assert the existence of an entity or an eventuality *as evaluated with respect to the contextual domain defined by the belief world of the agent of attitude*.

(repeated from pg. 4 in Section 1.1)

Existential assertion as I understand it here depends on the contextual domain of evaluation.⁴ Familiar entities (those that are assumed to exist) are not objects of existential assertion (witness: # *There is your dentist appointment at 11:00* (McNally: 1992)) unless the assertion is construed in a restricted domain (e.g., in the context of a list generated by a question: *What else do I have to do today?*). This is a theory of force rather than sense (Higginbotham: 1987), a theory of meaning as context update potential rather than as truth condition (Lewis (1975); Kamp (1981); Heim (1982), etc.).

⁴I'm using the term "contextual domain" to mean the inventory of entities present in the world set of evaluation.

Statements of propositional attitude (involving as they do the beliefs of the speaker of the statement and the beliefs of the agent of attitude referred to in the statement) potentially involve more than one contextual domain. While this complicates the possibilities for our interpretations of expressions in such statements, those interpretations are still amenable to formalization, and in some cases correspondences can be found between interpretations and syntactic properties. The accusative-quotative matrix verb can be considered as generating a contextual domain independent from the contextual domain defined by the speech situation itself. Accompanying uses of the accusative-quotative construction, it appears, there are restrictions against referring to attitudes toward propositions the assertion of which would add or subtract entities from one of these domains (namely, that generated by the matrix verb: the domain of the belief world set of the agent of attitude).

The following discussion examines how the principle operating behind the **Empirical observation** above effects the interpretation of quantification in accusative-quotative constructions within and without the scope of that domain, and examines how this formulation of the facts fares in comparison with accounts based solely on syntactic movement and relative structural height.

3.2 Theories of scope

Syntacticians have often tried to account for one or another of the patterns in the list on pg. 104 by reference to conditions on quantifier scope, or have used examples of one or another of the patterns as support for syntactic claims. (I am most concerned with claims either that the accusative subject is base generated in its surface position, or the that raised arguments in general do not reconstruct for the purposes

of scope taking.) All such attempts to date have ignored data that show existential quantification to behave differently from universal quantification when it comes to the accusative subject. In this Chapter I will show that a restriction against direct existential assertion can cover facts that a scope analysis can't. A proper understanding of the consequences of this restriction also suggests that some of the arguments for an analysis positing base generation of Japanese accusative subjects or the failure of Japanese accusative subjects to reconstruct have been based on evidence of scope asymmetry that is independently accounted for by the principle operating behind the **Empirical observation**.

For the purposes of logical representation, the interaction of syntactic elements having logical domains can be described with the notion of logical operators, where “the scope of an operator is the domain within which it has the ability to affect the interpretation of other expressions” (Szabolcsi: 2001, pg. 607, #1). Interpretations of sentences in which two logical operators can each be interpreted as being in the scope of the other are said to show “scope ambiguity.” Interpretations of sentences in which one logical operator affects the interpretation of the other, but the converse doesn't obtain, are said to exhibit “scope asymmetry.”

Syntacticians have long looked for ways to relate general principles of syntax (including those operating on overt structure) to restrictions on patterns of logical interpretation (May (1977) is an early example of attempts at systemization through syntax). Scope ambiguity is sometimes used as grounds to claim that the operators in question are clausemates, or are in a mutual c-command relations, or are in the same syntactic “minimal domain”. Scope asymmetry has been used to argue the opposite claims, and to support the view that quantified phrases exhibit crossover effects and sensitivity to syntactic islands, for example. But whether the interaction of logical operators

in natural language can be fully described through syntactic principles alone is still being argued.

Syntacticians have tried to directly relate the notion of scope to that of c-command domain in syntax. (See Reinhart (1978) for an early example.) Huang (1982, pg. 220) suggested the **Isomorphic principle** as part of a program to reduce quantifier scope to the c-command relation at the level of logical form (LF):

Isomorphic principle Suppose A and B are both QP's or Q-NP's (quantified NP's) or Q-expressions, then if A c-commands B at SS (S-structure), A also c-commands B at LF.

(Huang: 1982, pg. 220)

But Huang's (1982) **Isomorphic principle** only describes one sufficient condition for scope-taking, and only generates scope ambiguity through mutual c-command. Scope phenomena are more complex than that.

Kuroda (1970) noted that scrambling could produce scope ambiguity.⁵

- (1) a. Dareka-ga daremo-o semeta.
 Someone-NOM everyone-ACC criticized
 (i) 'Someone criticized everyone.'
 (ii) \neq 'For every person x , some person y criticized x .'

⁵This has been formalized in conjunction with the theory of traces in various ways (e.g., Hoji (1985), Oka (1988), or for a more complex account, Aoun and Li (1993)).

- b. Daremo_i-o dareka-ga t_i semeta.
 Everyone-ACC someone-NOM criticized
 (i) ‘Someone criticized everyone.’
 (ii) ‘For every person x , some person y criticized x .’

(adapted from Hoji (1986, pp. 89–90, #11a,12a), citing Kuroda (1970))

Kuroda (1970) accounted for the scope ambiguity seen in the scrambled example in (1-b) using the following formulation:

Kuroda’s generalization If a predicate corresponds to a sentence frame with the “preferred” word order, the semantic order of quantifiers is given by their linear order; If a predicate corresponds to a sentence frame with “inverted” word order, the semantic order of quantifiers is ambiguous.

Kuroda (1970, pg. 138)

It is sometimes said that Japanese “wears its logic on its sleeve,” and the formulation above expresses the high degree of predictability of interpretation by surface form that Japanese is noted for. As Hoji (1985, pg. 240) notes, **Kuroda’s generalization** also explains, for example, the lack of quantifier scope for subjects of passivized sentences, even though passive subjects are assumed to have moved from an underlying object position.⁶ A quantified subject of a passive takes only wide scope with respect to the quantified complement noun phrase in the agentive adjunct (e.g., for a sentence like *Sannin no syouzyo ga yonin no syounen ni syoutai sareta* ‘Three girls were invited by four boys’, available interpretations involve no more than three girls but as many as twelve boys).

⁶Hornstein (1999, pg. 57) also claims that, examples with scrambling aside, relative quantifier scope in Japanese reflects S-structure relations, basically following **Kuroda’s generalization**.

But accusative subjects show some scope ambiguities not in evidence for nominative subjects (as we will see in (4-b) on pg. 116 in Section 3.3), even though the case marking seems to alternate often without overt movement to a “non-preferred” word order. Furthermore accusative subjects fail to show scope ambiguities that are in evidence in the non-accusative marked arguments to which they correspond in minimal pairs (as we will see in (31-b) on pg. 141, a point discussed in detail in Section 3.6).

Oka (1988, pg. 196, #23) tried to capture the latter fact by attributing scope ambiguity to A-movement, re-framing **Kuroda’s generalization** in the following way:

Quantifier scope Given quantifier phrases α and β at S-structure, α can have the wide scope with respect to β if and only if

- (i) α c-commands β at D-structure, or
- (ii) α is moved crossing over the D-structure position of β

(Oka: 1988, pg. 196, #23)

Of course, Oka’s (1988, pg. 196, #23) principle of **Quantifier scope** fails to explain the lack of scope ambiguity for passives that Hoji (1985) was concerned about, but Oka found scope ambiguities in passives (e.g., *John ga dareka ga daremo ni syoukai sareta to omotte iru* ‘John thinks that someone was introduced to everyone’ (Oka: 1988, pg. 200, #36a)) and attributed this to A-movement. From the lack of scope ambiguity in an accusative-quotative counterpart to this example, Oka inferred (perhaps hastily) that accusative subjects are base generated in their surface position, outside of the complement clause.⁷

⁷Oka (1988) did not address the scope ambiguity that obtains between the matrix subject and the accusative subject. Furthermore, some of Oka’s conclusions were based on data which could be accounted for by an independent restriction on existential quantification of the accusative subject, and the same restriction accounts for patterns that Oka’s (1988) analysis does not predict (discussed in detail in Section 3.6 below).

Later researchers (Takemura: 1994; Hornstein: 1995; Takano: 2003), adopting the VP-internal subject hypothesis and a phrase structure containing agreement phrases (AGR__P), have proposed that the interleaving of A-chains can produce scope ambiguity in accusative subject constructions, thus accounting for a wider range of data while preserving a movement analysis. For example, the scope ambiguity between accusative subjects and matrix subjects can be explained by assuming a matrix VP-internal position for the matrix subject, and a higher [Spec, AGR_{OP}] position to which the accusative subject must move to receive case. Interpretation at that position accounts for wide scope over the matrix subject (construed *in situ*), and “reconstruction” to embedded subject position accounts for narrow scope under the matrix subject. But whether “reconstruction” for scope is allowed in chains produced by A-movement is still being contested.

One of the motivations for taking the stance that reconstruction is not allowed in A-chains is the fact that accusative subjects in English cannot take narrow scope under negation in the complement predicate.⁸ The same point holds for Japanese (pattern # 4 on pg. 104). But for those who assume reconstruction for A-chains, the facts of Japanese seem to suggest that the accusative subject is base generated in matrix object position. The idea that quantifier scope can be “read off of A-chains” is also suggested by the clause-bound behavior of universal quantifiers.⁹

⁸For example, Chomsky (1995); Lasnik (1999) argue that reconstruction should be barred for A-movement by virtue of examples such as *There aren't many linguistics students here*; *The mathematician made every even number out not to be the sum of two primes*; *Everyone seems not to be there yet*, etc.

⁹Kuno (1976, pg. 27) proposes a rule for interpreting quantified noun phrase constituents of a *simplex* sentence, based on surface string precedence:

- i. (a) Predominant reading: Interpret Q1, and then Q2.
- (b) Secondary and weak reading: Interpret Q2 first and then Q1.

(Kuno: 1976, pg. 27, #34)

This can be seen as an early formulation of a clausemate condition:

Aoun and Li (1993, pg. 199, fn. 1) use a variation of the c-command relation at logical form (LF) in conjunction with the notion of quantifier raising to represent scope relations for Japanese quantifiers, constraining the range of possible structures by a requirement on binding between a raised quantifier and its intermediate trace. In this way (for a limited data set), they are able to unify the scope behavior of English, Chinese, and Japanese quantifiers under the same principles by assuming different basic syntactic structures for each. Although Aoun and Li never tried to apply their analysis to accusative-quotative constructions, when applied to a raising analysis like Takemura's (1994) it accounts for the scope ambiguity between accusative subjects and matrix subjects that Kuno (1976) noted (i.e., pattern # 1 in the list on pg. 104), and their claim that scope is read off of intermediate traces rather than NP traces formed by A-movement can account for the lack of a narrow scope reading of universally quantified accusative subject under negation in the complement predicate (i.e., pattern # 4 in the list on pg. 104).

There are other advantages to their analysis as applied to accusative-quotative constructions (discussed in detail in Section 3.8 below), although it ultimately fails to cover all the facts.¹⁰ The accusative-quotative constructions poses some special challenges to a syntactic account.

Clausemate condition: If two quantified noun phrases A and B are ambiguous as to scope relations (i.e., if interpretations $(A > B)$ and $(A < B)$ are both available), this can be seen as evidence that A and B are (in some sense “immediate”) constituents of the same clause (i.e., included in the same clause, with no other clause boundary between them).

The condition that the sentence be simplex (the **Clausemate condition**) has been reformulated in a variety of ways in later analyses, some employing the notion of government (May: 1985), and some referring to the locality of A-movement. (Of course, Kuno's (1976) formulation does not account for the lack of scope ambiguity that Kuroda (1970) saw between subject and object in un-scrambled sentences such as (1-a).)

¹⁰For a critique of Aoun and Li's (1993) analysis on other grounds, see Kuno et al. (1999, 2001); Kuno and Takami (2002).

The notion of quantifier raising at the level of logical form is often used to account for scope ambiguity between quantified noun phrases (among other things). For example, it is widely recognized that English sentences like (2) are ambiguous.

(2) Some citizen admires every politician.

Winter (1997, pg. 400, #2)

The indefinite *some citizen*¹¹ can be interpreted “before” the universally quantified *every politician*, to mean “There is a citizen x and for every politician y , x admires y .” But *some citizen* can also be interpreted “after” the universally quantified *every politician*, to mean “For every politician y , there is a citizen x , such that x admires y .” Note that in the second interpretation, the value for x can vary according to the value assignment for y . May (1977) claimed that a process of quantifier raising at the level of logical form could invert the order of the operators in such cases, thus producing both readings.

¹¹In this case the interpretation of *some citizen* can be interpreted as either specific, or as having existential force. The general distinction is often overlooked, but is important to my thesis later on. Specificity is presuppositional (assuming existence in the contextual domain), whereas existential force is involved in existential (non-specific indefinite) quantification (adding an element to the contextual domain).

It is possible to find syntactic grounds for considering such specific indefinites as referential (non-quantificational) expressions. For example, Hoji (1985, pg. 269, #121c) finds that where the scope of quantifiers in general prohibits a *wh*-expression in Japanese, a specific interpretation of an indefinite does not:

- i. ??Dareka-ga nani-o nomimasita ka.
Someone-NOM what-ACC drank Q
- (a) ≠ What did someone drink?
- (b) What did a certain person drink?

(Hoji: 1985, pg. 269, #121c)

I suggest that if the prohibition is for quantified expressions generally, then its apparent relaxation in (2-b) indicates that specific indefinites are not quantified expressions.

As we have seen in (1-a), Japanese subjects and objects don't normally exhibit the kind of scope ambiguity that May (1977) was concerned with. But as it turns out, accusative-quotative constructions are an exception to the norm. That this is the case is one of the earliest observations about the behavior of quantifier scope in accusative-quotative constructions (i.e., pattern # 1 in the list on pg. 104).

With the preceding discussion as context, let's look at the peculiar ways that Japanese accusative subjects take scope.

3.3 Matrix subjects and accusative subjects

Kuno (1976) observes that in the sentence (3) below, a wide-scope reading of the quantifier in the embedded clause is impossible:

- (3) Dareka-ga [minna-ga sin-da] koto-o sira-nakat-ta.
 Someone-NOM [all-NOM die-PAST] fact-ACC know-NEG-PAST
 a. There was some person who did not know that all had died.
 b. \neq For each person x , there was someone who did not know that x had died.

(adapted from Kuno (1976, pg. 28, #35,36))

From this Kuno generalized that quantified constituents of subordinate clauses can never be interpreted as taking wide-scope over quantified constituents of superordinate clauses.¹² Kuno reasoned that scope ambiguity, when it arises, should ac-

¹²If we consider specific indefinites to be quantificational (i.e., to have "widest scope"), then Kuno's (1976) rule for interpretation is an over-generalization, covering only some cases of universal quantifiers in embedded clauses. But a distinction should be made between having specific reference and having existential force.

cordingly be attributable to clausemate status (that is, that clausemate status is a necessary condition for scope ambiguity). This is the basic assumption on which Kuno bases his analysis of the scope asymmetry between typical Japanese subjects and objects in root contexts, and the unexpected scope ambiguity between a matrix subject and an accusative subject.

Kuno (1976, pp. 27–28), in his seminal work on accusative-quotative constructions, claims that some speakers of Japanese find scope ambiguity in accusative-quotative constructions where there is none in corresponding constructions with nominative subjects of embedded complement clauses. As an example, Kuno notes the availability of a wide-scope reading for the accusative-quotative noun phrase in (4-b) below.

In ex. (i.) below, the linear order of the quantification type for the noun phrases in (3) is reversed (from $\exists < \forall$ to $\forall < \exists$). There is no doubt that *dareka* in ex. (i.) can be interpreted with a specific, presuppositional reference as in (i.b), (represented by a non-logical constant *j*).

i. Minna-ga [dareka-ga sin-da] koto-o sira-nakat-ta.

All-NOM someone-NOM die-PAST fact-ACC know-NEG-PAST

- (a) ‘For every person *x*, there is a person *y* for whom *x* did not know the fact that *y* had died.’
- (b) ‘With reference to a specific person *j*, for every person *x*, *x* did not know the fact that *j* had died.’
- (c) \neq ‘There is some person *y* for whom no one knew the fact that *y* had died.’

(Derived from Kuno (1976, pg. 28, #35,36) (my (3) above))

But ex. (i.) cannot be interpreted as an existential assertion about a non-specific person as in ex. (i.c). The crucial point to grasp is that, while ex. (i.c) does describe the truth condition for an interpretation like that in ex. (i.b), under no viable interpretation does ex. (i.) *assert* the existence of *j*. In short, *dareka ga* does not take wide scope over the matrix subject in ex. (i.).

It is sometimes claimed that indefinites are able to “scope out of” syntactic islands such as finite subordinate clauses (As an early example, Kroch (1974) refers to the tendency for *a certain* expressions to take “wide scope”.) Indeed, this is the treatment specific indefinites receive in Montague semantics (Montague: 1973, 1972). But, taking a dynamic view of semantics, it can’t be said that the indefinite expression in ex. (i.) actually has existential force outside of the scope of the universally quantified one. That is, there is no available interpretation in which asserting the sentence adds an entity to the contextual domain of interpretation. Logicians use existential quantification in translations of definite and specific indefinite noun phrases to describe the truth conditions of the sentences in which such expressions appear. But in a dynamic view of semantics (where meaning is the “context update potential,” existential assertions are statements about the constitution of the domain. Definite and specific indefinite references do not involve existential assertion in this sense.

- (4) a. Dareka-ga minna-ga baka da to omotte.iru.
 Someone-NOM everyone-NOM fool COP COMP think
 (i) ‘There is someone who thinks that everyone is stupid.’
 (ii) \neq ‘For every person, there is someone who thinks that person is stupid.’
- b. Dareka-ga minna-o baka da to omotte.iru.
 Someone-NOM everyone-ACC fool COP COMP think
 (i) ‘There is someone who thinks that everyone is stupid.’
 (ii) ‘For every person, there is someone who thinks that person is stupid.’

(adapted from Kuno (1976, pg. 28, #37,39))

Kuno sees the availability of the interpretation (4-b-ii) for sentence (4-b) (i.e., pattern # 1 in the list on pg. 104) as support for the claim that the accusative subject is not in the subordinate clause, but is rather a clausemate of the matrix subject noun phrase.

Hornstein (1995, pg. 35) finds the same sort of scope ambiguity in English accusative subject constructions:

- (5) a. Someone expects every Republican to win the election.
 b. Someone expects every Republican will win the election.

Hornstein (1995, pg. 36, #2a,b)

Only in (5-a) can the universally quantified subject take scope over the matrix subject. Assuming the accusative subject *every Republican* is in matrix object position, the fact that it exhibits scope ambiguity with the matrix subject *someone* is not surprising for English, given the interpretations we’ve seen are available for sentences like (2).

But the scope ambiguity in the Japanese example stands in stark contrast to what we might expect by analogy with (1-a).¹³ Of course, Kuno's (1976) **Clausemate condition** and his rule for strong and weak scope interpretations is weak enough to describe the contrast between scope asymmetry in (4-a) and scope ambiguity in (5-b), but it predicts a reading for (1-a) that is not available.

As mentioned briefly in the previous section, and as we will see in a more detailed discussion of structure in Section 3.8 below, the VP-internal subject hypothesis and a theory of movement to [Spec, AGR_{OP}] (Takemura: 1994; Hornstein: 1995) can account for the scope ambiguity in (4-b) in a way that preserves both the intuitions of Kuroda (1970) and the clausemate notion of Kuno (1976), at least with respect to scope ambiguity between matrix subject and accusative subject in Japanese.

But a movement analysis for Japanese accusative subjects runs into problems. The presence of finite tense marking on the complement predicate, and the presence of the complementizer *to* in (4-b) argue against an analysis for Japanese that parallels the analysis for English. If finite tense is associated with nominative case marking in Japanese (Takezawa and Whitman: 1998), there is no motivation for an embedded subject to move to [Spec, AGR_{OP}] in the matrix clause in Japanese, as opposed to English (Hornstein: 1995, pg. 157). Furthermore, if an IP sister of C(omplementizer) is a barrier, movement would be restricted by the **Empty category principle**.¹⁴

¹³Kuno's observation about the scope ambiguity of (4-b) is widely recognized as robust. Takemura (1994, pp. 112–113) notes the pattern independently. Tanaka (2002, pg. 638) reproduces Kuno's (1976) argument for operator scope uncritically. S. Kuno (2004, pp. 3-4) also reproduces his own (1976) arguments for subject raising based on quantifier scope without amendment.

¹⁴Hornstein (1995) uses the following definitions:

Empty category principle All traces must be properly governed. (Hornstein: 1995, pg. 14, #14)

Proper government A trace is properly governed iff it is governed by a head X^0 or locally bound by its antecedent. (Hornstein: 1995, pg. 14, #15)

Government A governs B iff A m-commands B and no barrier intervenes between A and B. (Hornstein: 1995, pg. 204, nn. 5)

I don't offer a specific proposal to derive the scope ambiguity in (4-b). Takemura (1994, pp. 109–110, #54a,b), working from a suggestion by Ura (1993, pg. 275), suggests that all arguments which move for reasons of case are “affected” in such a way that they receive some kind of “focus,” and this is responsible for the wide scope of *everyone* over *someone* in sentences like *Someone believes everyone to be a genius*. In fact, there is no special requirement for focus — as commonly understood — on the accusative subject: Insofar as focus is conceived of as prominence or as the answer to a question under discussion, virtually any element in an accusative-quotative construction can receive focus.¹⁵

3.4 Accusative subjects and matrix predicates

If we treat the **Empirical observation** as a constraint, and assume that a context of interpretation is determined by the matrix verb (i.e., that the matrix verb functions as a “belief operator”), we predict that narrow scope under the matrix verb is ruled out for weakly (existentially) quantified accusative subjects.¹⁶ (I will substantiate this claim in detail in the Sections that follow, and give more empirical support in Chapter 4.) However, strongly (proportionally) quantified accusative subjects can take narrow scope under un-negated matrix verbs:

These, in conjunction with various assumptions about English clauses structure, produce the scope asymmetry Hornstein notes for English.

¹⁵Kitano (1990) associates exhaustive focus with accusative subjects in Japanese, but the claim is easily falsified.

¹⁶At this stage I am treating the question of quantification type as a matter of interpretation rather than as a matter of the form of expression. We have already seen that expressions of weak form can have specific (and sometimes, partitive) reference, depending on context.

- (6) Saisyo no zyuk-ko-ga dame dat-ta to site-mo, subete-o sou
 First COP ten-CL-NOM bad COP-PAST CMTV do-even, all-ACC so
 da to dantei-suru no-wa mada hayai.
 COP COMP deem-do NMZ-TOP still early

‘Even if the first ten are bad, it is too soon to deem all of them to be so.’

In (6), the event involved in the act of *deeming* is not “distributed” between each object but is one act directed toward all the entities fitting the relevant description (in a contextually restricted domain).

Here are some more examples of the same point:

- (7) a. Tarou-wa watasi.no.sinseki-o minna hutotte.iru to omotte.iru
 Tarou-Top my.relative-ACC all be.overweight COMP think
 ga, titigawa-no hito-wa mada hito.ri.mo mite.i-nai.
 but, father’s.side-GEN people-TOP yet one-CL-NPI see-NEG
 ‘Tarou believes my relatives to all be overweight, but he hasn’t seen anyone
 on my father’s side yet.’
- b. Tyousa’in-wa zinkou-no san-wari-kyou-o
 Survey.conductor-TOP population-GEN three-tenths-strong-ACC
 kyouwatou da to dantei-sita ga, gohyaku-nin-sika
 republican COP COMP determine-did but, five.hundred-CL-NPI
 kiite.i-nai.
 ask-NEG
 ‘The survey conductor determined over three tenths of the population to
 be Republican, but she only asked five hundred people.’

- c. Sinpan-wa mou.sude.ni syutuzyouysya-o minna sikkaku da
 Referee-TOP already contestant-ACC all disqualified COP
 to handan-site.iru ga, kouhosya-ga mada iru to
 COMP judgment-do but, candidate-NOM still exist COMP
 omoikonde.iru rasii.
 think.erroneously seem

‘The referee has already judged all of the contestants to be disqualified, although he seems to be under the misconception that there are still candidates.’

In (7-a,b,c) as well, the beliefs are about quantifications over entities. Separate acts of judgment aren’t associated with each value assignment for a universally quantified variable. That is, in (6) and (7), the universal quantifier takes narrow scope under the belief operator.

The question is how to test the converse: whether accusative subjects can take wide scope over the matrix predicate.

3.4.1 Referential transparency

It has been claimed by Takemura (1975-1976, 1994); Kitano (1990) and Abe (2002a), among others, that the accusative-quotative complement is necessarily referentially transparent. The examples in (6) and (7) already suggest that this is too strong a claim. But it can be shown that the accusative-quotative complement *can potentially* be interpreted as referentially transparent. This points to the possibility that a quantified accusative subject *can potentially* take wide scope over the belief operator.

One of the earliest researchers to consider data supporting the view that accusative-quotative constructions could be referentially transparent was Tomoda (1976-1977). Tomoda judges a simple nominative-quotative construction as unacceptable where its accusative-quotative counterpart is fine:

- (8) a. *John-wa Mary-ga Mary de-nai to omotte.iru.
 John-TOP Mary-NOM Mary COP-NEG COMP think
 'John thinks that Mary is not Mary.'
- b. John-wa Mary-o Mary de-nai to omotte.iru.
 John-TOP Mary-ACC Mary COP-NEG COMP think
 'John believed Mary to not be Mary.'

(adapted from Tomoda (1976-1977, pg. 361, #3,4) (Tomoda's judgments))

Tomoda's judgments suggest that (8-a) involves an attitude of belief in a logical contradiction (an odd situation), while (8-b) involves something else, presumably either 1) an erroneous belief stemming from mistaken identity, or 2) a belief that *Mary* doesn't exhibit the characteristic properties that she ought. Both interpretations are possible. The interpretation involving erroneous belief involves referential transparency; the "uncharacteristic" interpretation certainly does not.

Tomoda (1976-1977) also gives us the contrast in (9) below:

- (9) a. *John-wa Mary-ga Betty da to kantigai.sita.
 John-TOP Mary-NOM Betty COP COMP mistake
 'John wrongly thought that Mary was Betty.'

- b. John-wa Mary-o Betty da to kantigai.sita.
 John-TOP Mary-ACC Betty COP COMP mistake
 ‘John mistook Mary to be Betty.’

(adapted from Tomoda (1976-1977, pg. 362, #5,6) (Tomoda’s judgments))

Judgments of ungrammaticality for (9-a) aside, observe that in (9-b) (but not in (9-a)), the proper noun *Mary* can undergo substitution *salva veritate*, the hallmark of referential transparency. That is, even if *Mary*’s name is substituted with some other description, the veracity of the characterization of *John*’s state of mind does not suffer: *John*’s beliefs are not assumed to depend on *Mary*’s appellation. I present this example because we will make use of verbs like *kantigai suru* ‘mistake’, *matigaeru* ‘mistake’, *sasyou suru* ‘misrepresent’ below.

J. Abe (2002a, pg. 104) claims that accusative-marked subject constructions are *always* referentially transparent. To demonstrate this, he gives us the minimal pair below:

- (10) a. Tarou-wa 502.gou.situ-wa betu no heya da to
 Tarou-TOP room.number.502-TOP different COP room COP COMP
 omotta.
 thought
 ‘Tarou believed Room #502 was a different room.’
- b. Tarou-wa 502.gou.situ-o betu no heya da to
 Tarou-TOP room.number.502-ACC different COP room COP COMP
 omotta.
 thought
 ‘Tarou believed Room #502 to be a different room.’

(J. Abe (2002a, pg. 104, #38,39))

As a context for interpreting sentence (10-a) above, J. Abe assumes that *Tarou* is standing in front of some room, the number of which is unknown to him, and that *Tarou* is looking for *Room #502*. J. Abe claims that in such a context it is most natural to interpret (10-a) as meaning that *Tarou* believes that the room he seeks is not the room before which he stands. In other words, the proper noun *502 gou situ* takes a *de dicto* reading in (10-a), relativized to the belief-world of the agent of judgment, *Tarou*, who believes that *Room #502* is some room other than the one right in front of him.

On the other hand, in (10-b) the natural interpretation (according to J. Abe) is that *Tarou* has *Room #502* right in front of him, but persists in believing that this room that he faces has some different cognomen. That is, the reference of the proper noun *502 gou situ* is interpreted relative to the belief-world of the speaker (a *de re* reading), rather than to that of *Tarou*.

What J. Abe is describing are valid intuitions, but they are not the whole story. Consider a different situation. *Tarou* is searching for *Room #502*. The speaker does not know the identity of the room before which *Tarou* stands, but is aware of *Tarou*'s commitment to enter *Room #502* and only *Room #502*. *Tarou* declines to enter the room directly in front of him. Observing this, the speaker draws a conclusion about *Tarou*'s state of mind: *Tarou wa 502-gou-situ o betu no heya da to omotte iru* 'Tarou believes Room #502 to be some other room' (10-b). In this interpretation, the accusative-marked subject takes the *de dicto* reading. The proper noun refers to the room *Tarou* has in mind, wherever that may be.

In short, both the *de re* reading and the *de dicto* reading are possible for (10-b), depending on context. All of these examples are intended to show that the reference of accusative subject noun phrase *can potentially* be independent of the beliefs of the

agent of attitude. That is, they can be evaluated outside of the scope of the belief operator. The next step is to show that this is also the case for quantification.

3.4.2 Quantificational transparency

One of the facts that fall out from the **Empirical observation** above is that existential quantification of the accusative subject is impossible under the scope of the belief operator. Indefinite accusative subject noun phrases that can be interpreted as specific (with respect to the belief world of the agent of attitude) will be so interpreted. Those that can't are ruled out as uninterpretable. But it is easy to demonstrate that indefinite accusative subject noun phrases can have existential force when evaluated in a different domain.

- (11) Hanako-wa atari.no.takarakuzi.no.ken-o dokka.no.suupaa-no
 Hanako-TOP winning.lottery.ticket-ACC somewhere's.supermarket-GEN
 ryousyuusyo da to matigaeta.
 receipt COP COMP mistook
 'Hanako mistook a winning lottery ticket to be a receipt from some supermarket someplace.'

The reference of the accusative subject noun phrase is specific indefinite from the point of view of *Hanako*, but from the point of view of the speaker it *can potentially* be construed as non-specific indefinite. The indefinite can have existential force in the same way as *a hammer* does in a sentence like *Hanako picked up a hammer*: "There was a hammer *x* and Hanako picked up *x*."

Demonstrably, the indefinite accusative subject can have existential force in a contextual domain other than the one defined by the belief operator. That is, specific/non-

specific ambiguous accusative subjects can have wide scope over the belief operator (part of the claim in # 2 in the list on pg. 104).

In many languages, noun phrases quantified with equivalents to English *each* tend to take widest scope. Here is another demonstration of referential transparency using *ono ono no* ‘each’.

- (12) Hanako-wa ono.ono.no yougisya-o hanzaisya da to
 Hanako-TOP each suspect-ACC criminal COP COMP
 kakunin-sita.
 verify-did
 a. ‘Hanako verified that for each suspect x , x was a criminal.’
 b. ‘For each suspect x , Hanako verified x to be a criminal.’

In the interpretation (12-b), separate acts of *verifying* vary with the changing value assignments for the universally quantified variable.

The reason why the (potential) referential transparency of accusative-quotative constructions has received so much attention is 1) because nominative-quotative constructions in general are referentially opaque, and 2) because referring to existential transparency seems like a way to account for the fact that indefinite accusative subjects are (in a particular sense) invariably specific. The contrast between accusative-quotative constructions and nominative-quotative constructions with respect to referential transparency is striking. But (as I have taken pains to demonstrate above) referential transparency is not a necessary condition of accusative-quotative constructions. Furthermore, the domain in which specificity is actually required is under the scope of the belief operator, not under the contextual domain of the speech situation (as should be clear by the interpretation of (11)). Referential transparency does not

contribute any part of an explanation for the specificity of the accusative subject. But a restriction against existential assertion in the proposition expressed by the accusative-quotative complement, I submit, both covers the facts and points to an explanation.

3.4.3 Negated matrix predicates

One problem contributing to the difficulty in testing that universally quantified accusative subjects can have wide scope over the belief operator is the fact that they cannot take scope over a negated matrix predicate (i.e., # 3 in the list on pg. 104). Scope asymmetry between negation and universal quantification (in either order of interpretation) is intuitively very easy to grasp. Thus the lack of scope ambiguity in (13) is incontestable.

- (13) Hanako-wa daremo-o supai da to sinzi-nakat-ta.
 Hanako-TOP everyone-ACC spy COP COMP believe-NEG-PAST
 a. ‘Hanako didn’t believe everyone to be spies.’
 b. \neq ‘For every person x Hanako did not believe x to be a spy.’

Nevertheless, we have seen in (11) and (12) that wide scope with respect to un-negated matrix predicates does seem to be available for universal quantified accusative subjects.

I don’t have an explanation for this fact, but in passing I would like to point out point out the scope ambiguity for arguments in simplex clauses with negated predicates:

- (14) a. subete no tori-ga toba-nai koto
 all COP birds-NOM fly-NEG fact
 (i) ‘the fact that not all birds fly’
 (ii) ‘the fact that no birds fly’
- b. subete no kinoko-o tabe-nai koto
 all COP mushrooms-NOM eat-NEG fact
 (i) ‘don’t eat every mushroom’
 (ii) ‘don’t eat any mushroom’

The universally quantified subject in (14-a) can take either narrow (14-a-i) or wide (14-a-ii) scope with respect to predicate negation. The universally quantified object in (14-b) can take either narrow (14-b-i) or wide (14-b-ii) scope with respect to predicate negation. Clearly, then, the accusative subject does not behave like a typical matrix level argument in this respect.

3.5 Accusative subjects and negated predicates

Takemura (1994) observed that a negated complement predicate takes scope over the quantified subject in nominative-quotative (15-a), but not in accusative-quotative (15-b).¹⁷

¹⁷Note that (with the exception of negated matrix accusative-quotative verbs) universally quantified subject noun phrases of the form [indeterminate + *-mo*] always take wide scope over the predicate, and so don’t exhibit the contrast in question. Here we use other kinds of (pre-nominal) modifiers that act as strong (proportional) quantifiers to contrast the “high-position” scope behavior of accusative subjects with the scope behavior of nominative subjects.

- (15) a. Keisatu-wa hotondo.no gakusei-ga supai de.wa-nai to
 Police-TOP almost student-NOM spy COP-NEG COMP
 omotte.iru.
 think
 (i) ‘The police believe that almost all the students are not spies.’
 (ii) ‘The police think it’s not the case that almost all the students are
 spies.’
- b. Keisatu-wa hotondo.no gakusei-o supai de.wa-nai to
 Police-TOP almost student-ACC spy COP-NEG COMP
 omotte.iru.
 think
 (i) ‘The police believe almost all the students to not be spies.’
 (ii) \neq ‘The police think it’s not the case that almost all the students
 are spies.’

(adapted from Takemura (1994, pg. 112, #62a,b) (My gloss))

Takemura draws no particular conclusion from this fact, other than to suggest that it supports his claim that the accusative subject is “focused” in some sense.

Homma (1998, pp. 29–30) also examines whether a quantified accusative subject falls under the scope of negation marked on the embedded predicate:

- (16) a. Aya-wa [subete-no gakusei]-ga kanemoti de-wa nai
 Aya-TOP all-COP students-NOM rich COP-TOP NEG
 to omotte.iru.
 COMP think
 (i) ‘Aya believes that no students are rich.’
 $(\forall > \neg)$
 (ii) ‘Aya believes that not all students are rich.’
 $(\neg > \forall)$

- b. Aya-wa [subete-no gakusei]-o kanemoti de-wa nai to
 Aya-TOP all-COP students-ACC rich COP-TOP NEG COMP
 omotte.iru.
 think
 (i) ‘Aya believes that no students are rich.’
 $(\forall > \neg)$
 (ii) \neq ‘Aya believes that not all students are rich.’
 $(\neg > \forall)$

(adapted from Homma (1998, pp. 29–30, #29; 30a,b; 33))

Homma interprets the scope asymmetry in the accusative-quotative sentence (16-b) as confirmation that the accusative subject is base generated in a position higher than the domain of negation on the complement predicate. Alternatively it can be interpreted as evidence that reconstruction is not allowed after movement.¹⁸

But there is conflicting evidence not only with regard to the derivation of the accusative-quotative construction, but also with regard to the structural height of the accusative subject in surface structure.

¹⁸The latter interpretation is how Lasnik (1999, pg. 195) analyzes this question for English.

- i. (a) I believed everyone not to have arrived yet.
 (b) I proved every Mersenne number not to be prime.

Lasnik (1999, pg. 199, #41,42)

3.5.1 Negative polarity items

For many embeddings, there is a clausemate condition on negative polarity particle *sika* ‘naught but’ and its associated negative morpheme (S. Kuno (2004, pg. 9, #30); Muraki (1978)).¹⁹ (I forgo the demonstration of this point.)

Under this assumption, if the accusative subject occupies a position structurally higher than the domain of the complement predicate negation, then it is predicted that [NP + *-sika*] will fail to be licensed, because negative polarity items can only appear within the domain of negation. S. Kuno (2004) gives us the following contrast:²⁰

¹⁹Actually, the facts are rather complicated. Yamashita (2003) cites Muraki (1978); Nemoto (1993); Kato (1994); Uchibori (2000) as noting that there are cases where the clausemate condition on negative polarity items does not apply. One such context is the “subjunctive complement.”

- i. Bill-ga John-ga Mary-to-sika au you-ni nozoma-nak-atta.
Bill-NOM John-NOM Mary-with-NPI meet way-COP wish-NEG-PAST
‘Bill didn’t wish for John to meet anyone but Mary.’

(adapted from Yamashita (2003, pg. 4, #5) citing (Uchibori: 2000, Ch. 5, Appendix 2.2, #16) (my gloss))

Another is the imperative mood:

- ii. Zyon-wa Meirii-ni Toukyou-ni-sika yuk-e to iwa-nak-atta.
John-TOP Mary-DAT Tokyo-LOC-NPI go-IMTV COMP say-NEG-PAST
‘It was only to Tokyo that John told Mary to go.’

(Muraki: 1978, pg.162, #36)

Kuno (1986) even finds examples where a simple finite clause boundary is not an impediment to licensing a downstairs NPI from an upstairs negation:

- iii. Kanzya-wa mizu-sika hosii to iwa-nakat-ta.
Patient-TOP water-NPI want COMP say-NEG-PAST
(a) ‘The patient said naught but that she wanted water.’
(b) ‘The patient said that she wanted naught but water.’

(adapted from Kuno (1986, pg. 78, #2.1b) (my gloss)).

One of the interesting things about ex. (iii.) that it shows scope ambiguity. Kuno (1986, pg. 79–80) supposes that the *sika* phrase is a theme, originating outside of the complement clause. But the narrow scope interpretation still needs to be explained.

²⁰While negative polarity item *sika* normally absorbs case marking, S. Kuno claims that its failure to absorb case marking here is a feature of “a sentence written in a stilted style,” which he marks with “#”.

- (17) a. #Yamada-wa Tanaka.sensei-o-sika syouziki da to
 Yamada-TOP Professor.Tanaka-ACC-NPI honest COP COMP
 omotte.i-nai.
 think-NEG
 ‘Yamada considers only Teacher Tanaka to be honest.’
- b. *Yamada-wa Tanaka.sensei-o-sika syouziki de-nai to
 Yamada-TOP Professor.Tanaka-ACC-NPI honest COP-NEG COMP
 omotte.iru.
 think
 (no gloss)

(adapted from S. Kuno (2004, pg. 12, #40a,b))

S. Kuno (2004) takes this to indicate that accusative subjects “raise” obligatorily, in counter-argument to Hiraiwa’s (2001) that “raising” is optional. In fact, examples with *-o -sika* are judged awkward by most speakers, so it is less than clear whether (17) actually exhibits the contrast that S. Kuno (2004) claims to find.

On its own, this particular negative polarity item cannot provide proof of constituency or structural height accompanying case alternation. For example, the negative polarity focus particle *sika* ‘naught but’ in (18-a) absorbs nominative case and the argument it marks is a clausemate with the embedded negative, while in (18-b) *sika* absorbs accusative case and the argument it marks is a clausemate with the matrix negative.

- (18) a. Hanako-wa Tarou-sika baka zya-nai to omotte.iru.
 Hanako-TOP Tarou-NPI fool COP-NEG COMP think
 ‘Hanako thinks no-one but Tarou is a fool.’

- b. Hanako-wa Tarou-sika baka da to omowa-nai.
 Hanako-TOP Tarou-NPI fool COP COMP think-NEG
 ‘Hanako doesn’t consider anyone but Tarou to be a fool.’

The scope changes depending on whether [NP + *-sika*] agrees with a downstairs negation or an upstairs negation. When there is negation on both downstairs and upstairs predicates, the scope is ambiguous. (I leave it to the reader to verify this.)

But S. Kuno (2002b, pg. 468–469) devises a way to test the structural height of accusative objects using *-sika* as a probe. First, observe that a matrix argument quantifier cannot float into an embedded clause:

- (19) a. Karera_i-wa mina_i Hanako-ga syouziki da to sinzite.iru.
 They-TOP all Hanako-NOM honest COP COMP believe
 ‘They all believe that Hanako is honest.’

- b. *Karera_i-wa Hanako-ga mina_i syouziki da to sinzite.iru.
 They-TOP Hanako-NOM all honest COP COMP believe
 (no gloss)

(adapted from S. Kuno (2002b, pg. 468, #10a,b))

But see how a universal quantifier²¹ can float to the right of an accusative subject:

- (20) a. Karera_i-wa mina_i Hanako-o syouziki da to sinzite.iru.
 They-TOP all Hanako-ACC honest COP COMP believe
 (no gloss)

²¹Weak quantifiers do not have this freedom of movement. See Section 4.1 for discussion.

- b. Karera_i-wa Hanako-o mina_i syouziki da to sinzite.iru.
 They-TOP Hanako-ACC all honest COP COMP believe
 'They all believe Hanako to be honest.'

(adapted from S. Kuno (2002b, pg. 469, #11a,b))

The inference is that *Hanako-o* in (20) can only be a constituent of the superordinate clause.

Now see how the quantifier intervening between the noun phrase *Hanako* (with its case absorbed by NPI *sika*) and the embedded predicate in (21-b) excludes *Hanako* from the clause with the negative morpheme, thus incurring a violation of the clausemate condition for *sika*:

- (21) a. Karera_i-wa mina_i Hanako-sika syouziki de-nai to sinzite.iru.
 They-TOP all Hanako-NPI honest COP-NEG COMP believe
 'They all believe no-one but Hanako to be honest.'
- b. *Karera_i-wa Hanako-sika mina_i syouziki de-nai to sinzite.iru.
 They-TOP Hanako-NPI all honest COP-NEG COMP believe
 (no gloss)

(adapted from S. Kuno (2002b, pg. 469, #12a,b))

While universal quantifiers have greater freedom of movement than, say, weak quantifiers (in that they do not have to appear in a position that is in a mutual c-command relation with either the host noun phrase or its trace), they still cannot float into a lower clause. The quantifier *mina* is associated with the matrix subject *karera*, but intervenes between the subject and its predicate. This by itself would not rule out the sentence as long as the construction obeys the constraints on accusative-quotative

constructions, other things being equal. But other things are not equal. The accusative subject is marked as a negative polarity item, and it unambiguously occupies a matrix constituent position, but the only potential licensing element (the negative morpheme) is in the embedded clause, and licensing fails.²²

Tanaka (2002, pg. 643–645) independently found a similar way to confirm the grammatical status of embedded subject noun phrases for which the case marking has been absorbed by NPI focus markers such as *mo* and *sika*. Interposing a matrix verb phrase level adjunct between the embedded subject noun phrase and the clausal complement yields different acceptability judgments depending on the scope of the negation.

- (22) a. *John-ga Bill-sika oroka.ni.mo tensai de-nai to
 John-NOM Bill-NPI foolishly genius COP-NEG COMP
 omotte.ita.
 thought
 (no gloss)

²²Actually, this argument would be more persuasive if ex. (i.b) below were completely acceptable, in contrast to (21-b) above:

- i. (a) Karera_i-wa mina_i Hanako-sika syouziki da to sinzite.i-nai.
 They-TOP all Hanako-NPI honest COP COMP believe-NEG
 'They all believe naught but Hanako is honest.'
 (b) ?*Karera_i-wa Hanako-sika mina_i syouziki da to sinzite.i-nai.
 They-TOP Hanako-NPI all honest COP COMP believe-NEG
 (no gloss)

(derived from S. Kuno (2002b, pg. 469, #12a,b))

But — in spite of the fact that *Hanako-sika* is unambiguously in the matrix clause under the domain of matrix negation — the sentence in ex. (i.b) is, for some reason, not very good at all. S. Kuno (2002b) does not note this point.

- b. John-ga Bill-sika oroka.ni.mo tensai da to
 John-NOM Bill-NPI foolishly genius COP COMP
 omotte.i-na-katta.
 thought-NEG-PAST
 ‘John foolishly considered no-one but Bill to be a genius.’

(adapted from Tanaka (2002, pg. 643, #28b,29b) (My glosses))

In (22-a,b) a matrix verb phrase adjunct follows the argument *Bill* that functions as the subject of the embedded predication. When *Bill-sika* is required to be a clausemate of — or, alternatively, in the m-command domain of — the complement predicate negation, the sentence is ungrammatical.²³

At this point we have seen grounds to believe that accusative subjects at surface structure are unambiguously outside of the c-command domain of the negation on the complement predicate. Assuming the truth of this claim, Hoji (1991) uses quantifiers floated from the accusative subject to show that there must be an empty category in the embedded subject position. Hoji’s (1991) judgment for (23-a) below is meant to indicate that an analysis in which the host noun phrase and its floating quantifier form a constituent is not tenable. Bear in mind, then, that (23-a) is grammatical.

- (23) a. *?John-ga [kurasu-no ko-o hito.ri.mo] waruku-nai to
 John-NOM class-GEN child-ACC person.one.not bad-NEG COMP
 omotte.i-ta (koto)
 thought-PAST (fact)
 ‘John believed not one student in class to be at fault’

²³In a similar test, Hiraiwa (2002) shows how an intervening adjunct blocks negative polarity licensing between an indeterminate accusative subject and NPI *-mo* marked on the embedded complementizer (discussed in detail below).

- b. John-ga [kurasu-no ko-o hito.ri.mo] warui to(-wa)
 John-NOM class-GEN child-ACC person.one.not bad COMP(-TOP)
 omotte.i-nakat-ta (koto)
 think-NEG-PAST (fact)

'John did not believe any of the students to be at fault'

(adapted from Hoji (1991, pg. 4, #14) (Hoji's judgments, my glosses))

The expression *hitorimo* 'not one person' is a floating [numeral + classifier] (NMRL-CL) plus focus marker (FOC) *-mo* that functions as a negative polarity item (NPI) in (23). For the universally quantified negation reading to go through, the NPI must be under the scope of negation (in (23-a), then, *included within* the embedded clause). If a [NP + NMRL-CL + NPI] complex were in a matrix argument position, the negative marking on the embedded predicate would not be able to take scope over the negative polarity item *hitorimo*. Assuming a high accusative subject, the fact that the negative polarity item in (23-a) is licensed — Remember to disregard the asterisk — means that the host noun phrase and its floating quantifier are separated by at least one phrasal node (in fact, at least a clause boundary). Note that this problem doesn't arise for the same structural analysis when the negation is on the matrix predicate (23-b). But in fact (in spite of the asterisk and question mark on (23-a)), both (23-a) and (23-b) are acceptable, and Hoji acknowledges this in a restatement of the sentence in (23-a), giving it a different structural analysis in (24) and an acceptable judgment:

- (24) John-ga [kurasu-no ko]_i-o [_{CP} pro_i hitorimo waruku nai to] omotte.ita (koto).

(adapted from Hoji (1991, pg. 4, #i), string-identical to (23-a), Hoji's judgment))

In sum, Hoji (1991, pg. 4) takes the ability of a negative polarity item associated with the accusative subject to be licensed by a downstairs negative to indicate that the accusative subject is associated with an empty category in the embedded predicate, and it is this empty category that “hosts” the [NMRL-CL + FOC] NPI.²⁴

This reasoning only goes through if it can be independently shown that A-movement such as scrambling cannot license a floating quantifier. But there are many examples where A-movement is associated with weak quantifiers floated to positions outside of the domain of mutual c-command with their hosts:

- (25) Syuuzin_i-wa [basu-de koutisyo-made e_i san-nin okur]-are-ta.
 Prisoner-TOP bus-INST detention.center-to three-CL send-PASS-PAST
 ‘Three prisoners were sent by bus to the detention center.’

(derived from Nakayama and Koizumi (1991, pg. 306, #7))

The usual analysis is that mutual c-command with an NP trace is sufficient to float a weak quantifier (Ueda (1986); Miyagawa (1989), among others).

Unfortunately, we can’t easily test weak quantifiers and scrambling, because weak (existential) quantification is independently ruled out by a restriction against direct existential assertion in the complement predication. Accordingly, (26), while ungrammatical, is not a test.

²⁴Of course, this is all based on an assumption about derivation that we are still probing.

- (26) *Tarou-wa zibun.no.suki.na.ko_i-o Zirou-ga nan.nin.ka_i
 Tarou-TOP girl.self.is.fond.of-ACC Zirou-NOM some.people
 horete.iru to omotte.iru.
 be.smitten.with COMP think
 (intended) ‘Tarou believes that girls he likes — several — are such that Zirou
 is smitten with them.’

A floating universal quantifier (such as *san nin to mo* ‘all three of them’) in place of *nan nin ka* ‘some people’ in (26) would result in a grammatical sentence, but there is no mutual c-command requirement on universal quantifiers, so such a sentence would not tell what we want to probe about structure.

But we can at least test Hoji’s (1991) example with matrix level material intervening between the accusative object and the floating quantifier it hosts:

- (27) John-ga kurasu-no ko-o oroka.ni.mo hitorimo waruku
 John-NOM class-GEN child-ACC stupidly person.one.not bad
 nai to omotte.ita.
 COMP(-TOP) think-NEG-PAST (fact)
 ‘John stupidly did not believe any of the students to be at fault’

(derived from (23-a) above (my judgment))

The argument for the presence of an empty category in the complement predicate seems a little stronger. Next we examine some arguments that the empty category might be a trace in some cases.

3.5.1.1 Focus on the complement phrase

Homma (1998, pg. 26) examines the scope of focus particle *sae* ‘even’ marked on the complementizer of the embedded clause.

- (28) a. Aya-wa daremo-ga kanemoti da to-sae omotte.iru.
 Aya-TOP everyone-NOM rich COP COMP-even think
 (i) ‘Aya even believes that everyone is rich.’
 (*even* > \forall)
 (ii) \neq ‘For each person x , Aya even has a belief that x is rich.’
 (\forall > *even*)
- b. Aya-wa daremo-o kanemoti da to-sae omotte.iru.
 Aya-TOP everyone-ACC rich COP COMP-even think
 (i) ‘Aya even believes that everyone is rich.’
 (*even* > \forall)
 (ii) ‘For each person x , Aya even has a belief that x is rich.’
 (\forall > *even*)

(adapted from Homma (1998, pg. 26, #8,9,10))

By the lack of scope ambiguity in (28-a), it may be supposed that the nominative subject remains in a syntactic position lower than the complementizer (presumably to receive case), while the ambiguity in (28-b) suggests that the accusative subject moves across the complementizer to a position where it can c-command *sae*, but leaves a trace that is c-commanded by *sae*. Thus, Homma concludes that reconstruction is possible for at least some kinds of accusative subjects.²⁵

²⁵This observation could be considered a counter-argument to both the prolepsis analysis for all accusative-quotative constructions, and to J. H. Yoon’s (to appear; 2007) contention that the sources of all accusative-quotative sentences are double nominative sentences. Overtly double nominative sentences behave differently, as will be seen directly below.

In contrast to this, an accusative-quotative construction that corresponds to a double nominative construction shows scope asymmetry:

- (29) a. Aya-wa daremo-ga oya-ga kanemoti da to-sae
 Aya-TOP everyone-NOM parents-NOM rich COP COMP-even
 omotte.iru.
 think
 (i) ‘Aya believes even that everyone is such that their parents are rich.’
 (*even* > \forall)
 (ii) \neq ‘For each person *x*, Aya even has a belief that *x* is rich.’
 (\forall > *even*)
- b. Aya-wa daremo-o oya-ga kanemoti da to-sae
 Aya-TOP everyone-ACC parents-NOM rich COP COMP-even
 omotte.iru.
 think
 (i) \neq ‘Aya believes even that everyone is such that their parents are
 rich.’
 (*even* > \forall)
 (ii) ‘For each person *x*, Aya even has a belief that *x*’s parents are rich.’
 (\forall > *even*)

(adapted from Homma (1998, pg. 27, #11,12,13) (my glosses))

(29-a) is unambiguous for the same reason that (28-a) is unambiguous: The left-most subject must have its nominative case checked within the complement clause. But in contrast with the ambiguity of (28-b), the accusative subject of (29-b) can only have wide scope with respect to *sae*, suggesting that it is base generated at a position outside the c-command domain of the embedded complementizer. From this observation, Homma (1998, pg. 25, #2a,b) assigns two underlying structures to accusative-quotative constructions:

- (30) a. NP-ga [_{CP} [_{IP} NP-o PRED] to] omotte.iru
 b. NP-ga [_{XP} NP-o [_{CP} [_{IP} ...PRED] to]] omotte.iru

Homma (1998, pg. 25, #2a,b)

Furthermore Homma (1998, pg. 25, #1,3) concludes that the base generated position of the accusative subject in a sentence like *Aya ga Mai o kanemoti da to omotte iru* ‘Aya believes Mai to be rich’ (1998, pg. 25, #1) must be a position higher than that of the nominative subject in *Aya ga Mai ga kanemoti da to omotte iru* ‘Aya believes that Mai is rich’.

Homma (1998) applies a similar test to a well-known example of Oka’s (1988) below:

- (31) a. John-ga [dareka_i-ni [daremo-ga e_i sitto.site.iru]] to
 John-NOM someone-DAT [everyone-NOM is.jealous]] COMP
 omotte.iru.
 thinks
 ‘John thinks that someone_i, everyone is jealous of e_i.’
 b. John-ga [dareka_i-o [daremo-ga e_i sitto.site.iru]] to
 John-NOM someone-ACC [everyone-NOM is.jealous]] COMP
 omotte.iru.
 thinks
 ‘John considers someone_i to be such that everyone is jealous of e_i.’

(adapted from Oka (1988, pg. 196, #24a,b) (My gloss))

The example in (31-a), where *dareka-ni* (\exists) is scrambled to the left of *daremo-ga* (\forall), is ambiguous. The scope relation between the two quantified noun phrases can be interpreted as being either $\exists > \forall$ or as $\exists < \forall$. However, according to Oka, (31-b) is unambiguously interpreted as $\exists > \forall$.²⁶

Homma's (1998) test adds a focus particle to the complementizer of the embedded clause:

- (32) Tarou-wa daremo-o Hanako-ga e_i sitto-site.iru to-sae
 Tarou-TOP everyone-ACC Hanako-NOM be.jealous-do COMP-even
 omotte.iru.
 think
- a. 'For each person x , Tarou believes that even Hanako is jealous of x .'
- b. \neq Tarou believes even that for each person x , Hanako is jealous of x .'

(adapted from Homma (1998, pg. 27, #14, 15))

When the complementizer is marked with *sae*, the accusative subject can only take wide scope with respect to *sae*.

Both in accusative-quotative constructions "derived from" double nominative constructions and in accusative-quotative constructions such as (31) and (32), where the accusative subject corresponds to an internal argument, the accusative subject is not the thematic subject of the overt complement predicate. So in general, it appears that when the accusative subject is not the thematic subject of the overt predicate in the complement predication, it always takes wide scope with respect to the embedded complementizer.²⁷

²⁶I will show below that this scope asymmetry can be accounted for on independent grounds, and does not demonstrate what Oka intends.

²⁷Homma (1998) seems to confirm these results using discontinuous [[indeterminate NP ... *mo*] ... NEG].

Sakai (1996, pg. 198) uses the licensing of negative polarity items and the phenomenon of discontinuous [[indeterminate NP ... *mo*] ... NEG] to show that there is a trace in the embedded clause. This can also be considered an instance of focus on the embedded complementizer.

- (33) a. Masao-ga [_S dare-ga baka da] to-mo omotte.i-nai.
 Masao-NOM who-NOM fool COP COMP-mo think-NEG
 ‘Masao does not think that anyone is a fool.’
- b. Masao-ga dare-o [_S t_i baka da] to-mo omotte.i-nai.
 Masao-NOM who-ACC fool COP COMP-mo think-NEG
 ‘Masao does not think anyone to be a fool.’

(adapted from (Sakai: 1996, pg. 197, #12b,c) (my gloss))

The indeterminate *dare* ‘who’ must be in the c-command domain of the quantificational particle *mo*, and both must be under the scope of negation (Homma: 1998, pp. 27–28).²⁸ The fact that an accusative subject *dare-o* can still be licensed by the *-mo* marked complementizer in (33-b) indicates either that 1) at the relevant level of representation it is contained in the clausal complement, or that 2) the trace of its movement is sufficient to license it at the relevant level of representation (i.e., reconstruction is possible in A-chains and suffices for licensing NPIs).

²⁸But Y. Takano (2003, pp. 802–803, fn. 18) gives the following counterevidence against the generality of this claim:

- i. (a) ?Watasi-wa dare-ni ko-i to-mo itte.i-nai.
 I-TOP who-DAT come-IMPV COMP-NPI say-NEG
 ‘I haven’t said to anyone, “come.”’
- (b) ?Watasi-wa dare-ni sono.sigoto-o suru to-mo yakusoku-site.i-nai.
 I-TOP who-DAT that.job-ACC do COMP-NPI promise-do-NEG
 ‘I haven’t promised to anyone, “I will do that job.”’

(adapted from Takano (2003, pp. 802–803, fn. 18, #ii-a,b) (my glosses))

Sakai (1996, pg. 199, #14) attempts to confirm this analysis using a sentence (34) for which it is supposed that the accusative element must be base generated *in situ*, given that 1) it is a major object, and that 2) it is associated with a resumptive pronoun in the clausal complement:

- (34) *John-wa dare_i-no koto-o [_S soitu_i-ga kasikoi] to-mo
 John-TOP who_i-GEN matter-ACC they_i-NOM clever COMP-mo
 itte.i-nai.
 say-NEG
 (intended) ‘John has not remarked about anyone that they are a fool.’

(adapted from Sakai (1996, pg. 199, #14) (my gloss))

Assuming that a major object accusative subject is base-generated in the matrix object position, the prediction is that an indeterminate major object accusative subject would be too high to be licensed by the *-mo* marked complementizer. Indeed, the example is unacceptable, but there is too much noise in this example to attribute the problem to the presence of *-no koto*. For one thing, *soitu* doesn’t take bound variable reference in general (e.g., **Subete no rikkouhosya wa sinzya ga soitu ni touhyou suru darou to omotta* (intended) ‘Every candidate thought that the believers would vote for him’), so the co-indexing with a universally quantified noun phrase renders the sentence ungrammatical independently of other factors.

We can test for the structural height of major objects while controlling for this and other potential sources of interference: After substituting a cognitive verb *dantei suru* ‘to determine’ for the verb of saying *iu* ‘say’ that Sakai uses above, and providing some context to help anticipate the negative polarity reading of the indeterminate, let’s examine an instance of discontinuous [[indeterminate NP ... *mo*] ... NEG] with a

major object accusative subject (but with an empty category in place of a resumptive pronoun).

- (35) Kawai.osiego.ni.kansite-wa, Tarou-wa ae-te [dare-no
 Regarding.precious.students-TOP Tarou-TOP dare-CONT who-GEN
 koto]_i-o kurasu.no.naka-de *e_i* itiban.kasikoi to-mo
 matter-ACC among.class-LOC most.clever COMP-mo
 dantei-si-nakat-ta.
 determine-do-NEG-PAST

‘With regard to his darling students, Tarou didn’t dare determine any one of them to be the most clever in the class.’

In (35), *dare no koto o* gets the universally quantified interpretation expected for interrogatives c-commanded by *mo* under the scope of negation. It is widely accepted that major object status for the accusative subject may often make the insertion of a resumptive pronoun into the complement more palatable. But an indeterminate major object accusative subject such as *dare no koto o* in (35) can be licensed by *-mo* marked on the complement. Either the assumption about base-generation of major objects is wrong, or the assumption about the conditions for licensing [indeterminate NP + *-mo*] are wrong. What is clear is that Sakai’s example in (34) does not amount to support for the claim that thematic subjects of lexical complement predicates move out of the complement to become accusative subjects.

There are other ways to support Sakai’s (1996) conclusion that the accusative subject in (33-b) originates from within the c-command domain of the embedded complementizer.

While we can’t make tests using constructions in which the indeterminate accusative subject in an [indeterminate ... *-mo*] expression is associated with a resumptive pro-

noun argument in the complement (such as *soitu*), Homma (1998) notes that there are other constructions in which the accusative subject shows structurally high behavior: 1) when the accusative subject is in a predication with a sentential predicate (i.e., taking a double-nominative sentence as source, parallel to (29-b)), and 2) when the accusative-subject is associated with a non-subject empty category (parallel to (31-b)):

- (36) a. *Aya-wa dono.gakusei-o oya-ga kanemoti da
 Aya-TOP which.student-ACC parents-NOM rich COP
 to-mo omotte.inai.
 COMP-even think-NEG
 (intended) ‘Aya does not believe any student to be such that their parents are rich.’
- b. *Aya-wa dono.gakusei-o Mai-ga sitto-site.iru to-mo
 Aya-TOP which.student-ACC Mai-NOM envy-do COMP-even
 omotte.inai.
 think-NEG
 (intended) ‘Aya does not believe any student to be such that Mai envies them.’

(adapted from Homma (1998, pg. 28, #21b,22c) (my glosses))

Under the assumptions about the licensing for discontinuous [[indeterminate NP ... *mo*] ... NEG], the inference is that the accusative subject in such cases is base-generated in a position outside the c-command domain of the embedded complementizer.²⁹

²⁹Note that the *sika ... nai* construction doesn’t give us the same results for double nominative constructions: *Aya wa Mai sika oya ga kanemoti zya nai to omotte iru* ‘Aya thinks that no one but Mai is such that their parents aren’t rich’. The licensing requirements for the two constructions are different.

Furthermore, note that there *are* cases where the accusative subject is not a thematic subject of the overt predicate, but the indeterminate is nevertheless licensed by *-mo* marked on the complementizer:

The contrast that Homma (1998) notes suggests that in those cases where the accusative subject is the thematic subject of the overt complement predicate, it originates within the complement clause.³⁰

Following this line of reasoning, what Oka (1988) expressed as an empty category *e* in (31-b) could not possibly be a trace. Otherwise, the conditions for licensing the discontinuous [[indeterminate NP ... *mo*] ... NEG] pattern would be satisfied. Now we might think that Oka's (1988) observations about the lack of scope ambiguity between a quantified accusative subject and other quantified arguments of the complement predicate in (31-b) are only generalizable to constructions with "accusative major subjects".³¹

We are left with some support for Homma's (1998) claim about there being two distinct derivational sources ((30-a),(30-b)) for accusative-quotative constructions (at least with regard to focus markers like *sae* on the embedded complementizer). Sakai's (1996) observations seems to supply the support for Hoji's (1991) claim that there is an empty category in the complement predicate, although whether it is a trace or *pro* seems to depend on where the accusative subject gets its thematic role. But we

-
- i. Aya-wa dare-o oya-ga kanemoti da to-mo omotte.i-nai.
 Aya-TOP who-ACC parents-NOM rich COP COMP-even think
 'Aya doesn't believe anyone to be such that their parents are rich.'

The position of the indeterminate within the accusative subject noun phrase seems to make a difference. Harada (2005) also notes that intonation contours are important to licensing discontinuous [[indeterminate NP ... *mo*] ... NEG]. It is easier to get the right contour when the indeterminate is the noun phrase head, apparently. This all suggests that "agreement" or "concordance" is possible between accusative subjects and embedded negations, and between accusative subject and embedded complementizers.

³⁰The point that there is an underlying structure distinct from that for an accusative-quotative construction embedding a major subject is counterevidence to Yoon's (2004) claim that accusative subjects are in general parallel to NP1 in multiple nominative sentences, and the claims of Kuno (2002a) that if a language allows multiple nominative constructions, it allows "raising" out of finite complements. (See also Ura (1994) for a related claim.)

³¹I demonstrate in Section 3.6.1 below that Oka's (1988) claim about lack of scope ambiguity doesn't even hold for "accusative major subjects" as long as the right combination of quantification types is employed.

are left with a mystery as to why an indeterminate major object accusative subject should be licensed by a *-mo* marked complement in some cases, and in other cases not. One clue might be in the fact that the head of the NP is [+Q] in the licensed cases. Remember that Takano (2003) gives some reasons to doubt the generality of the assumption about licensing [indeterminate NP + ... *-mo*].

- (37) a. ?Watasi-wa dare-ni ko-i to-mo itte.i-nai.
 I-TOP who-DAT come-IMPV COMP-NPI say-NEG
 ‘I haven’t said to anyone, “come.”’
- b. ?Watasi-wa dare-ni sono.sigoto-o suru to-mo
 I-TOP who-DAT that.job-ACC do COMP-NPI
 yakusoku-site.i-nai.
 promise-do-NEG
 ‘I haven’t promised to anyone, “I will do that job.”’

(adapted from Takano (2003, pp. 802–803, fn. 18, #ii-a,b) (my glosses))

Some speakers even find examples like the following acceptable:

- (38) Kare-wa dare-ni kuru you ni-mo itte.i-nai.
 He-TOP who-DAT come manner COP-mo say-neg
 ‘He didn’t tell anyone to come.’

These examples would be degraded if the indeterminate were embedded in the interrogative noun phrase, rather than occupying head position.

But taking a dispassionate view about the proposed analyses, it must be admitted that for all the suggestive patterns that they reveal, negative polarity item *-sika* and [indeterminate + *-mo* ... NEG] are not well-enough understood to give us reliable

grounds for choosing between movement and base generation as the analysis for the behavior of the accusative subject.

Nevertheless, some researchers make strong claims on this basis. Hiraiwa (2002) claims that an indeterminate noun phrase must be in the c-command domain of *mo* in overt syntax in order to get a universally quantified reading (or alternatively under Q to get a [+Q] reading):

- (39) *Dare-ga [Tarou-o/-ga baka da to]-mo omowa-nakat-ta.
 Who-NOM Tarou-ACC/-NOM foolish COP COMP-mo think-NEG-PAST
 (intended) ‘Nobody considered Tarou to be a fool.’

(Harada (2005, pg. 5, #21c) adapted from Hiraiwa (2002, pg. 7), citing Sakai (1998))

The matrix subject is outside of the c-command domain of *-mo*. But how about the embedded subject?

- (40) Tarou-ga [dare-ga/-o baka da to]-mo omowa-nakat-ta.
 Who-NOM Taro-ACC foolish COP COMP-mo think-NEG-PAST
 ‘Tarou didn’t consider anyone to be a fool.’

(Harada (2005, pg. 6, #23a,b), adapted from Hiraiwa (2002, pg. 7))

Both the nominative and the accusative subject can be within the c-command domain of *-mo* marked on the embedded complementizer. This is exactly the same point that Sakai (1996) made with his example in (33-b) above. (Let’s remember that major subject accusative objects with indeterminates “deep enough” in the noun phrase structure don’t get licensed in comparable situations.)

Now note how an intervening matrix adverb blocks the licensing of the indeterminate by *-mo*:

- (41) *Tarou-ga [dare-o orokanimo baka da to]-mo
 Who-NOM Taro-ACC stupidly foolish COP COMP-mo
 omowa-nakat-ta.
 think-NEG-PAST
 (no gloss)

(Harada: 2005, pg. 6, #24b), adapted from Hiraiwa (2002, pg. 7)

This is, according to Hiraiwa (2002), supposed to demonstrate that raising is only optional, and that an accusative-marked subject in raising to object constructions can remain in the embedded clause.³²

Therefore (as Hiraiwa reasons) case is licensed (presumably across a clause boundary) without movement on the part of the accusative subject, at least in some instances where the accusative subject is not unambiguously an immediate constituent of the matrix clause.

Sakai (1996); Homma (1998) and Hiraiwa (2002) assume that what is at stake is c-command, and S. Kuno (2004), among others, claims it is a clausemate condition. But consider how acceptability diminishes in direct proportion to the structural height of *-mo*:

- (42) a. *Tarou-wa dare-o baka da to omoi-mo si-nakat-ta.
 Taro-TOP who-ACC stupid COP COMP think-NPI do-NEG-PAST
 (no gloss)

³²This is the same sort of technique that Tanaka (2002) used for the *-sika . . . nai* construction in (22). Note that, in the same position, a universal floating quantifier hosted by a matrix subject (of the kind S. Kuno (2002b) used in (21-b)) would produce the same ungrammaticality.

- b. *Tarou-wa dare-o baka da to omotte-mo
 Taro-TOP who-ACC stupid COP COMP think-CONT-NPI
 mi-nakat-ta.
 try-NEG-PAST
 (no gloss)

The indeterminate is still within the c-command domain of *-mo*, but the sentences are unacceptable. This brings up problems for the clausemate condition as well. If that is the condition for licensing the NPI, then we might have to conclude that the accusative subjects in (42-a,b) are not in the matrix clause.

Harada (2005) also finds fault with Hiraiwa’s claims, primarily because 1) the evidence is not decisive, and 2) the analysis does not account for the restricted occurrence of raising to object. One of her arguments Harada (2005, pg. 6-8) is that the indeterminate noun phrase and its licensing quantificational particle must be in the same intonational phrase. An intervening matrix adverb renders this impossible for independent reasons, and so can not be considered as a test for the constituency “explaining” a bad sentence. I would submit that it is also hard to build the right intonational phrase when the indeterminate is “deep enough” in the accusative subject noun phrase structure. This point takes away some of the force of Hiraiwa’s argument, though it does not contradict his conclusions.

But consider the unresolved questions about [indeterminate + *mo*]: 1) the c-command requirement for [indeterminate + *mo*] licensing is relaxed in some cases, as noted by Y. Takano (2003), and 2) c-command by *-mo* within the scope of negation alone is not sufficient to license indeterminate, as indicated in (42).

Whatever may be actually going on, the principle the Hiraiwa proposes to account for his data doesn’t cover the rest of the facts:

Indeterminate-agreement constraint The head of the chain of an indeterminate must be in $\text{cd}(\text{Q})$ at Transfer.

Hiraiwa (2005, pg. 100, #15)

(More explicitly, the head of the chain of an indeterminate must be in the domain of c-command of the Q-marked element at Transfer (not at LF).)

3.5.1.2 Taking stock

The considerations above represent the best efforts of syntacticians to ascertain the derivation of the accusative-quotative construction using the notion of scope and negative polarity item licensing. What are we left with after all is said and done?

There seem to be two basic kinds of accusative-quotative structure, each with the option of appearing as a “major object accusative subject,” which I add as a third category because it seems to allow the appearance of resumptive pronouns:

1. **accusative thematic subjects:** cases where the accusative subject is a) the thematic subject of the lexical predicate in the complement, b) unaccompanied by a resumptive pronoun in the complement clause, and c) not a “major object” (i.e., a [NP + *no koto*] complex)
2. **accusative major subjects:** cases where the accusative subject is associated with a saturated sentential predicate (including cases with resumptive pronouns) or is a non-subject thematic argument of the lexical predicate in the complement
3. **major object accusative subjects:** cases where the accusative subject takes the form of a “major object,” including a) thematic subjects of the complement

predicate, and b) major subjects (note that resumptive pronouns are sometimes licensed, for both sub-cases, and sentences with resumptive pronouns behave syntactically as members of the class described in # 2).

(repeated from the list on pg. 54 in Section 2.6)

For all of these, the accusative subject always takes wide scope over a negated complement predicate.

For structure # 1, in which the accusative subject is the thematic subject of the complement predicate, “agreement” of some sort with *-mo* marked on the complementizer of the embedded clause is possible (under matrix negation, unless matrix level material intervenes between the accusative subject and the complement predicate. The same holds for structure # 3 with thematic subjects.

For structure # 2 the evidence is mixed. When the indeterminate is the accusative subject noun phrase head, the “agreement” seems to be possible. When it is embedded “too deeply” in the accusative subject noun phrase, the agreement doesn’t go through.

It’s difficult to see how to square these facts with Homma’s (1998) observation that “accusative major subjects” are outside of the scope of other focus markers on the complementizer of the complement clause such as *sae* ‘even’. If accusative major subjects always take wide scope over focus on the embedded complementizer, then *-mo* in the discontinuous [indeterminate + *-mo* + NEG] construction is not the same kind of animal.

There is some evidence that an empty category of some kind appears in the complement predicate, co-indexed with the accusative subject noun phrase, but evidence from floating quantifiers is inconclusive, and evidence from [indeterminate + *-mo* + NEG] is suspect on several grounds.

The apparent lack of scope ambiguity with quantified internal arguments of the complement noted by Oka (1988) seems to indicate that if there is an empty category, then it is not a trace. (However, I will present evidence to undermine Oka’s (1988) conclusions below.)

3.5.2 Scope and temporal adjuncts

In order to demonstrate that the overt accusative subject must occupy a position outside of the embedded clause, Hoji (1991) uses a topicalized temporal adjunct *ima wa* ‘now, in contrast’ to show its varying compatibility with embedded clauses of different tenses. Crucially, the following relationships are kept constant: The adjunct intervenes between the accusative subject *kurasu no ko* ‘children in the class’ and the NPI *hitorimo* ‘not one person’ that it hosts, and the predicate in the embedded complement is in past tense (resulting in a “shifted past reading”). The variable in the minimal pair is the position of the negative morpheme.

- (43) a. *John-ga [kurasu-no ko]_i-o hito.ri.mo ima-wa [_{CP} pro_i
 John-NOM class-GEN child-ACC person.one.not now-TOP
 waruku-nakat-ta to] omotte.iru (koto)
 bad-NEG-PAST COMP think (fact)
 (no gloss)

- b. John-ga [kurasu-no ko]_i-o hito.ri.mo ima-wa [_{CP} pro_i
 John-NOM class-GEN child-ACC person.one.not now-TOP
 warukat-ta to] omotte.i-nai (koto)
 bad-PAST COMP think-NEG (fact)
 ‘John does not now believe any of the children in the class to have been
 bad.’

(adapted from Hoji (1991, pg. 4, #ii,iii) (My gloss))

When the only negation is on the embedded predicate as in (43-a), the NPI is forced to agree with it, inheriting the past tense that is also marked on the predicate into the bargain. But note the deictic expression *ima wa* ‘now, in contrast’ in the context of a matrix-level present tense predicate, taking utterance time as its reference, intervenes between the accusative subject and the NPI. For the referent of the accusative subject (an object of a matrix-present action) in (43-a), association with that NPI is now impossible because of its agreement with a past tense. The “lifetime” of the accusative object (that is, the time interval at which it is interpreted as the object of a matrix-present action) conflicts with the reference time of any subject that might be associated with the embedded predicate. In contrast, in (43-b) the NPI agrees with the negation on the (present tense) matrix predicate, and there is no conflict.

I include this data here because I will have occasion to use similar techniques in Section 4.2 (although not interacting with the scope of negation).

3.6 Scope ambiguity with complement arguments

In order to examine whether an accusative subject can reconstruct to a position within the complement clause, some researchers have used examples of Japanese accusative-

quotative constructions that embed predicates with higher valences. The possibility of scope ambiguity in the interpretation of a quantified accusative subject in relation to another quantified argument contained in the complement predicate would suggest that reconstruction is possible, and would be an argument for a movement analysis of the accusative-quotative construction. Kuno (1976) didn't consider predicates of this type.³³

Taking advantage of a downstairs argument position for quantified noun phrases, Oka (1988) believed he had found evidence that accusative subjects cannot “reconstruct” to a position inside the complement clause. First, note that in (44) below, an empty category co-indexed with the accusative subject occupies a position under the scope of a quantified noun phrase in the complement clause — to wit, the position of underlying object of the active verb *syoukai suru* ‘introduce’. According to Oka's (1988) **Quantifier scope** principle, scope ambiguity between the two quantified noun

³³Tomoda (1976-1977, pg. 367, #29) and C. Kitagawa (1977) are the first researchers to examine such complements, although neither uses these multiple argument predicates to investigate the scope dependencies within accusative-quotative complements. Here is a partial list of examples of multiple-argument predicates that lend themselves to the sort of predication we see in accusative-quotative constructions:

Verbal: *horeru* ‘be in love (with)’; *masaru* ‘be superior (to)’; *sugureru* ‘excel (over)’; *otoru* ‘be inferior (to)’; *katu* ‘win (against)’; *makeru* ‘lose (to)’; *niru* ‘resemble’; *akogareru* ‘aspire (to)’; *ruizi-suru* ‘be analogous (to)’; *kakaru* ‘depend (on)’; *au* ‘fit’; *tariru* ‘be sufficient (for)’; *tinamu* ‘be relevant (to)’; *iru* ‘be needed (for)’; *seituu-suru* ‘be well-versed (in)’; *ataru* ‘amount (to)’; *hiteki-suru* ‘be tantamount (to)’, etc.

Adjectival: *hitosii* ‘be equal (to)’; *tikai* ‘be close (to)’; *kibisii* ‘be strict (with)’; *amai* ‘be lenient (toward)’; *kuwasii* ‘be well-versed (in)’; *husawasii* ‘be appropriate (for)’; *yasasii* ‘be gentle (to)’, etc.

Nominal predicate: *onazi da* ‘be the same (as)’; *pittari da* ‘be suited (to)’; *hituyou da* ‘be necessary (for)’; *hukaketu da* ‘be indispensable (for)’; *uttetuke da* ‘be tailor-made (for)’; *tyuuzitu da* ‘be faithful (to)’, etc.

phrases is predicted if the structure is the result of A-movement.³⁴ As will be observed below, however, the predicted scope ambiguity does not show up.

In order to explicate the full range of scope ambiguities that accusative subjects show, I add another dimension to the interpretations available for Oka's (1988) sentences by bringing into consideration the belief operator introduced by the matrix verb. Thus, for two quantified arguments and one belief operator there are six permutations to consider. Note that for the nominative quotative construction, quantification in the embedded clause cannot take wide scope with respect to the matrix predicate (ruling out (44-a-i,ii,v,vi)).³⁵ But the scope ambiguity that Oka (1988) predicts due to movement are evident, as can be seen in the availability of interpretations (44-a-iii.iv).

³⁴Oka (1988) gives us another sentence to which the same basic analysis is applied. In ex. (i.), the empty category is in the position of dative object of the complement predicate *sitto suru* 'be jealous (of)':

- i. (a) John-wa dareka_i-ni daremo-ga e_i sitto-site.iru to omotte.iru.
John-TOP someone-DAT everyone-NOM jealousy-do COMP think
'John thinks that someone_i, everyone is jealous of e_i .'
- (b) John-wa dareka_i-o daremo-ga e_i sitto-site.iru to omotte.iru.
John-TOP someone-ACC everyone-NOM jealousy-do COMP think
'John thinks of someone_i that everyone is jealous of e_i .'

(adapted from (Oka: 1988, pg. 196, #24b) (Oka's gloss))

³⁵This can be thought of as a manifestation of the referential opacity of objects of (some) propositional attitudes. Consider that the truth of a statement like *John believes that everyone ϕ* does not necessarily entail that for every member of the relevant set in the contextual domain of the speaker *John* holds the belief in question. Conversely, John could hold a belief about three members of a set of a given description without knowing that they constitute the whole set described. In this case too, *John believes that everyone ϕ* is not a faithful description of the situation. The term "referential opacity" covers a variety of phenomena, including the impossibility of substituting names *salva veritate* (See, for example, Quine (1971), Chomsky (1971b, pg. 197, fn. a)).

- (44) a. John-wa dareka_i-ga daremo-ni *e_i* syoukai-sa-re-ta
 John-TOP someone-NOM everyone-DAT introduce-do-PASS-PAST
 to omotte.iru.
 COMP think
 (i) \neq ‘There is a person x and for all people y John believes that x
 was introduced to y .’
 (ii) \neq ‘For all people x there is a person y such that John believes that
 y was introduced to x .’
 (iii) ‘John believes that there is a person x and for all people y , x was
 introduced to y .’
 (iv) ‘John believes that for all people x there is a person y such that y
 was introduced to x .’
 (v) \neq ‘There is a person x such that John believes that for all people
 y , x was introduced to y .’
 (vi) \neq ‘For all people x John believes that there is a person y such that
 y was introduced to x .’
- b. John-wa dareka_i-o daremo-ni *e_i* syoukai-sa-re-ta
 John-TOP someone-ACC everyone-DAT introduce-do-PASS-PAST
 to omotte.iru.
 COMP think
 (i) \neq ‘There is a person x and for all people y John believes x to have
 been introduced to y .’
 (ii) \neq ‘For all people x there is a person y such that John believes y to
 have been introduced to x .’
 (iii) \neq ‘John believes there to be a person x such that for all people y ,
 x was introduced to y .’
 (iv) \neq ‘John believes for all people x that there is a person y such that
 y was introduced to x .’

- (v) ‘There is a person x such that John believes for all people y that x was introduced to y .’
- (vi) \neq ‘For all people x John believes there to be a person y such that y was introduced to x .’

(adapted from (Oka: 1988, pg. 200, #36a,b) (my glosses))

In the accusative-quotative alternative (44-b) as well, quantified noun phrases that are part of the complement predicate cannot take wide scope with respect to the matrix predicate (ruling out wide scope for the universal quantification in interpretations (45-b-i,ii,vi)).

But in contrast to the indefinite nominative subject in (44-a), the indefinite accusative subject in (44-b) can also be interpreted as having existential force with respect to the beliefs of the speaker/hearer. That is, the utterance can be interpreted as an assertion of the existence of a person satisfying the description in question (viz. (44-b-v)). This is might be called a case of “quantificational transparency.”³⁶

Also in contrast to the nominative-quotative example in (44-a), it appears that in (44-b), the accusative subject *dareka o* cannot take narrow scope with respect to the dative argument *daremo ni* (44-b-iv). Oka took this as evidence that the accusative subject does not move but rather is base-generated in its S-structure position.

³⁶Takemura (1975-1976, 1994); Kitano (1990); Abe (2002a) attribute the invariable specificity of indefinite accusative subjects to obligatory referential transparency. But the specificity of indefinite accusative subjects is actually only invariant when evaluated in the belief world set of the agent of attitude. In the belief world set of the speaker/hearer, an indefinite accusative subject can have existential force. It can figure in an existential assertion, a kind of reference that is very different from specificity. The point is perhaps clearer in a sentence like *Hanako wa atari no takarakuzi no ken o dokka no suupaa no ryoushyuusyo da to matigaeta* ‘Hanako mistook a winning lottery ticket to be a receipt from some supermarket’. The accusative subject is specific from the point of view of *Hanako*, but not from the point of view of the speaker. The indefinite can have existential force in the same way as *a hammer* in a sentence like *Hanako picked up a hammer*: “There was a hammer x and Hanako picked up x .”

However, there is a further point that Oka (1988) did not consider: In (44-b), the accusative subject *dareka o* cannot take narrow scope with respect to the matrix predicate *omotte iru* (44-b-iii,iv) at all. Oka’s (1988) analysis can’t account for the unavailability of the interpretation in (44-b-iii), but that unavailability is actually a manifestation of a robust pattern that rules out existentially quantified readings of accusative subjects under the scope of the superordinate predicate. Thus the interpretation in (44-b-iv) (on which Oka (1988) based his scope analysis) is ruled out on independent grounds. Accordingly, it may be that the phenomenon that Oka (1988) indicates is not generalizable to quantification in general, but rather due to a restriction on existential quantification in particular.³⁷

Before moving on I want to note that the indefinite *dareka* in (44-a) can receive a specific interpretation (viz. “a certain someone”) both with respect to beliefs of the agent of attitude (*John*) and to those of the speaker/hearer. There are arguments to support the view that such interpretations are not quantificational. Specific interpretations are presuppositional, so it is important to separate these interpretations from interpretations involving existential force. I propose that in contexts where existential quantification is ruled out, indefinites that can receive specific interpretations do so by default, and those that can’t are themselves ruled out as uninterpretable.

Oka (1988) only looked at cases with indefinite accusative subjects before drawing his conclusions. Reversing quantification type can tell us a little more about what is going on with respect to quantification in general. Again, for the nominative-quotative example in (45), an embedded quantifier cannot take scope over the matrix predicate (ruling out (45-a-i,ii,v,vi)).

³⁷While there is a great deal of support for the possibility of referential transparency (Take-mura (1975-1976, 1994); Kitano (1990); Abe (2002a)), transparency is not a necessary attribute of accusative-quotative constructions, and I hold that the restriction against existential quantification should be attributed to a different principle.

- (45) a. John-wa daremo_i-ga dareka-ni e_i syoukai-sa-re-ta
 John-TOP everyone-NOM someone-DAT introduce-do-PASS-PAST
 to omotte.iru.
 COMP think
 (i) \neq ‘For all people x there is a person y such that John believes that
 x was introduced to y .’
 (ii) \neq ‘There is a person x and for all people y John believes that y
 was introduced to x .’
 (iii) ‘John believes that for all people x there is a person y such that x
 was introduced to y .’
 (iv) ‘John believes that there is a person x and for all people y , y was
 introduced to x .’
 (v) \neq ‘For all people x John believes that there is a person y such that
 x was introduced to y .’
 (vi) \neq ‘There is a person x such that John believes that for all people
 y , y was introduced to x .’
- b. John-wa daremo_i-o dareka-ni e_i syoukai-sa-re-ta
 John-TOP everyone-ACC someone-DAT introduce-do-PASS-PAST
 to omotte.iru.
 COMP think
 (i) \neq ‘For all people x there is a person y such that John believes x to
 have been introduced to y .’
 (ii) \neq ‘There is a person x and for all people y John believes y to have
 been introduced to x .’
 (iii) ‘John believes all people x to be such that there is a person y to
 whom x was introduced.’
 (iv) \neq ‘John believes that there is a person x such that for all people
 y , y was introduced to x .’

- (v) ‘For all people x John believes x to be such that there is a person y to whom x was introduced.’
- (vi) \neq ‘There is a person x such that John believes all people y to have been introduced to x .’

(derived from (Oka: 1988, pg. 200, #36a,b) (my glosses))

But the story is different for the accusative-quotative construction in (45-b). Again, the quantified accusative subject *daremo* can take scope over the matrix predicate as in the interpretation in (45-b-v), showing us that “quantificational transparency” obtains for universally quantified accusative objects as well as existentially quantified ones. But universally quantified *daremo* can also take narrow scope under the matrix predicate as in (45-b-iii). This is in marked contrast to the existentially quantified accusative subject in (44-b), for which such a scope-taking is unavailable (44-b-iii). Oka’s (1988) analysis predicts the reading in (45-b-iii), but not the difference in the way these two types of quantification behave when they appear in accusative subject noun phrases (i.e., not the contrast between (44-b-iii) and (45-b-iii)).³⁸ Oka’s (1988) base generated analysis would also correctly predict the unavailability of the interpretation in (45-b-iv) (with an inverse scope interpretation).

But it is evident that (45-b-iii) and (45-b-iv) are not available as interpretations of the example in (45) by reference to a prohibition against direct existential assertion in the complement predication, a prediction that can be had without resorting to a

³⁸It might be objected that the complement in (45-b-iii) contains an existential quantification. But also note that while the existence of *dareka* ‘someone’ in (45-b-iii) may be indirectly entailed by the truth of the proposition expressed by the complement (as part of the meaning of the property ascribed), the proposition cannot *directly* assert that existence, given the restriction I claim is operating here. Consider exactly what constitutes the property ascribed: It is a set of people. The people themselves share the property of having been introduced to someone, but the set itself comprises the property. As such there is no conflict with the principle operating behind the **Empirical observation**.

scope analysis, and a prediction that a scope analysis cannot generate. Oka (1988) made his generalization with an insufficient data set.

3.6.1 Reconstruction is possible

Oka (1988, pg. 194) claims that reconstruction to a position in the complement clause is impossible for accusative subjects.³⁹ I submit that such reconstruction is indeed possible. Only it is not easy to construct examples for which an interpretation through reconstruction would be available *ceteris paribus*, because many quantifier interactions are ruled out independently by the restriction against existential assertion.

For example, in the next examples, the accusative subjects all correspond to dative argument positions in the complement clause. A movement analysis would predict reconstruction effects. But it would be a mistake to attribute the lack of scope ambiguity in (46-a,b,c) to a failure to reconstruct, and infer a non-movement analysis, because in every example, an existential quantifier is involved.

- (46) a. John-wa [singata-no doremo]_i-o ikutuka no
 John-TOP new.model-GEN every.one-ACC some COP
 kyuugata-ga *e_i* masatte.iru to omotta.
 old.model-NOM be.superior COMP thought.
 (i) ‘John believed every new model to be such that there are some old
 models superior to it.’
 (ii) \neq ‘John believed that there are some old models that are superior
 to every new model.’

³⁹One of his pieces of evidence was the unacceptability of the following sentence: **John wa sensei_i o daremo ga e_i sitto site iru to omotte iru* (Oka: 1988, pg. 194, #17c) (Oka’s judgment)). Actually, the sentence is not all that bad to begin with, and is considerably improved if we use a “major object” accusative subject: *John wa sensei_i-no koto o daremo ga e_i sitto site iru to omotte iru* ‘John believes the teacher to be such that everyone is jealous of him’.

- b. John-wa [ikutuka no singata]_i-o kyuugata-no
 John-TOP some COP new.model-ACC old.model-GEN
 doremo-ga e_i masatte.iru to omotta.
 every.one-NOM be.superior COMP thought.
 (i) ‘John believed some (particular) new models to be such that every
 old model is superior to them.’
 (ii) \neq ‘John believed that every old model is superior to some new
 models.’
- c. John-wa [mit-tu no singata]_i-o kyuugata-no
 John-TOP three-CL COP new.model-ACC old.model-GEN
 doremo-ga e_i masatte.iru to omotta.
 every.one-NOM be.superior COMP thought.
 (i) ‘John believed three new models to be such that every old model
 is superior to them.’
 (ii) \neq ‘John believed that every old model is superior to three new
 models.’

The embedded existential in (46-a) is only interpretable as part of the predicate. It cannot have existential force directly in the proposition expressed, but only as entailed by the truth of the predication involved therein. The indefinite accusative subject in (46-b) is forced to receive a specific reading, which is presuppositional rather than existential, so that while the interpretation (46-b-ii) is entailed, it not derived through a narrow scope for *ikutuka no singata-o*. The assignment of values for *ikutuka no singata-o* does not vary with the assignment of values for *kyuugata no doremo-ga*. This is also the case (and might be easier to see) in (46-c), where the reference of *mittu no singata-o* ‘three new models’ clearly can only be specific. Here too, the assignment of values for *mittu no singata-o* does not vary with the assignment of values for *kyuugata no doremo-ga*. Thus, while none of the examples in (46) exhibits the scope ambiguity we might expect from reconstruction, there is

an independent reason for this. Cardinal quantification for both arguments faces the same problem:

- (47) John-wa [mit-tu no singata]_i-o yot-tu no kyuugata-ga
 John-TOP three-CL COP new.model-ACC four-CL COP old.model-NOM
e_i masatte.iru to omotta.
 be.superior COMP thought.
 ‘John believed three new models to be such that four old models are superior to them.’

There is a reading for (47) in which for each of the *three new models* the same *four old models* are superior. There is also a reading for (47) in which for each of the *three new models* there are *four old models* superior it. In fact there may be as many as twelve *old models*, no more than four of them superior to any one of three specific *new models*. However, there is no interpretation for (47) in which more than three *new models* are involved. That is, *three new models* is always interpreted first (always takes wide scope). An interpretation in which more than three *new models* are involved would require an existential assertion in the proposition expressed in the complement, and this, I claim, is ruled out independently. The only way to test for reconstruction is to use scope dependency that doesn’t involve existential quantification.

The preceding discussion suggests that we can test for reconstruction effects by looking for interaction between, say, universal quantification and disjunction, given that neither of these involves existential quantification. Finally we have a probe that reaches into the accusative-quotative complement:

- (48) Wareware-wa [byougenkin no doremo]_i-o [wakutin A ka B]-ga *e_i*
 We-TOP pathogen COP every.one-ACC vaccine A or B-NOM
 kouka-ga aru to handan-suru.
 effect-NOM exist COMP judgment-do.

‘We judge every pathogen to be such that vaccine A or B has an effect.’

We can see scope ambiguity here. (48) is interpretable as either 1) “We judge that for every pathogen x , x is such that either vaccine A has an effect against it or vaccine B has an effect against it” or 2) “We judge that either vaccine A has an effect on every pathogen, or vaccine B has an effect on every pathogen.”

That reconstruction of the accusative subject is attested is a surprising result, considering the weight that proponents of the polepsis analysis have given to claims that reconstruction is impossible. But that scope-dependencies should pattern in a way that allows such claims to be entertained (over a limited data set) is obvious, given the principle underlying the **Empirical observation**. That we are able to produce the scope ambiguities that reconstruction allows only by using non-existential quantification (i.e., controlling for the effects of the restriction against existential quantification in the complement predication) can be taken as an independent corroboration that a restriction against existential quantification actually obtains, and is not derivable from principles of scope-taking.

J.H. Yoon (2007) argues for an analysis of accusative-quotative constructions involving double nominative sentences (also known as “major subject” sentences) as derivational sources (introduced in Section 2.6.4). The accusative subject is assumed to be base generated in a position outside of the complement clause. As support for the analysis, J.H. Yoon (2007) offers the following example as evidence that the accusative subject cannot reconstruct to a position in the complement clause, and

so must not be derived by movement. Note how the accusative subject fails to show scope ambiguity with respect to a quantified argument in the complement:

- (49) a. Mary-wa san-nin no gakusei-ga subete no sensei-ni
 Mary-TOP three-CL COP student-NOM all COP teacher-DAT
 syoukai-sa-reru beki da to omotte.iru.
 introduction-do-PASS should COP COMP think
 ‘Mary thinks that three students should be introduced to all the teachers.’ $(3 > \forall), (\forall > 3)$
- b. Mary-wa san-nin-no gakusei-o subete-no sensei-ni
 Mary-TOP three-CL-COP student-ACC all-COP teacher-DAT
 syoukai-sa-reru beki da to omotte.iru.
 introduction-do-PASS should-COP COMP think
 ‘Mary thinks that three students should be introduced to all the teachers.’ $(3 > \forall), \neq (\forall > 3)$

(adapted from Yoon (2007, pg. 621, #11a,b))

Yoon (2007) cites Takano (2003) via Oka (1988) for this observation. It is basically a revisiting of Oka’s observation about the inability of the accusative subject to reconstruct to a position within the complement. In Yoon’s terms, “a raised nominal does not reconstruct to the embedded clause for the purposes of scope” (Yoon: 2007, pg. 621).

I claim that this analysis is a mis-reading of what is going on here. In fact, the cardinally quantified *sannin no gakusei* has to be reinterpreted as specific with respect to *Mary*’s beliefs, and as either having wide scope over the belief operator or as being specific with respect to the beliefs of the speaker/hearer. An existential interpretation of *sannin no gakusei-o* with narrow scope under the matrix predicate is impossible in (49-b). Accordingly, scope ambiguity between *sannin no gakusei-* and *subete no*

sensei-ga is impossible — independently of any supposed inability to reconstruct — due to a restriction against existential assertion in a particular domain. As such, this point removes one piece of the argument for a prolepsis account. But there are others.

3.6.2 Bound variable reference

Assume for the sake of argument that the same relationship the licences reconstruction allows bound variable reference. J. H. Yoon (2007) claims that there is no bound variable reference into the complement predicate in Korean and Japanese. Yoon examines the accuracy of the claim with respect to Korean.

- (50) a. ?Na-nun caki sensayng-uy chwuchense-ka citohaksayngtul-eykey
 I-TOP self teacher-GEN letter-NOM advisee-DAT
 kakkak kongkay-toy-ehanta-ko sayngkakhanta.
 each release-must-PASS-COMP think
 ‘I believe that their letters of recommendation should be released to each advisee.’
- b. *Na-nun caki sensayng-uy chwuchense-lul citohaksayngtul-eykey
 I-TOP self teacher-GEN letter-ACC advisee-DAT
 kakkak kongkay-toy-ehanta-ko sayngkakhanta.
 each release-must-PASS-COMP think
 (no gloss)

(adapted from Yoon (2007, pg. 621, #12a,b))

To test this cross-linguistically, I give a Japanese sentence corresponding to the Korean in (50) above in (51) below:

- (51) a. Watasi-wa sensei-no suisenzyou-ga osiego-ni
 I-TOP teacher-GEN letter.of.recommendation-NOM student-DAT
 sorezore miser-areru beki da to kangaete.iru.
 respectively show-PASS should COP COMP think
 ‘I believe that the teachers’ letters of recommendation should be shown
 to the respective students.’
- b. Watasi-wa sensei-no suisenzyou-o osiego-ni
 I-TOP teacher-GEN letter.of.recommendation-ACC student-DAT
 sorezore miser-areru beki da to kangaete.iru.
 respectively show-PASS should COP COMP think
 ‘I believe the teachers’ letters of recommendation to be such that they
 should be shown to the respective students.’

(adapted from Yoon (2007, pg. 621, #12a,b))

The Japanese counterpart to the Korean accusative subject example is perfectly acceptable, while the Korean is marginal.

Here is another example of an accusative subject binding a variable in the sentential predicate.

- (52) Sensei-wa taigai-no gakusei-o zibun-no hyouka-o
 Teacher-TOP most-GEN student-ACC self-GEN evaluation-ACC
 misete-mora-eru gurai sikkari-site.iru to omotte.iru.
 show-receive-POT enough stout-hearted-do COMP think
 ‘The teachers believe most of the students to be stout-hearted enough to be
 able to be allowed to see their evaluations.’

J. H. Yoon’s (2007) seems to assume that bound variable reference is ruled by the same conditions that impinge on the interpretation of quantifier scope. Whether it is or not, the effects that Yoon predicts don’t show up in Japanese.

3.7 \exists for English accusative subjects, not Japanese ones

Postal (1974, pp. 222–225) discusses some of the interactions between quantifier scope and raising in English, noting that sometimes existential readings for indefinite accusative subject noun phrases tend to “take wide-scope” over the superordinate predicate, while a corresponding embedded nominative subject would be ambiguous. Postal concentrated on whether for an indefinite accusative subject (e.g., *someone*; *few students*; *none of the formulas*, etc.) there could be an existential interpretation under the scope of the superordinate predicate.

- (53) a. I believe that someone insulted Arthur.
 b. I believe someone to have insulted Arthur.

(Postal: 1974, pg. 222, #42a,b)

- (54) a. The FBI proved that few students were spies.
 b. The FBI proved few students to be spies.

(Postal: 1974, pg. 222, #44a,b)

- (55) a. Melvin showed that none of the formulas were theorems.
 b. Melvin showed none of the formulas to be theorems.

(Postal: 1974, pg. 222, #45a,b)

Postal judges the accusative subjects in the (b) sentences above to lack existential readings with narrow scope under the superordinate predicate.⁴⁰ That is, for the (b) sentences respectively there are no existential readings “I believe that there was someone who insulted Arthur;” “The FBI proved that there were few students who were spies;” “Melvin showed that there were no formulas that were theorems.”

However, this judgment is not as robust as Postal makes it out to be, and I submit that the lack of existential readings for English accusative subjects is often a consequence of the sort of predication involved. For (53-b) at least (embedding, crucially, an eventive predication), an existential reading for the accusative subject is available for many English speakers. The judgments are sensitive to the nature of the complement predicate and the context of interpretation. For a clearer example, a narrow scope interpretation of an indefinite accusative subject is perfectly natural in a complement with a locative preposition such as in (56-b):

- (56) a. Phyllis suspects that someone is in the boathouse.
 b. Phyllis suspects someone to be in the boathouse.

Even constructions with a typically “extensional” predicate like *find* can support existential interpretations for indefinite accusative subjects:

⁴⁰Assuming a non-hierarchical phrase structure (i.e., one without a VP node), Postal claimed that in accusative subject constructions the accusative subject and the verb are in a mutual command relationship (or in other words, that they are clause-mates). In this Postal was following a suggestion by Lakoff (1969) that the relations of precedence and command are factors in scope relations. Mutual command would suggest scope ambiguity, where Postal found scope asymmetry, so he looked elsewhere for the operating principle and claimed to find it in Baker:

- i. A quantifier cannot have as its scope [only] a clause that does not contain it in Surface Structure.

Postal (1974, pg. 223, #47), citing either Baker (1970) or Baker (p.c.)
 I suppose that in this statement “a quantifier’s scope” is understood as the context in which a quantifier is interpreted.

- (57) a. Terry found that tiny bubbles had formed on the surface.
 b. Terry found tiny bubbles to have formed on the surface.

Similarly, Carlson finds a narrow scope existential reading available for the indefinite noun phrase in *Max believes a Commie to have robbed Macy's* (1977b, pg. 418, #13a). In fact, for the bare plural, Carlson finds the narrow scope existential reading obligatory: *Maz believes Commies to have robbed Macy's* (1977b, pg. 418, #13b).

Unfortunately, Kuno (1972, 1976) did not explore this aspect of scope interpretation with respect to Japanese. If he had he would have found a pattern even more robust than that which Postal attested for English. For while English will allow unambiguously non-specific accusative subjects in certain cases (Postal's (1974) claims notwithstanding), Japanese does not permit such existential interpretations for accusative subjects under any circumstances. While a comparison of Japanese with this aspect of the English data would have led Kuno to note the lack of a non-specific reading for bare common noun accusative subjects in Japanese, it was left to be pointed out by Takemura (1975-1976) that in Japanese, indefinite accusative subjects are interpreted as specific (in some sense).⁴¹

One might be tempted to couch this point in terms of scope dependency, saying that accusative subjects in Japanese are never interpreted as having narrow scope under the superordinate predicate (or the "belief operator" it involves). The problem with this characterization of the phenomenon is that it doesn't generalize to all types of quantification. We have already seen in Section 3.4 that universally quantified accusative subjects can take scope under the matrix predicate.

⁴¹Recently, aspects of this point have been revisited and/or rediscovered independently by several researchers (in particular, by Takano (2003)). I show (in Section 4.1) how Japanese accusative subject noun phrases overtly-marked as non-specific indefinite are either ruled out or interpreted as having partitive reference, depending on their form.

Takano (2003, pg. 802) makes an important (if not entirely well-formulated) observation about the examples below:

- (58) a. Keisatu-wa san-nin-no otoko-ga hannin da to
 Police-TOP three-CL-COP man-NOM culprit COP COMP
 dantei-sita.
 conclude-did
 ‘The police determined that three men were the culprits.’
- b. Keisatu-wa san-nin-no otoko-o hannin da to
 Police-TOP three-CL-COP man-NOM culprit COP COMP
 dantei-sita.
 conclude-did
 ‘The police determined three men to be the culprits.’

(derived from Takano (2003, pg. 802, #44,45) (my glosses))

Takano (2003, pg. 802) writes that in (58-a) “the nominative QP can have narrow scope under the matrix predicate (i.e., it has a reading on which the existence of the three men is true in the mind of the matrix subject), showing that it is an element of the embedded clause.” Contrast this with the reading in (58-b), where the accusative subject “can only have a wide scope reading over the matrix predicate (i.e., a reading on which the existence of the three men is true to the speaker)” (Takano: 2003, pg. 802).

Let’s expand Y. Takano’s observation: In (58-a) the (cardinally quantified) embedded nominative subject can be interpreted existentially under the scope of the matrix predicate. That is, the proposition toward which an attitude of belief is directed can be read as expressing an existential assertion plus a description of an eventuality:

“There are three men and they are the culprits.”⁴² In (58-b), however, the accusative subject can only be interpreted under the matrix predicate as specific (i.e., as not having existential force under the belief operator). The sentence cannot be interpreted as a statement about an attitude toward a proposition expressing existential assertion about *sannin no otoko*; the sentence can only be read as a statement about an attitude toward a proposition expressing a property ascription concerning three discourse-familiar men: “The police determined three specific men to be the culprits” or “The police determined the three men in question to be the culprits.” This does not preclude *sannin no otoko* from receiving an existential interpretation *as evaluated in the context of utterance*: “There are three men and the police determined them to be the culprits.”

Takano (2003) assumed that the interpretation for (58-b) is direct evidence that the accusative subject is base generated in a position higher than the clause boundary of the accusative-quotative complement, but did not explain the reasoning for this inference. A general claim that noun phrases base generated outside of the clauses to which they are associated cannot receive existential interpretations would be hard to maintain in light of the facts of language use. The claim holds for the major subjects of double nominative constructions, and for noun phrases in proleptic adjuncts, but not for all topics, for example. Read the following pair as a dialogue:

- (59) a. Nanika doubutu imasita?
 Something animal existed
 ‘Were there any animals?’

⁴²Of course (58-a) can also be read as a property ascription concerning three discourse-familiar men: “The/A specific three men are the culprits,” in which case also *sannin no otoko* does not take narrow scope under the belief operator *because it is not quantificational*. With respect to the speaker’s contextual domain, either interpretation is possible for the reference of *sannin no otoko* in (58-a).

- b. Araiguma-wa ni-hiki ita yo.
 Raccoons-TOP two-CL existed SFP
 ‘Raccoons, there were two.’

The topic *araiguma* ‘raccoon’ is not a definite reference to the species *Procyon lotor*, nor does it denote a specific or definite set of which *ni hiki* ‘two animals’ is a partitive reference. Clause external base generation by itself does not entail $*\exists$.

3.7.1 More evidence for $*\exists$

There are some novel ways to demonstrate the restriction against existential assertion using scope relations. First I introduce an example in which an existential interpretation is made impossible by changing case marking on the embedded subject. In a second example I show how specificity can actually license a construction as grammatical.

Brockett (1994) notes that the [indeterminate NP ...N + *-mo*] phrase that appears as the direct object in (60-a) below takes a wide scope reading for the indeterminate NP *dono gakka* ‘which department’ but an existential reading for the complex noun phrase in which it appears.⁴³ This reading is impossible for the accusative object in (60-b).

⁴³Incidentally, this pattern also violates the **Clausemate condition**: *Kono kigyō wa dono gakka kara sotugyō shita gakusei mo saiyō suru* ‘This company hires from every department students who have graduated from that department’. This is in contrast to English: (e.g., ??*Guinevere has a bone that is in every corner of the house* (Rodman: 1972)).

- (60) a. Kono.kigyuu-wa [dono.gakka-no gakusei]-mo
 This.company-TOP which.academic.department-GEN student-FOC
 sayou-suru.
 employ-do
 ‘This company hires students from any academic department.’
 = ‘Generally, from every department there is a student x such that this
 company hires x .’
- b. Zinzibu-wa [dono.gakka-no
 Personnel.section-TOP which.academic.department-GEN
 gakusei]-o-mo tekizai da to handan-sita.
 student-ACC-FOC good.material COP COMP judge-do
 ‘The personnel section judged the students from every department to be
 “company material”.’

Actually, the unavailability of an existential reading for *dono gakka no gakusei* in (60-b) is more a consequence of the nature of the complement predication than it is a consequence of the quantified noun phrase appearing as an accusative subject. The predicate *tekizai da* tends to be interpreted as a property ascription (other things being equal). In such cases, indefinite subjects are interpreted as specific. Thus the embedded subject in the nominative-quotative counterpart to (60-b) also lacks the existential reading: *Zinzibu wa dono gakka no gakusei mo tekizai da to handan-sita* ‘The personnel section judged that the students from every department were “company material”’. This fact does not actually detract from my argument: It is precisely cases such as these where it can be guaranteed that a nominative-quotative construction will have an accusative-quotative counterpart. I will examine the interdependence between quantified subjects, predication type, and context of interpretation in more detail in Section 4.2.

Another way to establish $*\exists$ under the belief operator in accusative-quotative constructions is suggested by Hoji's (1985) observation that Japanese *wh*-phrases are not allowed in under the scope of quantification, but if a weakly quantified subject is interpreted as specific, a *wh*-object internal argument is OK, as in (61):

- (61) Tarou-wa ikutuka-o nan-de dekite.iru ka to utagatta.
 Tarou-TOP some.item-ACC what-from be.realized Q COMP doubt
 (lit.) 'Tarou wondered about some items, "What are they made of?"

A non-specific indefinite interpretation of *ikutu ka* results in ungrammaticality. The inference is that *ikutu ka* as an accusative subject is referential, not quantificational. That is, at the level at which the *wh*-phrase is interpreted, *ikutu ka* is not existentially quantified.

This example is the only one presented in this Chapter for which a judgment of grammaticality is at stake (as opposed to an interpretation of quantification) in establishing my thesis. In Section 4.2 I will provide evidence that depends on co-occurrence of forms rather than on just interpretations of meaning.

3.8 Aoun and Li (1993) applied to accusative-quotatives

Now that the peculiar scope behavior of accusative-quotative constructions is fairly clear, we can assess how well the scope analysis of Aoun and Li (1993) can account for it.

The ability to interpolate matrix verb phrase adjuncts between the accusative subject and the complement predicate (Kuno: 1976), and the ability of accusative subjects to

bind reciprocals and pronouns in matrix verb phrase adjuncts (Sakai: 1996), among other facts, have led most researchers to accept that the Japanese accusative subject occupies a high position in overt syntax. One way to account for this is suggested by Takemura (1994) within the framework of the Minimalist program. Very roughly, the following assumptions apply: Subjects originate in [Spec, VP]. θ -roles are assigned within VP. V projects AGR phrases. Arguments move to [Spec, AGR] to receive case through Spec-Head agreement (A-movement to a θ' -position). The VP head V moves to the head of AGR_{OP}. Tense features in Infl move to AGR_SP.

For English accusative subject constructions, where construal of the tense of the embedded (*to*-infinitive) clause seems to be dependent on the tense of the matrix predicate, the movement of the embedded subject to an object position in a higher clause is said to be motivated by a lack of tense features in the subordinate AGR_S. Unable to receive case through agreement with tense in AGR_S, the embedded subject moves to the first position where case is available (viz. Spec of AGR_{OP} in the superordinate clause. This analysis is not available for Japanese, which has overt tense marking on the complement predicate.⁴⁴ Nevertheless, it is worth examining how Aoun and Li's (1993) **Scope principle** operates on the minimalist program's treatment of accusative subject constructions (as applied to Japanese).

The example in (62) is an accusative-quotative construction with a universally quantified accusative subject and an existentially quantified dative object in the complement predicate:

⁴⁴Many attempts have been made to deny that the tense morphology in accusative complements actually represents tense (Oshima (1979); Ohta (1997); Kawai (2006), *inter alia*), but these are not well supported by the facts. In fact, the lack of verbs specifying either 1) a future time or 2) a past time for evaluation of the embedded predicate (e.g., *kitai-suru* 'expect'; *yoken-suru* 'predict'; *omoidasu* 'recall'; *ki'oku suru* ("remember"), etc.) in the inventory of accusative-quotative verbs (as noted in # 5 on pg. 83 in Section 2.7) suggests that a relation of tense dependency does not obtain between the accusative complement and the matrix predicate in Japanese.

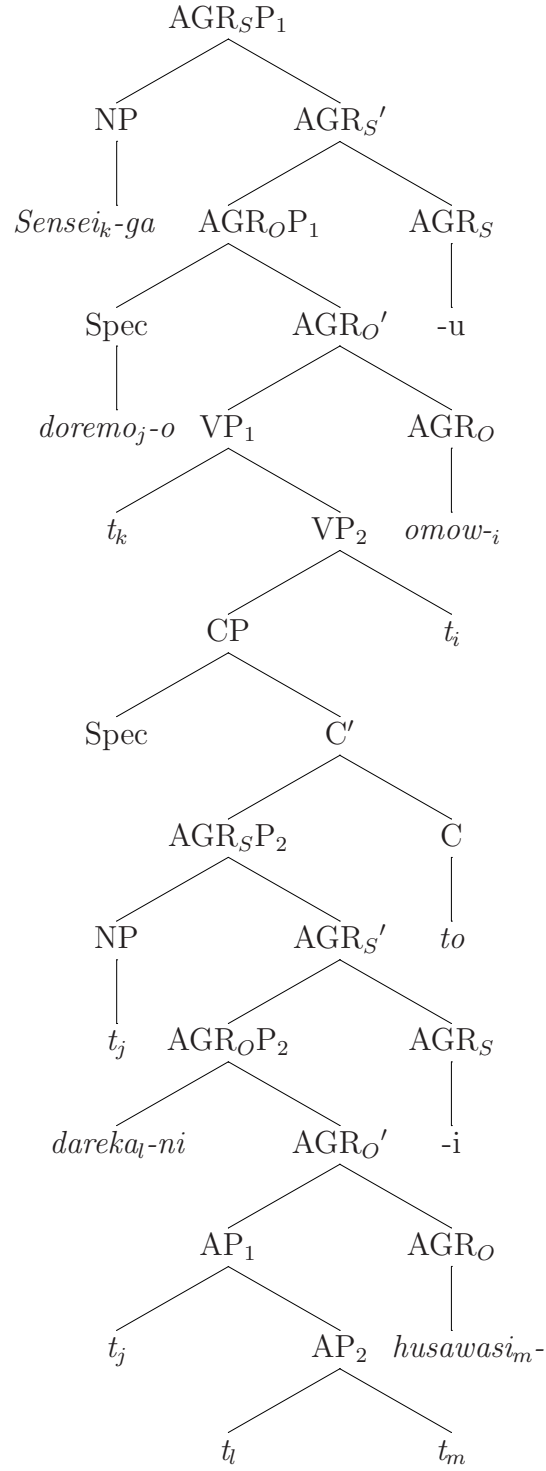
- (62) Sensei-ga doremo-o dareka-ni husawasii
 Teacher-NOM every.one.of.them-ACC someone-DAT be.appropriate.for
 to omou.
 COMP think
- a. ‘For all items x , the teacher believes x to be such that there is a person
 y for which x is appropriate.’
- b. The teacher believes that for all items x , x is such that there is a person
 y for which x is appropriate.’

The accusative subject can take wide scope over the matrix predicate, or narrow scope under the matrix predicate. But note that in this example there is no scope ambiguity between the accusative subject and the embedded dative object.⁴⁵

Now consider the structural assignment for the accusative-quotative construction in (62) under the assumptions of the minimalist program: (63) is the structural assignment in logical form before quantifier raising has applied:

⁴⁵It would be premature to conclude that scope ambiguity between an accusative subject and an argument of its complement predicate is impossible in general. I claim that there can be no direct existential assertion in the proposition that is the object of the attitude expressed in accusative-quotative constructions. Existential force within the predicate is only entailed by the truth of the predication, and not asserted by the predication. This by itself would rule out the kind of scope ambiguity we might anticipate, even if the quantification types were reversed for the argument positions.

(63)



(following Takemura's (1994) pg. 107, fig. 4 (my (31) on pg. 60 in Section 2.6))

Aoun and Li (1993) assume obligatory quantifier raising for QPs in θ -positions. QPs in θ' -positions, however, are free either to raise or to be interpreted *in situ*. The targets of quantifier raising movement are adjunction positions of non-arguments (excepting CP). Thus the targets are adjunction positions to either IP or VP (or in the Minimalist program, AGR_SP and VP). A maximal projection formed by quantifier raising of one QP is not a target for adjunction by other QPs through quantifier raising. VP-internal subjects are not required to raise to [Spec, IP] (as they are for English).

In addition to these assumptions, the following principle is assumed to hold:

Scope principle An operator A can have scope over an operator B iff A c-commands B or an A'-element co-indexed with B.

(Aoun and Li: 1993, pg. 88, #50)

The definition of c-command that (Aoun and Li: 1993) adopt is as follows:

c-command Node A c(onstituent)-commands node B iff the branching node α_1 most immediately dominating A either dominates B or is immediately dominated by a node α_2 that dominates B, and α_2 is of the same category type as α_1 .

Aoun and Li (1993, pg. 201, nn. 8)

Furthermore, the following requirement is assumed:

Minimal binding requirement Variables must be bound by the most local potential A'-binder.

(Aoun and Li: 1993, pg. 11, #1)

The definition for what constitutes an A'-binder, and the definition for the notion of locality are spelled out in (64) below:

- (64) An element E qualifies as an A'-binder for x in case it c-commands x and is an A'-position. *Locality* may be defined as in Chomsky 1981, 59:
- (i) A locally binds B if A and B are coindexed, A c-commands B, and there is no C coindexed with A that is c-commanded by A and c-commands B.

Aoun and Li (1993, pg. 202, nn. 12)

Aoun and Li (1993, pg. 19) assume their analysis rules out all logical forms in which a QP α c-commands an A'-element x not co-indexed with α and there is no QP β co-indexed with x that c-commands x and is c-commanded by α .⁴⁶

Now let's consider how quantifier raising is applied to the structural assignment in (63). The matrix subject *Sensei ga* has raised to a θ' -position to receive case. If it were a quantifier, it would optionally raise to a position adjoining AGR_SP_2 , but it is not a quantifier. The accusative subject *doremo o* has raised to $[\text{Spec}, \text{AGR}_O\text{P}_1]$ to receive case. This is a θ' -position, so *doremo o* can optionally raise to a position adjoining AGR_SP_2 , as long as that position is not already occupied by an obligatorily raised QP. In this case, quantifier raising takes the accusative object out of the c-command domain of the matrix predicate *omow-* in AGR_O , allowing the interpretation in (63-a). Even if the matrix subject were also a quantifier, then, scope ambiguity between the matrix subject and the accusative subject is possible, because of the existence of two licit logical form representations. This is a welcome result, as such scope ambiguity

⁴⁶That this is their ultimate intention (regardless of what their definitions logically entail) can be inferred from the way they purport to instantiate their principles (Aoun and Li: 1993, pp. 19–20, *in passim*).

has been recognized to obtain since it was first noted by Kuno (1976) (pattern # 1 in the list on pg. 104).

This movement also accounts for the ability of accusative subjects to take wide scope over un-negated matrix predicates (pattern # 2 in the list on pg. 104), but fails to predict the inability of universally quantified accusative subjects to take wide scope over negated matrix predicates (# 3 in the list on pg. 104).

Note also that the trace left by *doremo o* is an NP trace, and thus doesn't figure in quantifier interpretation. Accordingly, the inability of accusative subjects to take narrow scope under negation in the complement predicate is accounted for also (pattern # 4 in the list on pg. 104). But there is no way to account for a narrow scope interpretation of the universally quantified accusative subject under a non-negated complement predicate, and such interpretations are available in fact (pattern # 1 in the list on pg. 104). Thus the system under-generates in this respect.

The system also predicts that an accusative subject will not be able to take narrow scope under quantified arguments of the embedded predicate, given that NP traces (left by A-movement) do not figure in quantifier interpretation. However, we have seen in (48) that reconstruction to the complement clause is demonstrably possible (as long as the quantifiers concerned do not involve existential quantification) (pattern # 6 in the list on pg. 104).

Aoun and Li's (1993) system doesn't appear to predict the differences in behavior we note for accusative thematic subjects and accusative major subjects with respect to focus marked on the complementizer of the embedded clause (pattern # 5 in the list on pg. 104).

Finally, the regular inability of indefinite accusative subjects to take scope under the matrix predicate is not accounted for, as Aoun and Li's (1993) system allows optional movement out of θ' -positions, of which [Spec,AGR₀P] is one. It follows that all accusative subjects in [Spec,AGR₀P] should be able to be interpreted in [Spec,AGR₀P], a position c-commanded by the matrix verb in AGR_O, according to Aoun and Li's (1993) definition of c-command. But we already know that indefinite accusative subjects cannot receive the non-specific interpretation predicted for such a position (pattern # 7 in the list on pg. 104).

A system as explicit as that in Aoun and Li (1993) is easy to criticize, and is actually praiseworthy in this respect. In fact, it served as an impetus for me to make explicit claims for all the potential scope relations in a simple accusative-quotative construction. In the process a variety of facts (some unexpected, such as the patterns concerning negation) have come to light. Taken together they suggest that a reformulation of Aoun and Li's (1993) is necessary if the program of accounting for scope relations through syntax is to be seriously entertained. This discussion of the scope of accusative subjects should offer a clear picture of the requirements for an observationally adequate theory.

3.9 Concluding remarks

The interaction of accusative subjects with negation forms a pattern that is not entirely unexpected, but fascinating. Liu (1997, pg. 31) notes that some expressions with specific reference remain independent under negation:

- (65) a. John didn't see a certain student in the garden.
 b. John didn't see a student in the garden.

(Liu: 1997, pg. 31, #54a,b)

This is parallel to pattern # 4 in the list on pg. 104, and might be explained by assuming accusative subjects to refer under the belief operator. (The contrast in (65) is due to an existential interpretation for the indefinite in (65-b).) But the inability of universally quantified accusative subjects to take wide scope over negated matrix predicates (# 3 in the list on pg. 104) is more of a puzzle. I don't doubt that a satisfying explanation can be found. Still, the issue of immediate concern for the thesis of this study is the restriction on existential quantification, so I leave this problem for now.

Of particular concern for syntacticians should be the discussion concerning (48) in Section 3.6.1. Under the assumption that reconstruction in A-chains is possible for the purpose of quantifier interpretation, the argument for a movement analysis is strengthened (and a mainstay for a prolepsis analysis is weakened) by the attestation of scope ambiguity between an accusative subject and an internal argument of the complement predicate.

The syntactic experiment that yields this evidence is easily repeatable as long as the quantification types employed do not involve existential quantification. This I consider indirect confirmation of the effects of a restriction against existential assertion by the proposition expressed in the accusative-quotative complement (as evaluated in the belief world set of the agent of attitude). The reasoning is that scope ambiguity involving existential quantification (unlike the presence of noun phrases of weak quantificational form) necessarily involves existential quantification (while noun phrases

of weak form are usually ambiguous between non-specific and specific indefinite reference, depending on the contextual domain of evaluation).

Sorting out the quantificational possibilities of accusative subjects at the outset, as I have done here, takes some of the excitement out of the exposition that follows. The simple organization of issues in this Chapter was only made possible after a great deal of data-driven work represented in the discussion in the Chapters that follow, a small harvest after a great deal of winnowing over issues ranging from the philosophies of Frege and Quine to the latest theories in the Chomskian turn, along with endless manipulations of examples sentences in between. The patterns displayed by the behavior of scope of quantification in the accusative-quotative construction are captured under the **Empirical observation** and as such indicate the operation of an underlying principle, which I have formulated as a **Semantic/pragmatic constraint** (described on pg. 6 in Section 1.1). Seeing how the effects of this constraint reduce to matters of grammaticality is, however, still to come. Chapter 4 explores collocations of subject noun phrases and predicates in the accusative-quotative construction, the facts from which the generalizations presented here were originally inferred.

CHAPTER 4

ARGUMENTS AND PREDICATES

In Chapter 3 we saw accusative subjects exhibit a variety of scope phenomena consistent with the following pattern:

Empirical observation: Propositions expressed by the accusative complement cannot directly assert the existence of an entity or an eventuality *as evaluated with respect to the contextual domain defined by the belief world of the agent of attitude*.

(repeated from pg. 105 in Section 3.1)

It was argued in Chapter 1 that the pattern could be accounted for by reference to a constraint on the use of accusative-quotative constructions:

Semantic/pragmatic constraint: The proposition expressed by an accusative-quotative complement must be a property ascription on the referent of the accusative subject *when evaluated with respect to the belief world of the agent of attitude* (the referent of the matrix subject noun phrase).

(repeated from Section 1.1, pg. 6)

Some general arguments are presented in Chapter 1, but the supporting data presented in Chapter 3 is mostly concerned with interpretations, and direct evidence based on judgments of grammaticality is only presented in example (61) on pg. 177 in Section 3.7.1. In the present Chapter, some very clear patterns in the distribution of noun phrases and predicates in the accusative-quotative construction are examined. Judgments of grammatical acceptability for accusative-quotative constructions examined in this Chapter are predictable from the **Semantic/pragmatic constraint**. (In fact, the existence of the constraint was originally inferred by observing these patterns.)

In Section 4.1 I examine a pattern of distribution that has been under-appreciated in the literature: the inadmissibility of floating weak quantifiers¹ associated with the accusative subject. Depending on the predication in which they occur and the context of utterance, floating weak quantifiers associated with subject noun phrases can receive unambiguously non-specific indefinite interpretations. These interpretations, I maintain, depend on existential assertion. With regard to this, the **Semantic/pragmatic constraint** makes a clear prediction: Such expressions are ruled out as accusative subjects, as existential assertion is ruled out accusative-quotative complements.

In Section 4.2 I examine certain well-documented patterns of distribution for predicate types in the accusative complement, and suggest how a restriction against direct existential quantification within the contextual domain generated by the matrix verb point to an explanation: Some predications depend on eventualities in order to be interpreted, and where an eventuality is not presupposed in the context of interpretation for such predications, either 1) its existence must be asserted, or 2) generic quantification must hold over an eventuality variable. The **Semantic/pragmatic constraint**

¹For a brief overview of the referential possibilities of various types of classifiers, see Appendix B.

makes a clear prediction about the distribution of episodic/eventive predications and existential predications in accusative-quotative complements: If they require existential assertion, they are ruled out in accusative-quotative complements.

4.1 The interpretation of floating quantifiers

An examination of the referential possibilities of quantified phrases appearing as accusative subjects shows that 1) accusative subjects are always interpreted as specific with respect to the beliefs of the agent of attitude (the subject of the matrix predicate), and that 2) unambiguously non-specific indefinite noun phrases do not occur in that grammatical context. In the course of the examination, sensitivity to predication type (determined by the type of relations that obtain between $\langle \textit{subject}, \textit{property}, \textit{contextual domain} \rangle$) will emerge as the determinant factor in the distribution and interpretation of quantified noun phrases in accusative-quotative complements.

4.1.1 Specificity: Reference versus existential force

The earliest formulation of the semantic condition on accusative-quotative constructions was that *indefinite accusative subjects are specific* (Takemura (1975-1976), following M. Shibatani (p.c.)). The syntactic facts concerning a requirement on specificity in the accusative-quotative construction point to the same conclusion that facts about quantifier scope do: 1) the requirement for specificity in the accusative subject (as interpreted in the relevant domain) is a necessary condition — but not a sufficient one — for forming accusative-quotative constructions, and falls out of a deeper

requirement on their formation, and 2) the specificity involved is relative to the domain of the belief world set of the agent of attitude, and not necessarily that of the speaker/hearer. Thus indefinite accusative subjects can have existential force outside of the scope of the belief operator, but not within it.

- (1) a. Keikan-wa dareka-o ayasii to omotte.iru.
 Detective-TOP someone-ACC be.suspicious COMP think
 (i) ‘There is a person x (I don’t know who) and the detective specifically considers x to be suspicious.’
 (ii) With regard to a specific person j (known to me, not you), the detective considers j to be suspicious.’
 (iii) \neq The detective believes there to be a person x such that x is suspicious (but unbeknownst to the detective, x is really the specific person j).

The requirement for specificity in accusative subjects is not quite the mirror image of the “definiteness effect”² that prohibits definite reference in noun phrase complements (i.e., the post-copular position) of English existential phrases (i.e., **There is the unicorn in the garden*)(Milsark: 1974, 1977). The English existential phrase allows both non-specific indefinites (e.g., *There’s a mosquito on your forehead*) and

²Regarding the definiteness effect, Milsark (1974, 1977) noted that only “weak” noun phrases (e.g., *an NP*, *sm NPs*, *no NP*, *three NPs*, etc.) could appear in the “pivot” position of English existential constructions while “strong” noun phrases (e.g., *the NP*, *all NPs*, *most NPs*, etc.) cannot. Sag and Wasow (1999, pg. 254, fn. 3) also note that strongly quantified noun phrases often don’t fit into the pivot of the English existential construction (e.g., **There is each unicorn in the garden.*) but that as a generalization this is too strong (as can be seen by the acceptability of examples like *There is the cutest puppy outside*). They assume that the “definiteness effect” is a semantic one rather than a syntactic one. McNally (1992) also discusses the “list” item mention use in the pivot position (e.g., *There’s your dentist appointment at 11:00*). Setting aside exceptions like these, the pattern Milsark indicates manifests itself in many contexts in many languages.

specific indefinites (e.g., *There's a certain freckle on your forehead*).³ The Japanese accusative-quotative construction allows definites (2-a) and specific indefinites (2-b):

- (2) a. Ano.bun.no.kakite-o dansei to mita.
 The.writer.of.that.text-ACC male COMP see
 'I reckoned the writer of that text to be male.'
- b. Aru.tokutei.no kakite-o dansei to mita.
 A.certain writer-ACC male COMP saw
 'I reckoned a certain writer to be male.'

Given the overlap, then, rather than being a simple question of complementary distribution, there seems to be an added level of complexity to this problem (or more precisely, a dichotomy of levels of interpretation).⁴

With regard to the accusative-quotative construction, it would seem that the practical question is how to find a motivated principle that eliminates all and only the non-specific indefinites. While the solution is in the notion that a non-specific indefinite reference *always* adds an element to the domain of the context of interpretation, the matter requires an added distinction. We have already seen in (1-a) that overtly specific indefinites can appear as accusative subjects, and at the same time have existential force (in some sense) in that grammatical context.

³As noted by Fodor and Sag (1982, pg. 360–361), specific indefinites occur in existential sentences (e.g., *There is a certain man waiting for you on the balcony*; *There's this girl in our syntax class who cheated on the exam*, etc.) (see also (McNally and van Geenhoven: 1998, pg. 5)). In addition, they occur as subjects of property-ascribing predications (e.g., *A certain gold medalist is a fraud*).

⁴The “non-specificity effect” (the converse of the “definiteness effect” that rules out definites in existential constructions) that we see for accusative subjects can also be observed in small clause accusative subjects, “major subjects” of double nominative sentences, noun phrases associated with appositive (or non-restrictive) relative clauses, targets of antecedent contained deletion, most topic noun phrases, and presumably in other contexts as well.

There is at least one place where Japanese noun phrases with non-specific indefinite reference can reliably be found: the host position for floating weak quantifiers:⁵ In (3) the subject *sika ga roppiki* ‘six deer’ takes the form [NP + case ... NUM-CL] and is paired with an “existential” predicate.

- (3) Mori-kara sika-ga rop-piki arawareta.
 Forest-from sika-NOM six-CL appeared.
 ‘From out of the forest appeared six deer.’

Attempts to embed sentences with these types of subject/predicate pairs in accusative-quotative constructions result in ungrammatical or pragmatically odd sentences. This shows that accusative subject position cannot support noun phrases with unambiguously non-specific reference.⁶

Thus we have syntactic evidence of what has up until now been supported only by interpretation: the claim that accusative subjects must be at least specific.

But the demonstration for this will have to wait: Although a demonstration is available, we are not in a position to appreciate it without understanding more about the inter-dependence between existential quantification of subject noun phrases and the types of predications in which they appear. Making the assumption that all strings of the form [NP + case ... NUM-CL] are weakly quantified noun phrases is a mistake.

⁵We can add noun phrases of the form [modified numeral + classifier + copula + N] to the list of unambiguously non-specific indefinite noun phrases (discussed in more detail below). It is not easy to find others. While the predications in internally-headed relative clause noun phrases are (almost always) episodic/eventive or existential, and their internal subject noun phrases are often indefinite non-specific, the internally-headed relative clause noun phrase itself *can* be specific or definite, and *can* appear as an accusative subject: *Hanako wa mado ni keeki ga oite aru no o oisou da to omotta* ‘Hanako thought the cake in the window to look delicious’.

⁶To a list of elements that can’t appear as accusative subjects can be added 1) the presuppositional elements of specificational pseudocleft questions, and 2) *wh*-noun phrase subjects of questions. However, what is at issue with these is, arguably, not non-specific indefinite reference *per se*, but something like it. I discuss this in more detail in Chapter 5.

The notion that a predicate such as *arawareru* ‘to become manifest’ in (3) is “existential” actually has to be unpacked. Furthermore, what we mean by “specificity” is still not clear.

4.1.1.1 Theories of specificity

Enç (1991, pg. 7), following suggestions by Heim (p.c.), formulates specificity of a noun phrase as a condition on the domain of discourse. In short, a noun phrase is specific indefinite if 1) it does not have a discourse antecedent, and 2) it is a subset of a discourse-familiar set (a definite group). The antecedent for the superset is called the “second referential index.” Enç calls this notion of specificity “covert partitivity.”⁷ A noun phrase is definite if it has a discourse antecedent, and of course the relationship between a noun phrase and its discourse antecedent is one of identity rather than of inclusion. A noun phrase is non-specific indefinite if 1) it does not have a discourse antecedent, and 2) the superset to which it is related does not have a discourse antecedent either. For a non-specific indefinite common noun phrase, the denotation of the relevant superset is typically taken from the common noun head. For *a cat* in the sentence *A cat is on the mat*, the superset would be the set of entities having the *cat* property.

But there are problems with this idea. The requirement for class membership to a discourse familiar superset doesn’t cover specific indefinites like the following: *The technicians have encountered a certain heretofore unimagined difficulty*. On the other hand the requirement that a phrase noun have no discourse antecedent fails to cover cases like *I call before the committee one Ronald Reagan*. On a more practical note,

⁷Wu (1998, pg. 486) explains partitivity fairly clearly. There are ways in which specific indefiniteness is different from overt partitivity. See fn. 12 on pg. 195 for an example.

specific reference usually involves the question, familiar to whom? I suggest that reference to multiple independent contexts of interpretation is a simple way to sort out the confusion.⁸ The “epistemic specificity” we are talking about in statements of propositional attitude, then, is a matter of an expression referring in one belief world set and simultaneously being asserted to exist in another.

For assertions of propositional attitude, there are potentially three different and independent contexts for interpreting reference: that of the agent of attitude, that of the speaker, and that of the hearer. An indefinite accusative subject cannot be interpreted as having existential force in the domain defined by the belief world set of the agent of attitude. With respect to that contextual domain, expressions that might otherwise be interpreted as non-specific indefinite are either interpreted as specific indefinite or are ruled out as uninterpretable.

But (as we saw in (3-b)) it also appears that overtly specific indefinites can also be read as having existential force in the context of an independent domain:

- (4) Tarou-wa kono.kinoko.no.naka.de aru-is-syu-o dokusei
 Tarou-TOP from.among.these.mushrooms a.certain-one-CL-ACC poisonous
 da to kangaete.iru ga, dore ka-wa osiete.kure-nai.
 COP COMP think but, which.one Q-TOP tell-BFTV-NEG

‘From among these mushrooms Tarou considers one certain type to be poisonous but he won’t say which one.’

The noun phrase *aru issyu no kinoko* ‘one certain type of mushroom’ can be read with existential force outside of the scope of the belief operator.⁹ Higginbotham

⁸To handle “epistemic specificity,” Farkas (2002) uses the idea of separate “discourse commitments,” for participants, each one generating a different context set. I simply propose to add another for third-person statements of propositional attitude.

⁹The idea of independent domains of evaluation can also account for the ability of specific indef-

(1987, pg. 65) notes that the speaker of a propositional report is not committed to having in mind a particular person when saying something like *George said that he met with a certain student of his today*, but the “specificity effect” is felt nonetheless.¹⁰ Higginbotham (1987) suggests that specificity in this sense is not to be found in truth conditional analyses (theories of *sense*), but rather in theories of *force*. I’m assuming that the answer involves distinct context dependencies: that the apparent ambiguity of an indefinite comes from there being more than one relevant context in which it is to be interpreted.

The force of an existential assertion consists in adding (+/ –) an element or elements to the contextual domain.¹¹ When an overtly specific indefinite can be interpreted existentially, that is an indication that more than one contextual domain is involved in its interpretation.¹² In such a case, the reference must be definite in at least one

inites to appear in existential constructions: *There is a certain man waiting for you on the balcony* is specific for the domain defined by the speaker’s belief world, and existential for the domain defined by the hearer. The ability to interpret expressions in two independent domains simultaneously should be considered a basic skill of inter-subjectivity.

¹⁰Fodor and Sag (1982, pg. 362) note one aspect of the interaction of specificity with propositional attitude verbs, taking issue with the claim that a noun phrase like *a certain boy* in ex. (i.a) only has a *de re* reading (i.e., a reading where the existential force of the (specific) indefinite takes widest scope).

- i. (a) Sandy believes that a certain boy has been cheating.
- (b) Tom said that Sandy believes that a certain boy has been cheating.

Fodor and Sag (1982, pg. 362, #29,30)

Fodor and Sag (1982, pg. 362) suggest that when ex. (i.a) is embedded as in ex. (i.b), an interpretation where the existential part of the meaning of *a certain boy* is interpreted before the meaning of *believe* (i.e., a reading where *Sandy* has a boy in mind) is possible. In such a case, the specificity applies to *Sandy’s* understanding, but not necessarily to *Tom’s*.

¹¹Zucchi (1991) derives the definiteness effect in English existential sentences using the basic intuition that quantified expressions quantify over contextually furnished subsets of the domain of discourse. Strong quantification over a contextually furnished set is accompanied by the presupposition that that set is non-empty. Weak quantification over a contextually furnished set is not accompanied by such a presupposition.

¹² I don’t entirely reject Enç’s (1991) formulation of specificity as covert partitivity, but there are undeniable differences between the behavior of *a certain* expressions and that of overt partitives:

- i. (a) ??Mary said there is a certain man waiting for you on the balcony, but she doesn’t know which one.

domain and non-specific indefinite in at least one other. I come to this conclusion because it seems that at the level of the belief world set of the agent of attitude, the accusative subject must *refer* (an identity relation).¹³ The identity relation (with an element in the domain of discourse) is the way that Enç defines definiteness. When an expression's meaning depends directly on identity with an entity, that expression can be said to *refer*. Fodor and Sag (1982) argued that specific indefinites have non-quantificational (referential) aspects. In Section 3.7.1 above I contribute an argument from Japanese to the same effect. In relating the ability to refer to contexts of interpretation, it might seem like I'm ducking the challenge to define the truth conditions for specificity, but actually, the phenomena I address seem to elude any description that does not relativize to contexts of interpretation.

Relating noun phrase form to reference can require some subtle distinctions. The requirement for specificity is a requirement on interpretation, not on form. Furthermore, if we put what is normally interpreted as a non-specific indefinite noun phrase into an accusative subject position, we will see that the specificity required is not defined in the contextual domain of the speaker/hearer. Otherwise (5-a) and (5-b) would be interpreted as only being able to mean the same thing.

- (5) a. Zirou-wa nanra.ka.no kairui-o biyaku da to
 Zirou-TOP some.kind.of shellfish-ACC aphrodisiac COP COMP
 omotte.iru rasii.
 think seem
 'Zirou seems to believe some kind of shellfish to be an aphrodisiac.'

-
- (b) Mary said there is one of those men waiting for you on the balcony, but she doesn't know which one.

¹³That the idea of identifiability is involved seems pretty clear. I will examine the notion in more detail as it relates to specificational pseudoclefts, questions, covert questions, and definite descriptions in Chapter 5.

- b. Zirou-wa aru.tokutei.no kairui-o biyaku da to
 Zirou-TOP a.certain shellfish-ACC aphrodisiac COP COMP
 omotte.iru rasii.
 think seem

‘Zirou seems to believe a certain shellfish to be an aphrodisiac.’

The example in (5-a) cannot be interpreted as meaning *Zirou seems to believe that there is some kind of shellfish that is an aphrodisiac*. The propositions expressed by accusative-quotative complements are restricted from expressing that kind of existential assertion. On the other hand, (5-a) *can* be interpreted to mean *There is some kind of shellfish that Zirou seems to believe to be an aphrodisiac*, where the specific *kind* is not known to the speaker/hearer. In this respect (5-a) does not differ from (5-b), nor for that matter, from (4) above.

But note how in [*nanraka no* N], the head noun is modified so that it’s denotation is construed as a member of an *unfamiliar* discourse set. This means that *nanraka no kairui* ‘some kind of shellfish’ in (5-a) actually fails to satisfy Eng’s (1991) description of specific indefiniteness. This doesn’t mean that it can’t receive such an interpretation: It is not unambiguously non-specific indefinite. (In fact, it is difficult to find a Japanese noun phrase which is unambiguously non-specific indefinite by virtue of its form alone.) But an interpretation of [*nanraka no* N] as having existential force seems to be *required at some level*. All noun phrases of the form [*nanraka no* N] imply a non-specific (or “unidentified”) referential status *at some level of interpretation*, and for accusative subject noun phrases of this form, that can only be the level of the speaker/hearer. So while this noun phrase is acceptable as an accusative subject in (5-a) because it *allows* a specific reading *at the level of the agent of attitude*, at some level of interpretation it also *requires* a non-specific reading. In (5-a) it gets that interpretation *at the level of the speaker*.

In contrast to (5-a), the overtly specific indefinite *aru tokutei no kairui* ‘a certain shellfish’ in (5-b) is construed as specific with respect to the contextual domain of the agent of attitude and also potentially specific with respect to that of the *speaker*. If there is existential force in *aru tokutei no kairui* ‘a certain kind of shellfish’, it is only exerted within the contextual domain of the *hearer*.

For the type of distinctions we are dealing with here it is simplest to define specific indefinite reference of an expression ϕ as a consequence of simultaneous interpretation in two different contextual domains, one including ϕ as a familiar entity, and one excluding it.¹⁴

Consider the oddness of the first-person statement of propositional attitude ??*Ore wa nanraka no kai rui o biyaku da to omou* (intended) ‘I believe some kind of shellfish to be an aphrodisiac’. The English gloss is unremarkable on an existential interpretation, but the Japanese sentence is another kettle of fish. The prenominal indeterminate quantifier *nanraka no* ‘some kind of’ makes the superset of the noun phrase indefinite (i.e., it implies that there is no “second referential index,” (Enç: 1991)), rendering the noun phrase necessarily non-specific (at least at some domain). If the agent of attitude in an accusative-quotative sentence is in the first person (i.e., is also the speaker), the reference of the accusative subject noun phrase is necessarily specific for the agent of attitude *and* the speaker. This is incompatible with the meaning of noun phrases of the form [*nanraka no* N], unless it be in a situation where the speaker is not sure about what she or he knows: *Dou yara ore wa nanraka no kairui o biyaku da to omotte iru rasii* ‘It seems that somehow I believe some kind of *shellfish* to be an aphrodisiac’ (...and all this time I thought these were peacock’s tongues!).

¹⁴For formal semantics I don’t know if recognizing interpretations sensitive to these distinctions ultimately requires introducing indices into the object language. A proliferation of indices is a complication that is not desirable to many theorists.

Note that in this conception of specificity there can be so-called “intermediate scope specifics” without contradiction:

- (6) Dono.rikouhosya-mo sorezore aru.kuromaku-o onzin da
 Which.candidate-FOC respectively a.certain.mastermind-ACC patron COP
 to omotte.iru.
 COMP think
 ‘Every candidate respectively considers a certain mastermind to be a patron.’

In a situation like (6) (according to Fodor and Sag (1982)), even if each *candidate* has someone in particular in mind, the reference of *aru kuromaku* ‘a certain mastermind’ cannot be “specific” in the sense of “referential” because the expression is under the scope of another quantifier (i.e., its value co-varies with the value of *every candidate*).¹⁵ Relativizing specificity to belief worlds allows each interpretation to refer in the relevant belief world set. What co-varies with the value assignment of *every candidate* is the belief operator’s value.

The notion of independent contexts of interpretation is extremely useful in clarifying the sorts of intuitions involved in interpreting statements of propositional attitude. We have firmer ground on which to look for support for the claim that specificity is required in accusative subjects, and harder evidence (the sort that shows distinctions in grammaticality) is desirable. Let’s return to the original observation.

¹⁵Hintikka (1986) also noted the possibility of intermediate specifics: *Everyone loves a certain woman — his mother*.

4.1.2 Indefinite subjects

Takemura (1975-1976) is responsible for publishing Shibatani's (p.c.) observation that the reference of accusative subjects is always specific.¹⁶

- (7) a. Tarou-wa dareka-ga hannin da to omotte.iru.
 Tarou-TOP someone-NOM culprit COP COMP think
 'Tarou thinks that (there is) someone (who) is the culprit.'
- b. Tarou-wa dareka-o hannin da to omotte.iru.
 Tarou-TOP someone-ACC culprit COP COMP think
 'Tarou believes someone to be the culprit.'

(adapted from Takemura (1975-1976, pg. 186, #21a,b) following M. Shibatani (p.c.)
 (my glosses))

The point is rarely referred to, and while widely recognized in interpretations for noun phrases that would otherwise be specific/non-specific ambiguous, it has yet to be demonstrated in syntax, and has never been derived satisfactorily. Although

¹⁶(Uehara: 1994, pg. 38) claims that "indefinite specific noun phrases are not eligible for Raising."

- i. (a) Haha-wa ano/aru hana-ga kirei da to omotte.iru.
 Mother-TOP that/a certain flower-NOM pretty COP COMP thinks
 'Mother thinks that that/a certain flower is pretty.'
- (b) Haha-wa ano/*aru hana-o kirei da to omotte.iru.
 Mother-TOP that/a certain flower-NOM pretty COP COMP thinks
 'Mother considers that/?a certain flower (to be) pretty.'

(Uehara: 1994, pg. 38, #18,19) (Uehara's judgments)

- ii. Keizi-wa dareka-ga/*-o hannin da to sinzite.iru.
 Detective-TOP someone-ACC culprit COP COMP believes
 'The detective believes that someone is the culprit.'

(Uehara: 1994, pg. 38, #20) (Uehara's judgments)

But there is plenty of evidence to warrant rejecting her judgments in this regard, starting with the judgment for (7-b).

various researchers (M. Shibatani, Takemura (1975-1976); Tomoda (1976-1977); Oka (1988); Kitano (1990); Takemura (1994); Homma (1998); Abe (2002a); Takano (2003); Harada (2005), etc.) have considered the particular referential nature of the Japanese accusative subject in one aspect or another, none has so far given an adequate account of its consequences for syntax or its implications for the semantics of the construction as a whole. How to demonstrate the point syntactically is one practical problem, but why should this “non-specificity effect” obtain in the first place?

Japanese lacks a system of determiners that indicate definiteness, specificity, indefiniteness, so it is necessary to resort to a variety of other tests to explore details of reference. Proper nouns and common nouns with demonstratives usually have definite reference, but in Japanese there are few resources internal to the noun phrase to mark a common noun subject or object or oblique as unambiguously non-specific indefinite.

To a certain extent we can “get around” the problem using various noun phrase modifiers and adjuncts. Pre-nominal *aru tokutei no* ‘being existent and specific’ mostly corresponds to the English *a certain*. Komagata (1996) uses the pre-nominal *rei no* ‘the aforementioned’ to force definite reference on what would otherwise be ambiguous expressions (especially bare common nouns). For predicate nominals, Komagata (1996) also uses the adjunct *iti'ou* ‘more or less’ before bare common nouns in order to force a predicative (indefinite) interpretation over an equational interpretation for the predicate in which they appear.

For subject noun phrases in particular, the interpretation is dependent on the form the noun phrase takes, the type of predicate it is associated with, and the context in which the $\langle \textit{subject}, \textit{predicate} \rangle$ pair appears. There are pre-nominal modifiers that seem to force an indefinite interpretation on common nouns, for example, but when

such noun phrases (e.g., *nanika no ekitai* ‘some kind of liquid’) appear as subjects of property ascriptions, their reference is also specific: *a certain liquid of some kind* (similar to what we saw in (5-a) above): *Nanika no ekitai ga hyouten ga sessi mainasu hyaku do ika de aru* ‘A certain liquid of some kind has a freezing point below minus 100 degrees Celsius’. The reference seems to be sensitive to predication type (discussed in more detail below): Certain types of predication seem to be associated with reading that *refer* (i.e., definite readings, specific readings, strongly quantified readings, or partitive readings).^{17 18}

4.1.2.1 Controlling for predication type

At this point the reader may be wondering why I have not presented data to show that accusative subjects never float weak numeral classifiers, for example, as in (2)

¹⁷According to Herburger (1994), Milsark (1974) supposed that strongly quantified noun phrases were better candidates for topichood, a necessary condition for being the subject of a “property predicate” (his term).

¹⁸There are some reflexes in English of the phenomenon noted here. For example, Herburger((1994, pg. 518), (1997)) notes Milsark’s (1974; 1977) observation that *few* in *few children* can be interpreted as partitive (i.e., proportional) optionally when the NP is the subject of a stage-level predicate, but that interpretation is obligatory when the predicate in question is individual-level. Milsark (1977, pg. 17, fn. 7) grudgingly extends this observation to cardinally quantified subjects of property-denoting predicates. This parallels the situation with floating quantifiers in Japanese. The judgments can be subtle, however, as Milsark himself notes. Heycock and Doron (2003, pg. 119) predict numerals to be strong in construal when they appear as subjects of individual-level predicates. Ladusaw also notes how partitive readings are yielded from cardinally quantified subject noun phrases in categorical judgments (1994, pg. 228, #19). Lasnik and Saito (1991), cited in Davies and Dubinsky (2004, pg. 302) note Postal’s (1974) argument that differences in scope possibilities of *few students* in the following suggest a hierarchical difference:

- i. (a) The FBI proved that few students were spies.
- (b) The FBI proved few students to be spies.

Lasnik and Saito write that the precise semantic distinction is not clear, but I submit it is the same distinction that Herburger (1994) refers to. There is a difference between the case of Japanese subjects of root individual-level sentences and that of English accusative subjects. The difference lies in where the optionality is found: The strongly quantified reading of *few students* is not forced when it appears as a nominative subject in ex. (i.a), but it is when it appears as an accusative subject in ex. (i.b).

on pg. 7 in Section 1.1. I hesitate to do this too soon because of a situation alluded to in Section 3.7.1, where it was noted that one sort of complement predication that licenses the formation of accusative-quotative constructions is also a sort of predication that forces a specific interpretation on subject noun phrases in corresponding nominative-quotative constructions (as we saw in (60-b) on pg. 176). Something like the corollary to this situation is what stops us here: The sort of predication that licenses existential interpretation for quantified subject noun phrases of weak form in nominative-quotative constructions is exactly the sort of predication that is excluded from accusative-quotative constructions.¹⁹

To demonstrate this, consider the distribution of weakly interpreted floating quantifiers in general: The non-specific indefinite interpretation only arises when quantifiers of the right form appear in a certain kind of predication.²⁰ I will adopt the term “eventuality-dependent predication” to refer to a predication type that requires ref-

¹⁹The contrast between (2) and (3) on pg. 7 in Section 1.1 was made possible — even though the predicate is exactly the same — because of “coercion” of a certain kind.

- i. (a) Tarou-wa singata-ga/*-o san-syurui hatubaityuu da to omotte-iru.
Tarou-TOP new.model-NOM/-ACC three-CL on.sale COP COMP think
‘Tarou thinks that (there are) three new models (that) are on sale.’
- (b) Tarou-wa tenzi.site.aru.mono-ga/-o subete hatubaityuu da to omotte-iru.
Tarou-TOP items.on.display-NOM/-ACC all on.sale COP COMP think
‘Tarou thinks that the items on display are all on sale.’

(repeated from (2) and (3) on pg. 7 in Section 1.1)

In readily imaginable contexts, predication with *hatubaityuu da* ‘be on sale’ relies on eventualities (spatio-temporal locations that can potentially have a variety of properties), and in ex. (i.a) the existence of an eventuality (let l be the variable for values of eventualities) has to be asserted in order to interpret the proposition: $\exists x, l[\text{new.item}'(x) \wedge \text{be.on.sale}'(x, l)]$. In ex. (i.b) the description in the accusative subject noun phrase includes reference to a specific eventuality (give it the non-logical constant j) in which the referents are on display: $\forall x[\text{be.on.display}'(x, j) \rightarrow \text{be.on.sale}'(x, j)]$. If the eventuality is already supplied, there is no need to assert the existence of a new one in order to interpret the predicate *hatubaityuu*.

So, the data in (2) and (3) on pg. 7 in Section 1.1 was “cooked” in a special way for expository purposes.

²⁰Fukushima (1991, pg. 75) characterizes such predications as having stage-level (Carlson: 1977a,b) predicates. However, it is doubtful that a lexical classification of predicates can capture the real distinction.

erence to an eventuality in order to be interpreted, and as a result frequently requires existential assertion.²¹ For the predications in propositions that actually assert existence, I will use the term “existence-asserting predications.” The distinction between these two depends on whether an eventuality is supplied in the context or not.

Here is an example with a bare common noun subject associated with a floating numeral-classifier pair in an existence-asserting predication, first in root context (8-a), and next embedded in an accusative-quotative construction (8-b):

- (8) a. Ik.kaku.zyuu-ga ni-hiki ura.niwa-ni iru.
 One.horn.beast-NOM two-animal back.yard-LOC exist.
 ‘There are two unicorns in the backyard.’
- b. *Hanako-wa ik.kaku.zyuu-o ni-hiki ura.niwa-ni iru
 Hanako-TOP one.horn.beast-ACC two-animal back.yard-LOC exist
 to omotte.iru.
 COMP think
 (intended) ‘Hanako believes there to be two unicorns in the backyard.’

The weakly quantified interpretation is available for the predication in root context in (8-a). The combination [locative adjunct + existential predicate] is extremely easy to interpret existentially (and hard to interpret any other way, even in English, as we saw in (56-b) on pg. 171 in Section 3.7.1, which resisted Postal’s (1974) claims that accusative subjects necessarily take wide scope). But (8-b), where the same predica-

²¹Milsark (1974) uses the term “state descriptive predicate,” and Carlson (1977a,b) uses the term “stage-level predicate” to describe what I’m trying to get at here. But I reject the notion that the crucial distinction can be described as a partition on the set of predicates. In many cases, the relation between the subject and predicate depends on the nature of the subject as much as on the nature of the predicate, and I contend that the context in which they are interpreted is also crucial. Kuroda (1972b) uses the notion of “thetic description” to refer to the sort of propositions formed on such predicates, which is closer to the level at which I frame my analysis of Japanese, but fundamentally different in its particulars.

tion forms the complement of an accusative-quotative construction, is unacceptable as a whole, so the question of interpretation for *ikkakuzuyu o ni-hiki* doesn't even arise.²²

The complement predication in (8-b) itself is existence-asserting (therefore “eventuality-dependent”). Such predications can be embedded in nominative-quotative constructions without problem. But as clausal complements, existence-asserting predications are incompatible with accusative-quotative constructions, and non-specific indefinite reference in general depends on existence-asserting predication. As I will show in Section 4.1.4.1, in those cases where an interpretation *is* available for a discontinuous quantifier-classifier pair of weak form associated with an accusative subject, it is either that of 1) a cardinally specified universal quantifier (such as the English *both*, specified for *two*: *Hanako wa Tarou to Zirou o hutari sukebe da to omotte iru* ‘Hanako believes Tarou and Zirou to be the both of them sex-obsessed’), or 2) a partitive pronoun (e.g., *Hanako wa otoko o hanbun izyou sukebe da to omotte iru* ‘Hanako believes men to be the majority of them sex-obsessed’). The expression is never interpreted as a weak quantifier in those contexts. This fact points to a restriction on

²²One may object that it is the embedded predicate itself that is disallowed in (8), and not the quantificational relationship. This observation is actually close to the heart of the matter, but ultimately an inadequate characterization. There is no restriction against “existential predicates” *per se* in accusative-quotative clausal complements:

- i. Akemi-wa Hiroshi-o saisi-ga iru to utagatte iru.
 Akemi-TOP Hiroshi-ACC wife.and.child-NOM exist COMP suspect
 (lit.) ‘Akemi suspects Hiroshi to have a wife and child.’

The restriction is against complement predications that directly assert existence (either of the accusative subject, or of an eventuality in which the accusative subject is a participant). Note that in ex. (i.) existence of *a wife and child* is only an entailment of the truth of the property-attribution made to *Tarou*. The existential predicate is actually embedded in a sentential predicate. The complement predication in ex. (i.) is formed on the sentential predicate. The property ascribed is comprised of the set of entities that *have a wife and child*, and in the proposition that is the object of attitude in ex. (i.), it is simply asserted that *Tarou* belongs to that set.

The point is that the distinction we are looking for is not a partition on the set of predicates: Without taking the relationship between subject, predicate, and context into account, an explanation appealing to feature-marking on lexical items will fail.

weak quantification in accusative-quotative complements (as interpreted with respect to the beliefs of the agent of attitude), but is there a more direct way to demonstrate it?

4.1.2.2 A quest for unambiguous non-specificity

I would like to be able to make the claim that subjects of property-attributing predications can never be unambiguously and overtly weakly quantified. But I am afraid that this state risks being only trivially true, because it might be that there is no overt and unambiguous marking of non-specific indefiniteness for Japanese noun phrases independent of the predications in which those noun phrases appear. The floating weak quantifier construction is one of the few resources in the Japanese language that seems to force unambiguously non-specific indefinite reference for a common noun subject, but this ultimately depends on the predicate involved and on the context of interpretation. When associated with a definite noun phrase in general, an accusative subject, or a subject of a property ascribing predication, floating quantifiers of weak form receive either universal or partitive interpretations (discussed in detail in Section 4.1.4.1 below).

Indeterminate-classifier pairs (e.g., *doko ka ni kasyo* ‘somewhere two locations’) only receive partitive interpretations in such contexts. There are other paraphrastic pre-nominal expressions (e.g., *nani ka no* ‘some kind of’; *doko ka no* ‘from somewhere’; *dare ka no* ‘somebody’s’; etc.) that in the right syntactic contexts can evoke a non-specific indefinite interpretation for the noun phrase containing them. But most such noun phrases are interpreted as specific indefinite when they appear as accusative subjects. (Ogihara (1987, pg. 10) claims that *dare ka* and *nani ka* are invariably non-specific, but this too broad a claim.)

As a test for indefiniteness, Nakanishi (2001b,a) cites Maribel Romero’s (p.c.) suggestion that sluiced wh-phrases (Chung et al.: 1995; Reinhart: 1997) can be a diagnostic. In Japanese, an NP with a demonstrative *kono* ‘this here’ can’t be associated with a sluiced wh-phrase object in predication like *I don’t know* ____:

- (9) John-wa *ano/hitori.no/nanraka.no/doko.no.uma.no.hone.ka.wakaranai
 John-NOM *that/one.person/some.manner.of/from.who.knows.where
 otoko-o mita rasii ga, watasi-wa dono-otoko-ka sira-nai.
 man-ACC saw seem while I-TOP which-man-Q know-NEG
 ‘It seems that John saw *that/one/some manner of/etc. man, but I don’t know which man.’

(derived from Nakanishi (2001b, pg. 3, fn. 6, #ii))

Other than the demonstrative *ano* (which is ruled out), all the various paraphrastic pronominal forms are non-specific indefinite in this context, but it seems that of these, *nanraka no* ‘some kind of’ comes closest to being regularly non-specific in every context. We have already seen that an accusative subject with pronominal *nanraka no* is judged by some speakers to be quite awkward in first-person accusative-quotative constructions, but judgments vary. Those who accept it don’t interpret the referent of the accusative subject as identifiable by the first-person speaker. Noun phrases with the form [*nanraka no* + CN] ‘some sort of (common noun)’ are degraded as subjects of “individual-level” predicates (e.g., ??*Nanraka no musu wa/ga ookii* ‘Some kind of bug is big’) without an assumption of a special context (e.g., a prompting question such as *Sono naka no nani ga ookii?* ‘What among those things is big?’). We have seen above that when a noun phrase of the form [*nanraka no* + CN] appears as an accusative subject it receives a specific interpretation with respect to the beliefs of

the agent of attitude, and a necessarily non-specific reference at the speaker/hearer level).

To test the reference of accusative subjects against the **Semantic/pragmatic constraint** while controlling for predication type, we need an unambiguously non-specific indefinite noun phrase form. But can such a form actually be found in Japanese?

Noun phrases of the form [*roku na* + CN] ‘a (common noun) worth a damn’ are one possibility. In my own inquiries I have found that phrases of the form [*roku na* + NP], the “modified numeral” never appear as accusative subjects.²³ But this is because they only ever appear in existence-asserting predications under negation.

- (10) a. Koko.ni.wa roku-na kyaku-ga ko-nai.
 As.for.here worth.a.damn-COP customer-NOM come-NEG
 ‘No customer worth a damn comes here.’
- b. *Roku.na.yatu-ga zyourenkyaku zya-nai.
 Guy.worth.a.damn-NOM regular.customer COP-NEG
 (intended) ‘No guy worth a damn is a regular customer.’

While the form [*roku na* + NP] is probably the closest thing to an unambiguously non-specific indefinite noun phrase that the Japanese language has to offer, it cannot serve as a test that controls for predication type.

Liu (1997, pg. 3, #8) suggests that quantified expressions like [NUM-CL + *ika/izyou* *no* + CN] ‘less than/more than + numeral + common noun’ behave in a special way. The [modified numeral + classifier + NP] (which Szabolcsi (2001, pp. 626–628)

²³But see Hoji (2005a), where a researcher uses an unambiguously non-specific indefinite negative polarity item [*roku na X*] (‘an *X* worth a damn’) as an accusative subject in stimulus sentences in a survey instrument and does get some judgments of acceptability. This is a surprising result, and I have no explanation for it.

suggests never takes wide scope) is not completely incompatible with definite readings (e.g., *Tatoe hutari ika no okyakusan sika konai to site mo, sono hutari ika no okyakusan ni subete no saabisu o teikyou suru to iu housin da* ‘Even if only two or less customers were to come, it is our policy to offer our full services to those two or less customers’). But the inability of modified numerals to take wide scope is well documented for a variety of languages. So it is worth testing:

- (11) a. John-wa san-nin-ika no kibousya-ga husawasii to
 John-TOP three-CL-less.than COP applicants-ACC suitable COMP
 omotta.
 thought
 ‘John thought that fewer than three applicants were suitable.’
- b. *John-wa san-nin-ika no kibousya-o husawasii to
 John-TOP three-CL-less.than COP applicants-ACC suitable COMP
 omotta.
 thought
 (intended) ‘John thought fewer than three applicants to be suitable.’

The form doesn’t take on an indefinite interpretation, as some accusative subjects with weak pre-nominal modifiers do. It is ruled out outright.

Note also that these [modified numeral + classifier + NP] expressions are perfectly natural as subjects in existence-asserting predications:

- (12) San-nin-ika no kibousya-sika i-nai.
 Three-CL-fewer COP applicants-NPI exist-NEG
 ‘There aren’t but fewer than three applicants.’

But such [modified numeral + classifier +NP] expressions are no more acceptable as “major” subjects than they are as accusative ones:

- (13) *San-nin-ika no kibousya-ga syokureki-ga zyuubun
 Three-CL-less.than COP applicants-NOM career.history-NOM sufficient
 da.
 COP.
 (intended) ‘Fewer than three applicants are such that their resumes are sufficient.’

As with weak floating quantifiers, then, the [modified numeral + classifier + NP] form can be ruled out on independent grounds. It only appears in existence-asserting predications.

This seems to be as close as we can get to an unambiguously non-specific indefinite noun phrase form in Japanese. Significantly, this form does not appear in the accusative subject context. In fact, it seems that subjects of this form do not appear in property ascriptions at all, unless as an expression denoting a measurement:

- (14) Sanzyuu-nin-ika no okyaku-ga husawasii.
 Thirty-CL-less.than COP guest-NOM be.appropriate
 a. ‘Fewer than thirty guests is (an) appropriate (number).’
 b. \neq ‘Fewer than thirty guests are appropriate.’

That weak quantification depends on a particular type of predication should be clear by now. The difficulty of separating the two has made it difficult to establish directly the contention that weak quantification is impossible for accusative subjects. At every turn we see that the absence of weakly quantified noun phrases in accusative subject

position can be explained on independent grounds by an apparent restriction on the sort of predication that licenses weak quantification in the first place. A demonstration of this would involve showing that definite subjects of eventive/episodic and existential predications are also unacceptable in accusative subject position.

- (15) *Tarou-wa otousan-o Amerika-kara kaeru to omotte.iru.
 Tarou-TOP father-ACC America-from return COMP think
 (intended) ??“Tarou believes his father to return from America.

(Interestingly enough, the English equivalent to (15) is also less than acceptable.)

What all these considerations suggest is that Takemura’s (1975-1976) observation is epiphenomenal. The generalization to be inferred is one over predication types.

4.1.3 $\langle \textit{subject}, \textit{predicate}, \textit{contextual domain} \rangle$

Only property-ascribing predications (including equations) are compatible with accusative-quotative constructions, and existence-asserting predications are restricted from appearing as complement predications.²⁴ Weak quantification is existence-asserting, and is only possible in an existence-asserting predication. Although some predicates lend themselves more readily to existence assertion than others, the distinction is not one simply between classes of predicates.

²⁴This claim commits to a partitioning of the set of all expressible predications, but is simply a question of whether the assertion of a proposition formed on a predication adds entities to the contextual domain or not, a condition on the relationships between the members in the tuple $\langle \textit{subject}, \textit{predicate}, \textit{contextual domain} \rangle$. This distinction is not between predicate classes, nor is it the same as that betweenthetic judgment and categorical judgment in Kuroda’s (1972a; 1972b) interpretation of the Brentano-Marty framework. (See Ladusaw (1994) for the first attempt at unification of the ideas of Milsark, Carlson, and Kuroda.)

Here is an example with a bare common noun subject associated with a floating numeral-classifier pair in a property-ascribing predication, first in root context (16-a), and next embedded in an accusative-quotative construction (16-b):

- (16) a. Kodomo-ga huta-ri zyus-sai.izyou da.
 Children-NOM two-people ten.years.old.more.than COP
 (i) ‘The/Some particular children are both more than ten years old.’
 (ii) ‘Two of the children are more than ten years old.’
- b. Tarou-wa kodomo-o huta-ri zyus-sai.izyou da
 Tarou-TOP children-ACC two-people ten.years.old.more.than COP
 to omotte.iru.
 COMP think
 (i) ‘Tarou believes the children to be both more than ten years old.’
 (ii) ‘Tarou believes the children to be such that two of them are more than ten years old.’

Note that the weakly quantified interpretation is not available, even in root context (16-a).²⁵ The interpretations that *are* available are there by default.²⁶ This situa-

²⁵The first researcher to have remarked directly on this pattern that I have been able to find is Tateishi (1989), who implies that the quantifier in the example below has an extremely low level of acceptability because it appears as the subject of an “individual-level” predicate:

- i. (a) Gakusei-ga san-nin kita.
 Student-NOM three-people came
 ‘Three students came.’
- (b) ***Gakusei-ga san-nin kasikokatta.
 Student-NOM three-people came
 (intended) ‘There were three students who were clever.’

(adapted from Tateishi (1989, pg. 414, #21c,d) (Tateishi’s judgment))

²⁶In order for numeral-classifier pairs to be interpreted as universally quantifying expressions, it is common to add the suffix *-tomo* to the pair. But for subjects of property-ascribing predications, a universally quantifying interpretation is forced even without the suffix. This falls out from the fact that the subjects of property-ascribing predications are always presuppositional: Their quantifications will always be proportional. That the predication is property-ascribing is a consequence of the construction in which the predicate appears, rather than of the nature of the predicate itself. Existential readings can be gotten for predicates like these, provided the right sort of context: *Gakkou no*

tion is repeated for every grammatical accusative-quotative construction that has an accusative subject associated with a non-contiguous quantified classifier.

As noted above, there is no comparable constraint against definite and specific-indefinite noun phrases appearing as subjects of episodic/eventive predications.²⁷

The distribution of subjects and that of predicates we’ve been looking at are two aspects of the same fact: Accusative-quotative constructions only take complement predications that denote property ascriptions (when evaluated in the relevant domain) (defined on pg. 6 in Section 1.1). Properly understood, then, the interpretation of floating numeral classifiers and other weak quantifiers even might be a reliable probe for distinguishing accusative-quotative constructions from string-similar constructions.

4.1.4 Partitivity

I stated above that quantifier-classifier pairs of weak form associated with (rather than “floated from”) definite or specific indefinite noun phrases do not get weak interpretations: When they co-occur, their reference is not weak but partitive (e.g.,

housin ga kawatta naa. Sannensei ga zyuuissai izyou da ‘School policies have really changed. (There are) third graders (who) are over eleven years old’. See Kuroda (2003) on this point. (For this last example the existential interpretation is similar to how a use of the “representative” auxiliary would be construed: *Sannensei ga zyuuissai izyou dattari suru* ‘There are cases where third graders are over eleven years old’.)

One exception to the claim that floating weak quantifiers associated with the subjects of existential-eventive predicates are not proportional occurs with predicates that denote “change-in-measure” such as *hueru* ‘increase’.

²⁷In Kratzer’s (1989) system, vacuous quantification is not allowed. But as long as a variable for the eventuality itself is introduced, there is no vacuous quantification, even if the subject is not an open expression (Kratzer: 1989, 1995).

Rei no otoko ga hutari kite imasu ‘Two of those aforementioned men are here’).²⁸

As the difference between partitivity and non-specific indefiniteness is sometimes confused,²⁹ let’s look at the contrast between a weakly interpreted floating cardinal-classifier pair in (17-a) and the same pair interpreted partitively in (17-b):

- (17) a. Teeburu.no.mukougawa.ni torampu-ga ni-mai at-ta.
 At.the.far.side.of.the.table card-NOM two-CL exist-PAST.
 ‘There were two cards at the far side of the table.’
- b. Kotti.no.go.mai.no.torampu-o ni-mai mekutta.
 The.five.cards.on.this.side-ACC two-CL turned.over
 ‘I turned over two of the five cards on this side.’

If we interpret the reference of *ni mai* ‘two flat things’ in (17-a) as non-specific indefinite, the common noun *torampu* ‘playing card’ is not understood as referring to the set of all playing cards. In this context, *torampu* doesn’t refer to any definite

²⁸When numeral-classifier pairs and other quantifiers of weak form are associated with definite noun phrases, they function as pronominals with proportional reference (Inoue (1978), Fukushima (1991, pg. 77, #17a,b)). When they are associated with subjects of predicates denoting change-of-measure (e.g., *hueru* ‘increase’; *heru* ‘decrease’; *kireru* ‘be exhausted’; *nokoru* ‘be left over’, etc.), they also do not restrict the quantity of the host noun, but function as pronominals indicating a change in proportion to a discourse-familiar quantity (Fukushima: 1991, pp. 76, fn. 4; 77, #18a,b).

²⁹Downing (1996, pg. 223–224) claims that the [N’ + case marker ...NM-CL] construction establishes a grouping which the numeral classifier subsequently delimits, so that the predication in question applies to a subset of the whole, often implying that it is a proper subset. Downing comes close to saying that the nominal in this configuration is always a referring expression. My point is that, in the [N’ + case marker ...NM-CL] floating configuration, the nominal element is not necessarily a referring expression, but can function as a predicate. Whether it can or not is in part dependent on the nature of the matrix predicate in question, and in part dependent on the referential status of the nominal expression to be quantified. A referring expression (denoting a definite set in the discourse domain) would give rise to a partitive reference. Such interpretations are usually forced for subjects of predications if 1) the nominal element is specific, or 2) the predication is property-attributing. But if the nominal element is indefinite, and the predicate is existential/eventive, the subject [noun + case marker ...NM-CL] construction can also function to give the intersection of two predicates (one of a property, one of cardinality) and introduce a variable for existential quantification to take scope over. This is non-specific, indefinite reference, and is a special case of Downing’s “introductory” (or “first mention”) function. We might call it “presentational,” or “existential,” or “non-specific indefinite reference”.

group at all, but has the logical type of a predicate (a set of individuals), not an individual. The intersection of *torampu* (a subset of the classifier *mai* ‘flat things’) and *ni* ‘two’ restrict a variable under existential quantification. The interpretation is cardinal and weak (a sub-type of existential interpretation).³⁰

The situation is different for the partitive reference in (17-b). Ladusaw (1982) argues that the complement noun phrase in a partitive (e.g., *the cards* in *two of the cards*) denotes a group. Groups are non-empty and non-singleton sets of entities (i.e., having a cardinality greater than or equal to 2) (Wilkinson: 1991, pg. 405).³¹ In English, the host of a partitive must be group that is definite in reference: a group-level individual (Wilkinson: 1991, pg. 404). In Japanese, a quantifier-classifier pair (or lexical quantifier) of weak form associated with an overtly definite group noun phrase always receives partitive interpretation (regardless of whether the predication involved is existential-eventive or not):

³⁰For people who find the notion that common nouns are sometimes non-referring to be unsettling, the following example should make the point clearer:

- i. 1693-nen-no aru.hi, Isaac Johannes Lamotius-ga dodo-o
 1693-year-GEN one.day, Isaac Johannes Lamotius-NOM dodo-ACC
suu.wa/nan.wa.ka/ni.wa utta.
several.animal/some.animal/two.animal shot.
 ‘One day in 1693, Isaac Johannes Lamotius shot several/some/two dodos.’

To see that the common noun *dodo* does not refer to the group of all *dodos*, consider that ex. (i.) is acceptable even if the two *dodos* that *Isaac Johannes Lamotius* shot were the last ones on earth. Under the assumption that the common noun denotes the group supremum, the quantifying expression would have to be interpreted as universal in force. But no one would interpret the reference of *dodo ni-hiki* in ex. (i.) in this proportional way unless the group of all *dodos* were already a discourse referent. Partitivity is proportional. Weak quantifiers are not proportional. The expressions that float them do not refer to groups. Hasegawa (1993, pg. 134) cites Nishigauchi and Uchibori’s (1991) argument that such expressions do not presuppose the existence of the entities to which they refer. The usage of terminology I adopt here differs from that of researchers such as Belletti (1988), who refer to non-specifics as “partitives”.

³¹Here is the source of confusion. A group is a set of entities, but a group itself is an entity. Ladusaw (1982) sets up a distinct algebra to handle entities of this special sort. The sets that common nouns and properties denote are not entities. But there is always one case where a group denoted by a common noun has the same extension as the set that that common noun denotes.

- (18) a. Ano.tamago-wa ni-ko(-ga) datyou-no da.
 Those.eggs-TOP two-CL(-NOM) ostrich-GEN(NMZ) COP
 ‘Two of those eggs are ostrich eggs.’
- b. Ano.tamago-wa ni-ko(-ga) kaeri-sou da.
 Those.eggs-TOP two-CL(-NOM) hatch-about.to COP
 ‘Two of those eggs are about to hatch.’

A partitive interpretation for a quantifier of weak form implies (by Enç’s (1991) definition) 1) a specific interpretation for the sub-group (*ni ko* ‘two things’) denoted by the quantified expression, and 2) a definite reference for noun phrase (*ano tamago* ‘those eggs’) that is associated with it. Syntactically, quantifiers of weak form receiving such interpretations are not “floating quantifiers” but are pronominals, and can often (but do not always) receive case.

I have been making a distinction between weak quantifiers and quantifiers of weak form precisely because of this distinction. Strong quantifiers (e.g., [*hito-tu-mo* ... *nai*] ‘not a single one’, *go-nin-to-mo* ‘all five people’, etc.) can “float” from accusative subject hosts: Weak quantifiers cannot. But quantifiers of weak form (e.g., numeral-classifier pairs, [indeterminate + *ka*], etc.) can appear as pronominals associated with accusative subject nouns phrases with partitive reference. In such cases, the accusative-quotative complement is similar to a double nominative construction (or “major subject” construction) in which the accusative subject plays the role of the major subject. As we will see below, in these situations there is an “aboutness” condition on the relationship between the accusative subject and the sentential predicate it appears with.

4.1.4.1 Numeral-classifiers as partitive pronouns

As was noted above, accusative subjects can float universal quantifiers without many restrictions other than that the host noun phrase be able to take a plural or mass reading:

- (19) Tarou-wa ano.hito.tati-o minna(*-ga) amerikazin da to
 Tarou-TOP those.people-ACC all-NOM American COMP COP
 mita.
 COMP deemed
 ‘Tarou reckoned those people to be all Americans.’

(Note that the case-marking for the quantifier is disallowed.)

But accusative subjects can only be associated with (optionally case marked) partitive pronouns under particular pragmatic conditions on the relationship between a sentential predicate (i.e., the [part_i + predicate] sentence) and the major subject (i.e., the accusative subject denoting the whole_i).

- (20) a. Tarou-wa girisia-no gorin-no.yakyuu.sensyu-o
 Tarou-TOP Greek-GEN Olympic.baseball.player-ACC
 roku-nin-izyou(-ga) girisia-kei-amerikazin da to mite.iru.
 six-CL-exceeding-NOM Greek.American COP COMP see
 ‘Tarou reckons the Greek Olympic baseball team to be such that more
 than six of them are Greek-Americans.’
- b. Sono.iwayuru.masu-o yon-hiki(-ga) suzuki da to omou.
 Those.so.called.trout-ACC four-CL-NOM perch COP COMP think.
 ‘I consider those so-called trout to be such that four of them are perch.’

In a use of the accusative-quotative construction, the judgment concerns the properties that pertain to the denotee of the accusative subject noun phrase. Thus, the fact that a given property obtains for a part must have “consequences” for the way that the whole is to be understood, or the usage sounds odd. In (20-a), the status of a team as representative of Greece is called into question by an incongruous property of a part of that team. In (20-b), the rightfulness of the description *masu* is called into question by an incongruous property of part of the group so called.

There may be “consequences” of other types:

- (21) a. Ano.ori.no.usagi-o ip-piki-ga osu da to omou.
 That.cage.of.rabbits-ACC one-CL-NOM male COP COMP think
 ‘I consider those rabbits to be such that one of them is a male.’
- b. Ano.usi-o it-tou-ga kansen-site.iru to omou.
 Those.cows-ACC one-CL-NOM infect-be COMP think
 ‘I consider those cows to be such that one of them is infected.’

Keeping rabbits of more than one gender in the same cage (21-a) may eventually have “consequences” for the total number of the whole group. Having one sick cow among others (21-b) may have consequences for the health of all, or for their commercial value.

For a contrast, consider the consequences that a judgment from a referee might have for the ability of a team to play, as opposed to an opinion from a spectator. In the former case, the judgment has pragmatic consequences.

- (22) a. Kankyaku-wa sensyu-ga/??-o huta-ri sikkaku da to
 Spectator-TOP player-NOM/-ACC two-CL disqualified COP COMP
 omotte.iru.
 think
 ‘The spectator thought two of the players were disqualified.’
- b. Sinpan-wa sensyu-o huta-ri sikaku (da) to
 Referee-TOP athlete-ACC two-CL disqualified COP COMP
 handan-sita.
 judged
 ‘The referee judged two of the players to be disqualified.’

In the preceding examples, replacing any of the embedded lexical predicates with some property that is incidental to the part but not consequential for the whole (such as, say, *ookii* ‘big’, for example) would result in pragmatic anomaly. But the distinction is a pragmatic one, and this “consequentiality” has no more theoretical utility than the catch-all phrase “aboutness.” The “aboutness” relation has been proposed as a requirement between the accusative subject and the complement predication by several theorists (Mihara (1994b), for example), but the notion has never been articulated explicitly enough to criticize either as a necessary or a sufficient condition.

While these observations have more to do with pragmatic considerations about how the world works than with syntactic ones, they have a bearing on how example sentences should be constructed, and on what constitutes counterevidence. Furthermore, these tokens (like those of any “accusative major subject” complement) illustrate the fact that the overt predicate in the complement does not necessarily take the accusative subject as the thematic argument.

4.1.5 Previous studies

The earliest observation concerning the awkwardness of bare common noun subjects hosting numeral-classifier pairs in non-existence-asserting predications that I can find is Y.-K. Takano (1986, pg. 53, #24c). Y.-K. Takano (1986, pg. 57–58) discusses the interaction between predicate type and the focus and definiteness of common nouns with numeral classifier pairs. Y.-K. Takano (1986, pg. 57) quotes Kuno (1973, pg. 60) as saying “if the predicate represents an action, existence, or temporary state, the subject with *ga* is ambiguous between neutral description and exhaustive listing,” and “if the predicate represents a stable state, the subject with *ga* can receive only the exhaustive-listing interpretation.”³² First Y.-K. Takano looks at an action predicate.

- (23) a. Siti-nin no samurai-ga kita.
 Seven-people COP samurai-NOM kita
 (i) ‘(The) seven samurai came.’ (neutral description)
 (ii) ‘(The) seven samurai (and only (the) seven samurai) came. (exhaustive listing).
- b. Samurai-ga siti-nin kita.
 Samurai-NOM seven-people kita
 (i) ‘Samurai, seven of them, came.’ (neutral description)
 (ii) ‘Samurai (and only samurai), whose number is seven, came.’ (exhaustive listing)

(adapted from Y.-K. Takano (1986, pg. 57, #28a–c) (Takano’s glosses))

Y.-K. Takano (1986, pg. 58) first notes that the optional definiteness of the subject noun phrase with the pre-nominal numeral-classifier pair (viz. *siti-nin no samurai*) in

³²Note that this description only applies to sentences in root contexts (Ogihara: 1987).

(23-a) is no longer an option for the subject noun phrase with the floating numeral-classifier pair (viz. *samurai ga siti-nin*) in (23-b). (This is actually a simplification of the facts. I will explain below.) Y.-K. Takano (1986, pg. 58) then notes that the meanings of the subject noun phrase with the pre-nominal numeral-classifier pair and the subject noun phrase with the floating numeral-classifier are different. Y.-K. Takano claims that this difference is indicated in the glosses for the examples.

Next Y.-K. Takano looks at a “stable-state” predicate:

- (24) a. Siti-nin no samurai-ga binbou da.
 Seven-people COP samurai-NOM poor COP
 ‘(The) seven samurai (and only (the) seven samurai) are poor.’
- b. Samurai-ga siti-nin binbou da.
 Samurai-NOM seven-people poor COP
 ‘Samurai (and only samurai), whose number is seven, are poor.’

(adapted from Y.-K. Takano (1986, pg. 57, #29a,b) (Takano’s glosses))

Y.-K. Takano claims (and for my thesis, unfortunately so) that the same changes in definiteness show up for subjects of “stable-state” predicates, depending on the position of the numeral-classifier pair. Even worse for my thesis, Y.-K. Takano finds (24-b) to be acceptable under the interpretation provided. I predict that either (24-b) is ruled out — In fact it is irredeemably awkward for at least some speakers under the interpretation given — or it is interpreted as meaning either 1) *It is all seven samurai (and only them) who are poor* or 2) *It is seven of the samurai (and only them) who are poor*.³³

³³Incidentally, Y.-K. Takano (1986, pg. 52) observes (in the same paper) after Kuno (1973) that when the subject contains a numeral or quantifier, only the neutral description interpretation is available. So the exhaustive-listing reading expected from the subject of a stable-state predication is

I claim that without some special presuppositions about the reference of *samurai* in (24-b) (specifically, that the set it denotes is non-empty), the sentence is extremely hard to interpret. I submit that it is impossible to interpret existentially. The fact that Y.-K. Takano (1986, pg. 58) gives *samurai* an exhaustive-listing interpretation shows that he doesn't interpret it existentially, but his gloss is also incoherent. Exhaustive-listing is, semantically, a statement about a contextually restricted domain involving the notion of (non-trivial) set partition. In a sentence like *samurai ga binbou da* the exhaustive-listing interpretation places three requirements on the meaning of the parts of the sentence: 1) that the predicate *binbou da* partition the domain, yielding set A; 2) that the subject noun phrase *samurai* partition the domain, yielding set B, and 3) that A be a subset of B. Exhaustive-listing reference is accompanied by a presupposition that the set denoted by the list-exhausting item is non-empty.³⁴ The only interpretations available for (24-b) are proportional ones: Either *It is all seven samurai (and only them) who are poor* or *It is seven of the samurai (and only them) who are poor*.

In the same paper Y.-K. Takano (1986, pg. 52) notes that “generic *wa* is incompatible with quantifiers.” So in the sentences in (25) below, the noun phrase *samurai*

suppressed when the subject noun phrase is internally quantified: *Gakusei-no san-nin ga dokusin da* ‘Three of the students are single’ Y.-K. (Takano: 1986, pg. 51, #23c). However, the Japanese example can be read as either a token of the overt partitive (*no* = GEN) that Downing (1996, pg. 230–231) notes, or a token of a the relative head numeral-classifier pair (*no* = COP) (See Appendix B for details). The exhaustive-listing interpretation is only suppressed in the partitive reading. The other reading can be glossed as follows: *It is those three, who are students, who are single*.

³⁴Ogihara (1987) also sees an existential presupposition operating in exhaustive listing reference. The type-shifting operations *ident*, *iota*, and *sigma* that Ogihara (1987) employs to render exhaustive-listing sentences into a form consistent with the class of categorical judgments, all either operate on expressions of type *e* or are undefined on empty sets. Consider how the specific/non-specific ambiguous expression *nan-nin ka no hito* ‘some number of people’ is interpreted as specific when it appears as a subject in a property predication: *Nan-nin ka no hito ga kitigai da* ‘Some people are crazy’ (Ogihara: 1987, pg. 10, #35). I want to point out that by “specific” (I don’t mean to imply more than a partitive reading. Identifiability is not required.) (Ogihara: 1987, pg. 14, #44) also notes that specificity is also required for noun phrase-internal cardinally quantified subjects of property predications.

wa is to be interpreted as either being a topicalized discourse referent or as having contrastive focus. Y.-K. Takano (1986, pg. 53) finds *samurai wa siti-nin* in (25-b) hard to interpret as a definite noun and lacking in semantic coherence. (25-c) he finds awkward, but improved with the inclusion of a demonstrative *sono* (crucially, giving it a partitive interpretation).

- (25) a. (Sono) siti-nin-no samurai-wa uta-ga zyouzu da.
 Those seven-people-COP samurai-TOP song-NOM skilled COP
 ‘Speaking of the seven samurai, they are good at singing.
- b. ??Samurai-wa siti-nin uta-ga zyouzu da.
 Samurai-TOP seven-people song-NOM skilled COP
 (intended) ‘Speaking of the samurai, seven of them are good at singing.
- c. ?Sono.samurai-wa siti-nin uta-ga zyouzu da.
 Those.samurai-TOP seven-people song-NOM skilled COP
 ‘Speaking of the samurai, seven of them are good at singing.
- d. (Sono).samurai-wa siti-nin-tomo uta-ga zyouzu da.
 Those.samurai-TOP seven-people-all song-NOM skilled COP
 ‘Speaking of the samurai, all of the seven are good at singing.

(adapted from Y.-K. Takano (1986, pg. 53, #24a–d)(Y-K. Takano’s judgments and glosses))

Of particular interest to me is how Takano glosses (25-c) as having partitive reference, and how Takano finds (25-d) improved by the universalizing suffix *-tomo*. Unfortunately, Takano never examines the sort of minimal pair that would evoke a complete discussion of the interaction between property predications and subjects quantified with apparently weak forms.

The first direct connection between predicate type and the interpretation of floating quantifiers was made by Tateishi (1989, pg. 414, #21c,d), who implies that the quantifier in the example below has an extremely low level of acceptability because it appears as the subject of an individual-level predicate:

- (26) a. Gakusei-ga san-nin kita.
 Student-NOM three-people came
 ‘Three students came.’
- b.***Gakusei-ga san-nin kasikokatta.
 Student-NOM three-people came
 (intended) ‘There were three students who were clever.’

(adapted from Tateishi (1989, pg. 414, #21c,d) (Tateishi’s judgment))

In an extension of observations by Terada (1986, 1987), Tateishi (1989, pg. 414, fn. 12) notes that along with weak floating quantifiers being incompatible with individual-level predicates in general, an episodic reading of (26-b) (i.e., a reading of three separate “discoveries”) is also impossible.³⁵ Ishii (1991) picked up on Tateishi’s observation, offering some new examples:³⁶

- (27) a. *Gakusei-ga san-nin Eigo-ga umai.
 Student-NOM three-people English-NOM good
 (intended) ‘There are three students who are good at English.’
- b. Gakusei-ga san-nin Eigo-o hanasita.
 Student-NOM three-people English-ACC spoke
 ‘(There were) three students (who) spoke English.’

³⁵I won’t reproduce his analysis here, because I think that the analysis in Nakanishi (2002) is closer to the mark. See discussion below.

³⁶Miyamoto (1996, pg. 330, #25b) also cites Ishii’s examples.

- c. San-nin no gakusei-ga Eigo-ga umai.
 Three-people COP student-NOM English-NOM good
 ‘The three students are good at English.’

(adapted from Ishii (1991, pg. 109, #36,37,38a) (my glosses))

First I would like to point out that in the right context, the sentence in (27-a) is possible with a partitive interpretation, even with an unstressed (i.e., neutral-focus) *ga*-particle marking the subject noun phrase as nominative. This point goes unnoticed. The tendency to interpret the pre-nominal numeral quantifier in (27-c) as definite also goes unnoticed. Tateishi (1989), Ishii (1991), and Miyamoto (1996) all judge sentences like (27-a) to be unambiguously bad as examples of cardinal floating quantifiers, but of them only Miyamoto (1996) directly discusses the possibility of a partitive interpretation, in the following way: Miyamoto (1996) begins discussion of the incompatibility of floating weak quantifiers with individual-level predicates by citing this example from Nishigauchi and Uchibori (1991):

- (28) a. Panda-ga ni-tou genki da.
 Panda-NOM two-animal healthy COP
 ‘Two pandas are healthy.’
 b. *Panda-ga ni-tou honyuurui da.
 Panda-NOM two-animal mammal COP
 ‘Two pandas are mammals.’

(Nishigauchi and Uchibori (1991) cited in Miyamoto (1996, pg. 324, fn. 4, #i-a,b))

Miyamoto argues that the problem with Nishigauchi and Uchibori’s (1991) (28-b) is not one of ungrammaticality but of semantic anomaly. The sentence appears to

attribute the property of being a mammal to a cardinally specified subset of a group of *pandas* (i.e., a partitive reference). Given the reference requirements, the property *honyuurui* ‘mammal’ should partition the set of entities denoted by the group from which the partitive is generated. But all pandas are, in fact, mammals; hence the anomaly.

Miyamoto (1996) gives an alternative example of a numeral quantifier appearing with an individual-level predicate:

- (29) Panda-ga ni-tou mesu da.
 Panda-NOM two-animal female COP
 ‘Two of the pandas are female.’

(adapted from Miyamoto (1996, pg. 324, #6) (my gloss))

Although Miyamoto doesn’t address the referential status of *ni-tou* in (29) directly, Miyamoto (1996, pg 326) does imply that for the sentence to go through, the predicate must only apply to a proper subset of the denotation of the “host” noun phrase. Miyamoto (1996, pg. 325) concludes that the expression *ni-tou* is not a floating numeral quantifier, but rather an “adjoined quantifier” (in my analysis, a pronominal with partitive reference). The implication for (28-a) is either that 1) the predicate *genki da* ‘be healthy’ is individual-level, partitive reference is required for *panda ni-tou*, and the predicate partitions the superset, or that 2) *genki da* ‘be healthy’ is a stage-level predicate (and presumably *panda ni-tou* can receive an existential interpretation). Miyamoto does not explore the latter possibility, but I side with the first option (in spite of the fact that *genki da* might denote an impermanent state).

Although Miyamoto does not state this explicitly, the analysis and interpretations given suggest that when quantifiers of weak form are associated with the subjects of individual-level predicates, they are interpreted as proportional. We have already seen that when associated with an accusative subject noun phrase, quantifiers of weak form are either 1) rejected, or 2) interpreted as proportional. When the sort of example that Miyamoto presents in (29) is embedded as the complement in an accusative-quotative construction (30), it is acceptable for some speakers with the proportional interpretation. (Some regard the nominative marking on the numeral classifier phrase in (30) as obligatory.)

- (30) Hakase-wa panda-o ni-tou(-ga) mesu da to
 Scientist-TOP panda-ACC two-animal(-NOM) female COP COMP
 handan-sita.
 judgment-did.

‘The scientist judged two of the pandas to be female.’

If we adopt (provisionally) the distinction of stage-level and individual-level predicates, here is a syntactic argument for the claim that only individual-level predicates can appear in the complements of accusative-quotative constructions.

Fukushima (1991) observed that the interpretation of numeral-classifier pairs is related to the type of eventuality denoted by the predicate with which they occur.

- (31) a. Tarou-ga pisutoru-o ip-patu kinou ut-ta.
 Tarou-NOM pistol-ACC one-shot yesterday shoot-PAST

‘Tarou shot a pistol once yesterday.’

- b. *ip-patu no pistoru
one-shot COP pistol
(intended) ‘one pistol’

(adapted from Fukushima (1991, pg. 73, #10a,b))

The function of the numeral-classifier pair in (31-a) above is clearly that of a frequency adverb. That it is not associated directly with the noun phrase *pisutoru* ‘pistol’ is clear from (31-b).

Fukushima (1991, pp. 54–57) extends this point, taking the basic position that floating numeral-classifiers pairs relate verb phrase denotations to common noun phrase denotations by taking the denotation of the verb phrase and returning a modified denotation of the same semantic type that then combines with the denotation of the common noun. The function returns the intersection of the denotations of the predicate and the common noun, restricted by the cardinality of the numeral and a subset relation with the denotation of the classifier. (See also Dowty and Brodie (1984) for a similar approach to English.) One of the interesting aspects of this analysis is that the verb phrase combines first with the numeral-classifier pair, allowing selection by the core predicate.

It is tempting to relate the numeral-classifier pair directly with the host noun because of the requirement for a subset relation between the denotation of the noun and the denotation of the classifier. But Fukushima (1991, pg. 75) observes that weakly construed floating numeral-classifier pairs (in contrast with pre-nominal numeral-classifier pairs) cannot be associated with the subjects of individual-level predicates (33-b).

- (32) a. San-nin no gakusei-ga yotte.iru.
 Three-people COP student-NOM be.drunk
 ‘Three students are drunk.’
- b. Gakusei-ga san-nin yotte.iru.
 Student-NOM three-people be.drunk
 ‘Three students are drunk.’
- (33) a. San-nin no gakusei-ga katawa da.
 Three-people COP student-NOM cripple COP
 ‘Three students are cripples.’
- b. *Gakusei-ga san-nin katawa da.
 Student-NOM three-people cripple COP
 (intended) ‘Three students are cripples.’

(adapted from Fukushima (1991, pg. 75–76, #13a,b; 15a,b))

Fukushima (1991) takes this as further evidence of the adverbial nature of floating quantifiers, but (1991, pg. 88) doesn’t pursue the question of why weak floating quantifiers should have this distribution.

It is not until the research of Nakanishi (2002) that we see these observations integrated into a theory about the predicate types in question.

Nakanishi (2003, pg. 369) credits Fukushima (1991); Nishigauchi and Uchibori (1991); Miyamoto (1994) for the original observation about the incompatibility of floating quantifiers and individual-level predicates. Nakanishi (2003, pg. 370) assumes (following Kratzer (1995)) that stage-level predicates have a Davidsonian event argument,³⁷

³⁷The original idea is from Davidson (1967). Various implementations have been suggested. Kratzer (1989, 1995) represents an early example. The notion can be adapted to Heim’s (1982) theory of existential closure in the VP, or to Diesing’s (1990; 1992) suggestion that different predicates project different IPs by assuming that the Spec,IP position in a stage-level predication is occupied by a Davidsonian event argument.

whereas individual-level predicates lack them. Nakanishi constructs examples with an eye to drawing parallels with measure quantifiers. Due to this, her data has “noise.” The example in (34) below is assumed to be a token of a stage-level predicate together with a weakly construed floating numeral-classifier pair.

- (34) a. [Gakusei san-nin]-ga kono.kurasu-de byouki de.aru (koto)
 [student 3-CL]-NOM this.class-LOC sick COP (fact)
 ‘Three students in this class are sick.’
- b. Gakusei-ga kono.kurasu-de san-nin byouki de.aru (koto)
 student-NOM this.class-in 3-CL sick COP (fact)
 ‘Three students in this class are sick.’

(adapted from Nakanishi (2002, pg. 370, #10a,b))

However, the adjunct *kono kurasu de* can be construed as restrictive, defining a group relative to which the denotation of *gakusei ga san-nin* is interpreted. That is, the reference is construable as partitive.³⁸ This overt mention of a set restriction, arguably, is also what improves (35-b) below.

- (35) a. [Gakusei san-nin]-ga kono.kurasu-de kasikoi (koto)
 [student 3-CL]-NOM this.class-in smart (fact)
 ‘Three students in this class are smart.’

³⁸This is exacerbated by the predicate used in the complement. Some speakers can’t get an existential reading for a sentence like (34-b) \neq *In this class there are three students who are sick.*

- b. ??Gakusei-ga kono kurasu-de san-nin kasikoi (koto)
 student-NOM this class-in 3-CL smart (fact)
 (no gloss)

(adapted from Nakanishi (2002, pg. 370, #11a,b))

Nakanishi introduces the adjunct *kono kurasu de* in order to draw parallels with measure phrases, but the addition diminishes the contrast we might see.³⁹ Nevertheless, Nakanishi's (2002) work is the first comprehensive investigation of the relationship between the interpretation of floating quantifiers and the type of predicates with which they co-occur that I have been able to find.

The effect of accusative subject position on interpretations of what would otherwise be noun phrases with ambiguous reference is also noted by some researchers. I noted above Takemura's (1975-1976, pg. 186) observation that when indefinite noun phrases are raised to object position, they are interpreted as having specific reference. Takemura presents a contrast pair suggested to him by Masayoshi Shibatani (p.c.):

- (36) a. Tarou-wa dareka-ga hannin da to omotte.iru.
 Taro-TOP someone-NOM culprit COP COMP think
 'Taro thinks that someone is the culprit.'

³⁹Nakanishi (2002) claims that it is the lack of Davidsonian event arguments that prevents individual-level predicates from having domains with part-whole structures of events. Nakanishi (2002) analyses floating quantifiers as secondary predicates that introduce event arguments, claiming that there is a requirement that the event be simultaneous with the matrix event. That is what accounts for the distribution. Nakanishi (2003) claims that her observations are compatible with an analysis of the floating quantifier as either a secondary predicate or as a verb phrase level adverb. I present her work as an example of the connection between the Davidsonian argument, the notion of stage-level predication, and the distribution of weakly construed floating quantifiers. As she is concerned with part-whole relations, I won't pursue her claims here.

- b. Tarou-wa dareka-o hannin da to omotte iru.
 Taro-TOP someone-ACC culprit COP COMP think
 ‘Taro thinks someone to be the culprit.’

(Takemura (1975-1976, pg. 186, #21a,b) (repeated from (7) on pg. 200))

In the (36-b) sentence above, the accusative marked indefinite noun phrase has a specific reading, in contrast to the non-specific reading of its nominative marked counterpart in (36-a).⁴⁰

Kitano (1990) observes that noun phrases that are ambiguous between a non-specific indefinite interpretation and a specific indefinite interpretation are unambiguously specific when they appear as accusative subjects:

- (37) a. Ooku-no nihonjin-wa dareka-ga rosiago-ga dekiru
 Many-COP Japanese-TOP someone-NOM Russian-NOM be.able
 to omou.
 COMP think
 ‘Lots of Japanese think that (there is) someone (who) can speak Russian.’
- b. Ooku-no nihonjin-wa dareka-o rosiago-ga dekiru
 Many-COP Japanese-TOP someone-NOM Russian-NOM be.able
 to omou.
 COMP think
 ‘Lots of Japanese think that someone specific can speak Russian.’

(Kitano (1990, pp. 23–24, #74, 75) (my glosses, Kitano’s judgments))

⁴⁰Takemura also claims that the same semantic effect can be seen in some common nouns (Takemura: 1975-1976, pg. 187, #22a,b) and also indefinite descriptions (Takemura: 1975-1976, pg. 187, #24a,b) when they appear as accusative subjects.

Kitano (1990, pg. 24) concludes from this that raising to object makes the complement referentially transparent (in line with Takemura (1975-1976, 1994); Abe (2002a)). This is not necessarily the case, as I have argued in Section 3.4.

There is a little literature on pre-nominal quantification as well, so I will include it here. I noted above that pre-nominal weak quantifiers allow weakly construed in the right contexts. Following Takano (2002a, pg. 14), Harada (2005) notes (as far as I can tell) that an existential interpretation of the embedded predicate in (38) is impossible:

- (38) Keisatu-wa san.nin-no otoko-o hannin da to dantei.sita.
 Police-TOP three.CL-GEN man-ACC culprit COP COMP conclude-did
 ‘The police concluded that three men committed the crime.’

(Harada (2005, pg. 8, #38b), adapted from Takano (2002a, pg. 14) (see also Takano (2003, pg. 802, #44,45)))

If we change the gloss slightly, we can reflect the ambiguity in (38): *The police determined the three men/three of the men to be the culprits.*⁴¹ Note that only a definite

⁴¹J.H Yoon (to appear) cites J.M. Yoon (1989) who notes that the interpretations of some accusative subject noun phrases differ from their counterparts in nominative subject constructions:

- i. (a) Kyengchal-i myes-myeng-uy namca-lul peminila-ko tancenghayssni?
 Police-NOM how.many-CL-GEN man-ACC culprit-COMP conclude
 ‘How many men of the men do the police consider to be culprits?’
- (b) Kyengchal-i myes-myeng-uy namca-ka peminila-ko tancenghayssni?
 Police-NOM how.many-CL-GEN man-NOM culprit-COMP conclude
 ‘How many men do the police consider to be culprits?’

(adapted from Yoon (to appear, #8a,b))

Specifically, the accusative subject noun phrase *myes myeng uy namca lul* ‘how many men’ in ex. (i.a) receives a specific, partitive reading (i.e., a presuppositional reading), while the nominative subject noun phrase *myes myeng uy namca ka* ‘how many men’ in ex. (i.b) receives a non-specific, cardinal reading (an indefinite, existential reading). The situation is exactly parallel to pre-nominal cardinal quantification in Japanese accusative subjects that Harada (2005, pg. 8, #38b) notes.

interpretation or a partitive interpretation is available. The non-specific indefinite interpretation for *san nin no otoko o* is impossible in (38). Harada interprets this fact in the following way: For an existential interpretation, the noun phrase in question must either be present in the embedded clause or must reconstruct into the embedded clause. As neither of these seem to be the case here, her conclusion is that the accusative-marked noun phrase in (38) above must be base-generated in the matrix-clause position. While the reasoning that leads to this conclusion is based on incomplete data, as was noted in Section 3.6, the observation itself indicates the effects of the **Semantic/pragmatic constraint**.

As can be seen, previous research in support of my thesis regarding the interpretation of weak-form floating quantifiers in construction with subjects of property-attributing predication is thin on the ground, and not well explicated. Nevertheless, the patterns that can be observed are robust enough that the correlation between quantification and predication type should be clear. In Section 4.2 I examine predicates and predication type in more detail.

4.1.6 Summary

In sum, we have seen that accusative-quotative constructions do not allow unambiguously non-specific indefinite reference for accusative subjects (but are led to suspect that this is an effect of a deeper principle). We have seen that those indefinites of weakly quantified form that *can* be interpreted as specific are so interpreted (with respect to the beliefs of the agent of attitude), but also that at the level of the beliefs of the speaker/hearer, an existential interpretation is allowed when the context and the form of the accusative subject permit (and indeed sometimes even required). We have seen a general correlation between the possibility of existential interpretation for

indefinite subjects and the sort of predication they enter into (a dependence on the relationships between members of the tuple $\langle \textit{subject}, \textit{predicate}, \textit{contextual domain} \rangle$). Indefinite subjects of existence-asserting predications are interpreted existentially. Indefinite subjects of property ascriptions are interpreted as referring. In each case, possible multiple contexts of interpretation add possibilities for specific interpretations (depending in part on the form that the noun phrase takes). The distinction between existence assertion and property ascription is ultimately context-dependent. The distribution of floating weak quantifiers was seen to depend on this distinction in predication type.

The idea that the existential force of indefinite reference depends on the contextual domain of interpretation is a powerful one. But the interpretations of specific accusative subjects, the more general possibilities for interpretation of indefinite accusative subjects, and the distribution of weak quantifiers, push us toward such an analysis. The restrictions on the interpretation of indefinite accusative subjects suggest that 1) the form of the accusative subject, 2) the nature of the predication it saturates, and 3) the context in which these are interpreted, are all interrelated in a constraint on what is embeddable in accusative-quotative constructions. I submit that the **Semantic/pragmatic constraint** accounts for the patterns explicated here.

I would also like to note in passing that the analysis of accusative subjects in parallel with that of topic noun phrases (Oka: 1988; Homma: 1998; Raposo and Uriagereka: 1995) suffers when we consider that overtly specific indefinite noun phrases are allowed in the accusative subject position:

- (39) Aru.tokutei.na.otoko*-wa/-ga hito-ri barukonii-de anata-o
 A.certain.man-TOP/-NOM one-CL balcony-LOC you-ACC
 matte.imasu.
 wait
 ‘There is a certain man waiting for you on the balcony.’

It was noted in Section 3.7 that topic-marked expressions are not invariably referring (i.e., they can sometimes host weak floating quantifiers). That they do not include specific indefinite noun phrases is another reason to reject a parallel analysis between accusative subjects and topics.

4.2 Complement predicates

The discussion on the possible forms and interpretations of accusative subjects in Section 4.1 pointed to the need for examining the nature of the type of predication (the relationships between the elements $\langle \textit{subject}, \textit{predicate}, \textit{contextual domain} \rangle$). Throughout that Section I maintained that this was the level at which a generalization should be made, and that a partition on predicates (while easily incorporated into a feature-based grammar or lexicon) would be inadequate to the task of covering all the data about what is and is not allowed in an accusative-quotative complement. The utility of the notion of “eventuality” was suggested but not developed, as was that of the “Davidsonian argument.” In this Section I will look at tense reference and reference to events as characteristics of eventuality-dependent predications. It will be seen that many of the apparent restrictions on predicate types in accusative-quotative complements can be accounted for by reference to the **Semantic/pragmatic constraint** on the use of the constructions in which they figure.

4.2.1 On predicate classes

First I look at a few generalizations proposed by previous researchers as constraints on the class of predicates that can appear in accusative-quotative complements in Japanese. In particular the treatment of tense marking on the complement predicate has been a concern for syntacticians. In the process of examining what factors license the appearance of past tense markings on complement predicates, a common semantic factor becomes apparent. Acceptable examples either involve accusative subjects with denotations that are temporally restricted to a past interval (thus providing an antecedent for anaphoric tense in the predicate) or involve past tense interpreted as resultative (where the interpretation of the past tense is only indirectly related to the interpretation of the predicate). From these observations I draw the following generalization: In no acceptable tokens will the interpretation of past tense in the complement involve the direct assertion of the existence of a past interval.

Restrictions against existential assertion recall the observation by Takemura (1975-1976) that indefinite accusative subject noun phrases get specific readings. The impossibility of a non-specific indefinite accusative subject (at least when evaluated from the perspective of the agent of attitude) suggests that direct existential assertion in general is incompatible with the function of the accusative-quotative construction.

Researchers such as Oka (1988); Sells (1990); Kitano (1990); Morikawa (1993); Ohta (1997) and Kawai (2006) further observe that predication that are “eventive” in some sense are also incompatible with the accusative-quotative complement context, and have proposed semantic conditions requiring predicates to denote “stative” properties in general, or “characteristic properties” of the accusative subject in particular. These approaches suffer from various flaws, from the technical to the philosophical. One of

the most sophisticated of this sort of approach borrows Carlson's (1977a; 1977b) stage-level/individual-level distinction between predicates, although no researcher in the literature has bothered to state the condition with any precision (See Section 4.2.3 below for a detailed examination of Carlson's ideas as they apply to the accusative-quotative construction). It should look something like this:

Constraint on predicates: (in Carlson's system) The only predicates which can appear in the heads of clauses in accusative-quotative complements are either 1) non-derived individual-level predicates, or 2) individual predicates derived through generalization.

The **Constraint on predicates** as it is formulated above comes closer to observational adequacy than any other proposed in the literature by virtue of the fact that it rules out one kind of predicate and one kind only: individual-level predicates derived through existential quantification over stages.

But for all its many improvements over what has come before, the **Constraint on predicates** is not observationally adequate. In fact, there are some fundamental weaknesses in Carlson's system which accusative-quotative construction in Japanese is particularly well-situated to cast into relief. Indefinitely many examples which violate the **Constraint on predicates** can be constructed by choosing accusative subject noun phrases that have spatio-temporally restricted denotations. These "stage-like" entities that are not quite the intensional objects Carlson calls "individuals" don't find a place in the ontology of his system. But as accusative subjects, they can appear together with exactly the sort of predicates that have been claimed to be un-allowable in the accusative-quotative complement clause: predicates categorized as stage-level, and stative individual-level predicates in past tense, for example.

Such observations (along with other objections on different grounds that appear in the literature) suggest that the partition on predicates that Carlson proposes cannot be applied in its present form to the peculiar case of accusative-quotative constructions.

As mentioned above, from an examination of the characteristics of acceptable subject/predicate pairs in accusative-quotative complements, patterns emerge that indicate that in a specific context of evaluation there can be no existential assertion involved in the interpretation of the proposition expressed by the complement clause: The principle arguments of the embedded clause must already be in the contextual domain. This is a pragmatic constraint, most easily expressed in a dynamic semantics that treats sentence meaning as context update potential.

4.2.2 Eventuality dependence

Analyses of the patterned behavior seen in subject/predicate pairings in accusative-quotative complements have been attempted by researchers since the beginning of systematic investigation into the characteristics of this class of constructions. The overwhelming tendency has been to look for a syntactic explanation to generalizations made over a limited data set.

Restricting the set of matrix verbs to the class of verbs that can embed quotative complements in general (and holding the subject/predicate pair constant), it can be observed that not every nominative-quotative construction has an corresponding accusative-quotative construction. Kuno (1972, 1976) proposed that there was a limited class of matrix verbs with which these pairs could be generated, namely “verbs whose complements represent not abstract facts but indirect speech or internal

feelings of the referents of their subjects” (Kuno: 1976, pg. 43),⁴² but this proposal was at best merely descriptive of a limited data set and unfortunately inaccurate in many respects.

In fact, even holding the set of matrix verbs to those for which minimal pairs of corresponding nominative-quotative and accusative-quotative sentences are attested, nevertheless it is observable that for any given matrix verb in this set, not every nominative-quotative construction has an corresponding accusative-quotative construction that is acceptable. Kuno (1976, pg. 33) generalized that the accusative-quotative complement can only be formed on either adjectival predicates or “nominal + copula” predicates.⁴³ There is no such restriction on the set of predicates that can appear in nominative-quotative complements. So Kuno’s proposal accounts for some subset of the nominative-quotative constructions that fail to map onto analogous accusative-quotative constructions. Still, this proposal too is at best merely descriptive of a limited data set and unfortunately inaccurate in many respects.

⁴²This generalization is not the right one. First, it is too restrictive: Some factive verbs support accusative-quotative constructions, and some accusative-quotative verbs can select non-sentient subjects, in which they denote neither indirect speech nor internal feelings.

Second, it is not restrictive enough: Not all verbs that take complements representing indirect speech or internal feelings of the agent subject can support accusative-quotative constructions.

⁴³This generalization is not observationally adequate. First, it is not restrictive enough. Some adjectives denoting temporary states (e.g., *isogasii* ‘busy’; *uresii* ‘happy’, etc.) are a bad fit for many subject pairings and for many pragmatic contexts, and the same holds for some nominal predicates (e.g., *uridasityuu da* ‘be on sale’; *taikityuu da* ‘be on stand-by’; *yasumi da* ‘be on vacation’, etc.). A “nominal + copula” predicate formed on a noun phrase with a head denoting hearsay (e.g., *sou da* ‘be hearsay’; *uwasa da* ‘be a rumor’, etc.) is bad for both accusative- and nominative-quotative complements of Kuno’s (1976, pg. 43) “thinking and feeling verbs.” For many accusative subjects, nominal predicates formed on noun phrases with heads denoting intention (e.g., *tumori* ‘intention’; *kontan* ‘design’; *ki* ‘inclination’; *yotei* ‘plan’, etc.) are a bad fit for many subject pairings and for many pragmatic contexts. These are just a few exceptions to Kuno’s generalization if we were to read it as a statement of sufficient conditions.

Secondly, the generalization is too restrictive. Verbal predicates representing habitual/generic actions (e.g., *gunzyusangyou ni sihon suru* ‘invest in munitions industry’; *kodomo o gyakutai suru* ‘abuse children’, etc.), resultative states (e.g., *kekkon site iru* ‘be married’; *sinde iru* ‘be dead’, etc.) and stative properties (e.g., *tariru* ‘be sufficient’; *sugiru* ‘be in excess’, etc.) can form the basis of accusative-quotative complements for many subject pairings and for many pragmatic contexts. These are just a few exceptions to Kuno’s generalization if we were to read it as a statement of necessary conditions.

4.2.2.1 Past tense

Kuno (1976) also observed that past tense in the embedded predicate can make an accusative-quotative construction marginal:⁴⁴

- (40) ?Yamada-wa zibun-o oroka-na otoko dat-ta to omotta.
Yamada-TOP self-ACC stupid-COP man COP-PAST COMP thought
‘Yamada considered himself to have been a stupid man.’

(adapted from Kuno (1976, pg. 41, #89) (Kuno’s judgment))

Many researchers (e.g., (Oshima: 1979, pg. 437, #94,95); Kitagawa (1986, pg. 264, #39b); Ueda (1988, pg. 44, #22,23); Ohta (1997, pg. 366, #27,28); Kawai (2006, pg. 331, #4a,b), *inter alia*.) picked up on this observation as support for extending a certain family of analyses developed for English (beginning with Chomsky’s (1971a; 1973) “Tensed S Condition”) to data in Japanese. But, as it turns out, the generalization that past tense predicates are regularly ungrammatical in accusative-quotative complements was made over an unrepresentative data set.

The fact is that a number of researchers have attested to acceptable constructions with past tense predicates as heads of accusative-quotative complement clauses (e.g., Uehara (1979, pg. 142, #85); (Saito: 1982, pg. 22, #42); Y. Kitagawa (1986, pg. 270, fn. 6, #vii); (Oka: 1988, pg. 209, #57b); Hoji (1991, pg. 4, #iii), etc.). It is possible to construct several kinds of acceptable examples by taking advantage of the notions

⁴⁴Kuno (1976) would have done better not to use *zibun* ‘self’ as an accusative subject to support this particular point. A sentence like *?Yamada-wa me no mae no hito ga/o oroka na otoko datta to omotte iru ((intended) “Yamada believes the person standing before him to have been a foolish man”)) would have shown a clearer contrast. Why do I say this? For example, Saito (1982, 1985); Tanaka (to appear) judge sentences similar to (40) to be acceptable, and those sentences crucially have *zibun* as an accusative subject. The fact that temporal priority can figure prominently in the acquaintance relation between an agent of attitude and aspects of that agent’s self is an important factor in licensing the past tense predicates in these sentences, suggestively.

of “life-time” of the accusative subject and “run-time” of the predicate applying to it.

- (41) a. Tarou-wa gakubusei.zidai-o yokat-ta to omotte.iru
 Tarou-TOP undergraduate.years-ACC good-PAST COMP think
 rasii.
 seem
 ‘It seems Tarou considers his undergraduate years to have been enjoyable.’
- b. Mokugekisywa-wa ziko-o mukou-ga
 Witness-TOP accident-ACC other.side-NOM
 muri.site butukatta to mite.iru.
 taking.unreasonable.action collided COMP see
 ‘The witness reckons the accident to be such that the other side took unreasonable action and caused the collision.’
- c. Uranaisi-wa kare-o usidosi-ni umare-ta
 Fortune.teller-TOP he-ACC year.of.the.cow-LOC be.born-PAST
 to suisoku-suru.
 COMP conjecture-does
 ‘The fortune teller surmises him to have been born in the year of the cow.’

While there may be variation in judgments of acceptability for sentences like those in (41), some speakers find them all acceptable. Let’s look at each in turn and see what it might be that makes them acceptable where a sentence like ??*Gakusei wa Nicole o kirei datta to omotta* (intended) ‘The students considered Nicole to have been pretty’ (Ohta: 1997, pg. 366, #28) is not.

For the sake of explicitness, I’ve translated the sentences roughly into symbolic logic, introducing the notion of “life-time” into the object language by use of a predicate

life-time on ordered pairs $\langle \text{entity}, \text{interval} \rangle$.⁴⁵ This is necessary to reflect the plastic nature that entities can have with respect to their extensions in time, a point which becomes crucial when the reference of an entity is restricted by a relation it assumes with respect to a specific eventuality: *the Marilyn Monroe of 1962*, for example, or *our house as see through the wrong end of this telescope*.

I coin one more term in the object-language in order to render (41-c): **Result**. Assume (for the sake of argument) that this translation element, **Result**, works like verb phrase level adverb, expressing the resultative meaning of the perfective for an appropriately restricted subset of predicates.⁴⁶ The translations below are extremely rough, but serve immediate my purposes here.

(41-a) involves an accusative subject whose referent (let's represent it as a non-logical constant j) is temporally restricted to a prior interval t and associated with a predicate P denoting an enduring state obtaining of the referent at that interval. Roughly: **life-time**(j, t_i) \wedge $P(j, t'_i)$, where $t' = t$ (informally: j is an entity that has a life-time of interval t and P obtains of j at t' , identical to t). Thus P is a tensed predicate with a variable t' as its tense, and that variable acts as a pronoun, taking as its antecedent the value of t in the life-time (my term) of j (Partee: 1973).⁴⁷

(41-b) involves an accusative subject denoting a prior event j in an equative relationship with an eventive clause. Very roughly: **life-time**(j, t_i) \wedge $j = S_{<t>}$, where

⁴⁵Assuming an order on intervals, it has become customary to use operators denoting “subpart” and “superpart” relations (viz. \leq and \geq , respectively) and another for the “overlap” relation (viz. \circ), as well as the operators for “precede” and “succeed” (viz. \prec and \succ , respectively). (For an example of a much more precise formalization, see Dowty (1979, pp. 139–141).

⁴⁶See the discourse representation theoretical treatment by de Swart (1998, pp. 253–254), who uses PERF (an aspectual operator mapping eventualities onto states) on untensed sentence radicals: A present perfect sentence *Mary has met the president* introduces reference time n , eventuality e , state s , tense reference t , and argument variables x, y : $t = n$, $\text{Mary}(x)$, $\text{President}(y)$, $s \circ t$, $e \supset \subset s$, $e : [x \text{ meet } y]$, where $\supset \subset$ = “abuts” (de Swart: 1998, pg. 254, fig. 4).

⁴⁷Kratzer (1989, pp. 189–190) also discusses cases where the life-time of the subject contributes to the contextually supplied tense interpretation of a predicate.

$S = P(x_1, \dots, x_n, t'_i)$ (informally: j is an event that has a life-time of interval t_i and j is identical to S (a proposition), where S is a predication that obtains at time t'_i , identical to t_i). Assume here too that the predicate head of S has a “temporal pronoun” t'_i as its tense, taking as its antecedent the value of t_i in the life-time of j .⁴⁸

(41-c) involves an accusative subject whose reference j extends into the present (for brevity’s sake, here let it be “time of speech,” or t_S), and the predicate associated with it is interpreted as a resultative, so the time of the event is excluded from the time of the result obtaining after the event: Roughly: (**Result**_{<<e,t>,<e,t>>}(P))(j) where $\mathbf{Result}_{<<e,t>,<e,t>>}(P) = \lambda Q[(\exists P[P(x, t'') \wedge t'' \leq t \wedge \mathbf{life-time}(x, t) \wedge t_S \circ t \wedge t'' \prec t_S]) \rightarrow (Q(x, t') \wedge t_S \circ t' \wedge t' \leq t \wedge \neg(t'' \circ t'))]$ (informally: **Result**(P) obtains of j where **Result** maps properties onto properties so that **Result**(P) is the set of properties Q such that if there is a P that obtains of x in the past and the lifetime of x extends into the present, then Q obtains of x for an interval including the present, but excluding the past interval where P obtains for x).⁴⁹

In the first two examples (41-a,b) the interpretation of the tense of the predicate is identical to an antecedent in the accusative subject.⁵⁰ In the last example (41-c) the

⁴⁸Actually we also need some kind of type-shifting principle (Partee: 1986) that would map a proposition (type $\langle t \rangle$) to its individual correlate, so that this would fit into an equative relationship with the entity j (type $\langle e \rangle$) (either directly, assuming that there is such a thing as an equative copula, or by being further type-shifted into a predicate (Partee: 1986, pg. 358, #7f)), but I won’t attempt to provide a formal mechanism for that. It is a fascinating point that an un-nominalized saturated clause such as that in the complement of (41)-b can serve in this equative relation, but the problems this poses for formalization are orthogonal to the point I want to make here.

⁴⁹There are many more details that would need to be specified for this treatment of resultative readings of past tenses to actually work, not least among them specifying the Aktionsart of P . The analysis is just explicit enough to make two main points: 1) that the eventuality that must exist for the resultative to be true will be introduced in the antecedent clause of a conditional formula that defines the meaning of the resultative, and 2) that the run-time of that eventuality is disjoint from the run-time of the resultative. The latter point was suggested to Kim (2004, pg. 167, fn. 13) by Angelika Kratzer (p.c.). A more principled representation of the resultative perfect in Japanese can be found in Nishiyama and Koenig (2004). See also Nishiyama (2006) for an analysis of the resultative reading of the *-te iru* form.

⁵⁰To show that in some predications, equivalence (or subsumption, or at least overlap) between “life-time” and “run-time” is required and disjunction is not allowed, consider this example: The

direct interpretation of the tense of the predicate is an interval that is 1) introduced as part of a condition in the description of the predicate, and 2) disjoint from the interval that is the interpretation of the resultative predication. All three cases share something in common: None directly assert the existence of an eventuality: In general, any eventualities involved in the interpretation of past tense in (41) either are supplied by the context (i.e., presupposed to already exist), as in (41-a,b), or only have their existence indirectly entailed, as in last (41-c).

With a broad survey of accusative-quotative constructions, it becomes possible to observe aspects of the relationships in the subject/predicate pairing and in the utterance/context pairing that affect the acceptability of subject/predicate pairs in ways that are predictable to a large extent. In general, it seems that some past tense predicates are allowed in accusative-quotative constructions when the predication that result don't receive a semantic translation of the following generalized form: $\exists t[t \prec t_S \wedge P(x, t)]$ (informally: There is an interval t in the past, and predicate P obtains of x at t). If the acceptability of a variety of accusative-quotative complements with past tense predicates seems attributable to the fact the past tense in

following statement was broadcast on the radio one day around 8:30 AM as part of a human interest item in an hourly news summary. The statement was the last sentence in a segment about someone running a lottery as a private business out of their home.

- i. Police said a seventy-seven year old woman ran the lottery for 30 years.

(National Public Radio *Weekend Edition*, April 10, 2004, about 8:30 AM)

The following hour, the item had been changed:

- ii. ... The lottery had been run for thirty years ... Police said a seventy-seven year old woman ran the lottery.

(National Public Radio *Weekend Edition*, April 10, 2004, about 9:30 AM)

The fact that the news copy was changed suggests that, even in a discourse context where only one person was arrested for running an unlicensed gambling operation, the statement in its original form invites the reading "Every year for thirty years there was a seventy-seven year old woman who ran the lottery for that year." This is due to a gross mismatch between "life-time" and "run-time." It may sound paradoxical, but in the sense that I am concerned with, the "life-time" of "a seventy-seven year old woman" can be no longer than one year long.

question is interpretable without needing to make an existential assertion about some eventuality, a hypothesis is suggested:

Negative prediction for past tense Accusative-quotative complements with past tense predicates are unacceptable when the interpretation of the resulting predication requires making a direct existential assertion about some eventuality.

Furthermore, we see that some predications (such as those in (41-a,b)) are eventuality-dependent. But these can be licensed in the accusative-quotative complement as long as the necessary eventuality is supplied by the context. Including the eventuality in the description of the accusative subject is one way to carry this out.

4.2.2.2 Eventive, episodic, existential

Existence assertions are most easily recognized when they comprise assertions of the existence of entities: *There is a cat on the mat.* These “presentations” or “introductions” of a novel entity into the context usually involve a non-specific indefinite description of that entity (e.g., *a cat, someone’s umbrella, big round dents*, etc.). But note well that there is an inter-dependence between the interpretation of indefinite noun phrase subjects and the sort of predicates with which they appear. And the dependence of the notion of novelty on the context of interpretation is of course crucial as well.⁵¹

⁵¹Felser (1999, pg. 109) gives arguments (following Suzuki (1991)) for why weakly quantified subjects of small clause complements of English cognitive verbs don’t allow narrow scope existential interpretations (in contrast to English *to*-infinitive complements, which do allow them), attributing this lack of scope ambiguities to the lack of a tense phrase in small clauses. Clearly this analysis can’t be extended to Japanese, given the overt tense morphology and fewer constraints on predicate types in accusative-quotative complements, which nevertheless don’t admit existential quantification.

I suggested in the previous Section that many past tense predications involve the assertion of the existence of an eventuality. Because eventualities are often not overtly expressed in syntax, assertions of their existence are harder to recognize than that of, say, one of Tarski's *cats* on a previously unoccupied *mat*. The notion that reference to a past event requires reference to an eventuality should not be too controversial. But there are indefinitely many predications (with various temporal references) that are eventuality-dependent. For any of these, when the eventuality is not already supplied in the context (for example, in the description of the subject, or through generic quantification over an eventuality variable), the existence of an eventuality must be asserted for the predication to be interpretable. We have already examined some predications that are eventuality-dependent. The interpretation of predications made with *hatubaityuu da* 'be on sale' (e.g., (2) on pg. 7 in Section 1.1) is eventuality dependent in many contexts. The interpretation of predications made with *kaeru* 'return' (e.g., ex. (15) on pg. 211 in Section 4.1.2.2) is eventuality dependent in many contexts. Here are more examples:

- (42) a. *Tarou-wa syouyu-o zyuubun aru to omotte.ita.
 Tarou-TOP soy.sauce-ACC in.plenty exist COMP think
 (intended) 'Tarou believed there to be plenty of soy sauce.'
- b. *Sono.touki.ni Tarou-wa hibi-o itte.iru to omotte.iru.
 In.the.ceramic Tarou-TOP crack-ACC enter COMP think
 (intended) 'Tarou believed there to be a crack (in the ceramic).'

The treatment of all eventuality-dependent predications might be unified if we suppose them to select something along the lines of a Davidsonian argument, allowing existential quantification over a variable that takes eventualities as values.

While Japanese does not have an analog to the English existential construction, it can yield existential readings for *-ga* marked⁵² indefinite subject noun phrases, depending on the corresponding predicate and the context of interpretation. This holds for predicates other than *aru* ‘exist’, *iru* ‘exist’; *sonzai suru* ‘exist’, which are overtly existential: *Kutuzure ga dekite iru* ‘Blisters from her shoe have appeared’; *Saisin-gata no keitai ga tadaima uridasityuu da* ‘Latest-model cell-phones are on sale now’; *Hae ga uttousii* ‘Flies are bothersome’, etc. But none of these sentences (insofar as they receive existential interpretations) have corresponding accusative-quotative complement clauses.⁵³

Some researchers (e.g., Oka (1988, pg. 222, fn. 7); Sells (1990, pg. 453); Kitano (1990, pg. 3); Morikawa (1993, pp. 111–114); Ohta (1997, pg. 357); Kawai (2006, pg.330), *inter alia*), noting that “eventive” predications (e.g., *Tarou wa Zizou ni binta o kurawasita* ‘Tarou gave Zizou a slap to the head’) are (often) incompatible with accusative-quotative complement contexts, proposed that the correct description of the semantic constraint on predicates appearing in accusative-quotative complements is that they

⁵²Existential readings are not available for most topicalized subject noun phrases, exhaustive-listing noun phrases, and noun phrases appearing with *dake* ‘only’, *nomi* ‘only’, *koso* ‘selfsame’, among others. Existential readings are available for indefinite noun phrase subjects appearing with *-mo* and with negative polarity *-sika*, and even for contrastively focused *-wa* marked bare common noun phrases, depending (always) on the corresponding predicate and the context.

⁵³Actually, it may be possible to coerce the first two sentences, given rich enough contexts. And as for the third, *Zizou wa hae o uttousii to omotta* ‘Zizou considered flies to be bothersome’ is perfectly fine as long as the reference is to a specific group of *flies* or to *flies* as generic class. But the claim that existential interpretations are impossible stands.

be *stative*. But one quintessentially stative predicate type is (almost)⁵⁴ impossible to shoehorn into head position in an accusative-quotative complement clause: [locative post-position phrase + existential predicate]. Substituting the accusative subject with a definite noun phrase does nothing to improve the sentence, for that matter:⁵⁵

- (43) a. Hanako-wa neko-ga/*-o asihuki-no ue-ni iru to
 Hanako-TOP cat-NOM/-ACC mat-GEN over-LOC exist COMP
 omotte.iru.
 think
 ‘Hanako thinks that the cat is on the mat.’
- b. Hanako-wa rei-no neko-ga/*-o asihuki-no ue-ni
 Hanako-TOP example-GEN cat-NOM/-ACC mat-GEN over-LOC
 iru to omotte.iru.
 exist COMP think
 ‘Hanako thinks that the aforementioned cat is on the mat.’

In either case, the accusative-quotative alternative is unacceptable. If even definite noun phrases are disallowed in contexts such as these, is there, then, a partition on the class of predicates, dividing them into existential predicates and non-existential predicates? The question must be addressed, but from the discussion above it should be obvious that it is a straw man: The answer is obviously no, as can be seen just from

⁵⁴Some speakers find sentences like the following acceptable:

- i. Keizi-wa mokugekisya.no.tatiba.kara.mita higaisya-o
 Detective-TOP seen.from.the.perspective.of.the.witness victim-ACC
 douro.no.man.naka-ni tatte-iru/-ita to suisoku-sita.
 middle-of.the.street-LOC stand-is/-was COMP conjecture-did
 ‘The detective deduced the victim as seen from the point of view of the witness to have been standing in the middle of the street.’

The manipulation of perspective in the description of the accusative subject allows “coercion” of a variety of otherwise unacceptable sentences. But there are other ways to “coerce” a [locative post-position phrase + existential predicate] into an accusative-quotative complement, as will be seen below in (45) on pg. 254.

⁵⁵This is (for all practical purposes) the same exercise we did in (15) on pg. 211 in Section 4.1.2.2.

the data in example (41) and in the remarks about habitual/generic interpretations of action predicates in fn. 43 on pg. 240 above.

4.2.3 Carlson’s system

Many researchers (e.g., Oka (1988), Ogawa (1996), Sakai (1996), Kawai (2006), etc.) have referred to Carlson’s (1977a; 1977b) distinction between stage-level and individual-level predicates in order to describe the constraints on predicates appearing in accusative-quotative complements.⁵⁶ Carlson (1977b, pg. 443) noted that generic bare plurals “take on the appearance of ambiguity when we assign different properties to the individual in question,” and starting from this observation, he proposed a *sortal* ontology for the semantic model of interpretation in which bare plurals are not ambiguous, but are names for *kinds*. Proper nouns (among other expressions) denote *objects*. These two sorts belong to the class of *individuals*, they are “intensional” (i.e., they can have different manifestations at different points of evaluation), and they are expressed formally as non-logical constants. Depending on the properties attributed to these basic individuals, the reference may not be to either a kind or an object, but rather to a third sort called a *stage*: a “temporally bounded portion” of an individual’s existence that “realizes” that individual *qua* participant in an event or in a temporary state. Call the realization relation between stages and objects R , and the one between objects and kinds R' . There are no stage-denoting noun phrases (Condoravdi: 1997, pg. 49, fn. 17). The set of stages that realizes an individual (represented, say, by the non-logical constant j) is expressed by the formula $\lambda x R(x, j)$.⁵⁷

⁵⁶For brief introductions to Carlson’s theory, see Dowty (1979, pp. 83–87) or Krifka et al. (1995, pp. 20–22). A concise and comprehensive description can be found in Condoravdi (1997, pp. 6–33).

⁵⁷If ϕ is an open formula containing a free variable x , then $\lambda x(\phi)$ denotes a set specified by ϕ with respect to the variable x . The λ operator binds a variable and “abstracts” sets with members comprised of all entities of the same logical type of that variable that satisfy the formula in which

Because there are no noun phrases denoting stages, a stage-level predicate “be sick” (of type $\langle e^s, t \rangle$) must take the following form in order to compose with an individual-denoting noun phrase: $\lambda x^i \exists y^s [R(y^s, x^i) \wedge \mathbf{sick}'(y^s)]$ (informally: the set of individuals x^i for which there is a stage y^s that 1) realizes x^i and 2) is sick). In Condoravdi’s explication of Carlson’s system, this is an individual-level predicate with existential quantification over stages.⁵⁸ It takes a stative reading (rather than assuming a characteristic property reading).

Suppose that j corresponds to the individual named “Jake.” If we apply our translation of the predicate to the constant j to get $\lambda x^i \exists y^s [R(y^s, x^i) \wedge \mathbf{sick}'(y^s)](j)$ we have a translation of “Jake is sick.” This is logically equivalent to $\exists y^s [R(y^s, j) \wedge \mathbf{sick}'(y^s)]$. With this sort of predicate, an English bare plural subject would get an existential reading. (Carlson (1977b, pg. 449), Condoravdi (1997, pg. 13)).

On the other hand, a non-derived individual-level predicate can apply directly to individuals without the mediation of the relation R or R' . For example, “be intelligent” is an object-level predicate (of type $\langle e^i, t \rangle$) that translates as **be-intelligent'** and “Jake is intelligent” is logically equivalent to **be-intelligent'**(j) (Carlson: 1977b, pg. 449).⁵⁹ Non-derived object-level predicates can apply directly to objects, but never to stages. These predicates either receive a stative reading or a “characteristic property” reading. With this sort of predicate, an English bare plural subject would get a universal reading.

There is another way to derive predicates in Carlson’s system, involving generalization operators. One such operator (“**G**” in Carlson (1977a), “ Gn ” in later versions)

the variable is bound by the λ operator. See Dowty et al. (1981, pg. 98) for a principled explanation.

⁵⁸Many researchers mis-categorize this derived form itself as being a stage-level predicate. This loose use of terminology is a source of many misunderstandings.

⁵⁹I’m skipping some steps in derivation for the sake of brevity.

maps stage-level predicates to individual-level predicates. Another (“**G’**” or “*Gn’*”) maps object-level predicates onto kind-level predicates. When we consider the generalization operator *Gn*, we need to make a distinction between *stative* stage-level predicates and *episodic* stage-level predicates, because in Carlson’s system *Gn* can only apply to the latter.⁶⁰ The operator *Gn* takes the intension (the set of extensions at all points of evaluation) of an episodic stage-level predicate such as “smoke” (of type $\langle e^s, t \rangle$, with the translation **smoke’**), to make an individual-level predicate *Gn*(**smoke’**), which can apply directly to an individual, yielding a “characteristic property” reading (or habitual/generic reading). But *Gn* is barred from taking a stative stage-level predicate like “be available” (or, for that matter, “be sick”).

Framed in Carlson’s (1977a; 1977b) system, a perspicacious formulation of the constraint on predicates in accusative-quotative complements would be as follows.⁶¹

Constraint on predicates: (In Carlson’s system) the only predicates which can appear in the heads of clauses in accusative-quotative complements are either

⁶⁰Carlson (1989) rejects the *Gn* operator in favor of an analysis of dyadic relations to get two different interpretations for sentences like (44):

- i. Typhoons arise in this part of the Pacific.
 - (a) For typhoons it holds: They arise in this part of the Pacific.
 - (b) For this part of the Pacific it holds: Typhoons arise here.

See the discussion in Krifka et al. (1995, pp. 23–25).

⁶¹No one in the literature has bothered to offer a precise formulation of this constraint. Strictly speaking, in Carlson’s system, simply requiring that predicates be individual-level amounts to no restriction at all, as the only way for a predicate to combine with a subject is in the form of an individual-level predicate. And excluding all stage-level predicates from figuring in predicates in accusative-quotative complements would mistakenly exclude habitual/generic readings of predicates derived from episodic stage-level predicates through generalization. Excluding all stative stage-level predicates from figuring in predicates in accusative-quotative complements would not go far enough: Predicates derived from episodic stage-level predicates through *R* and existential quantification over stages must also be excluded.

Diesing (1990, pp. 23,24) actually finds two different generic readings for *Firemen are available*, something which Carlson (1977a) would predict to be impossible for a stative stage-level predicate. Diesing rejects Carlson’s system but retains the notion of the partition on predicates, focusing on the inability of individual-level predicates to receive existential readings as the distinguishing factor.

1) non-derived individual-level predicates, or 2) individual predicates derived through generalization.

(repeated from pg. 238 in Section 4.2.1)

The **Constraint on predicates** as it is formulated above comes closer to observational adequacy than any other proposed in the literature. The condition is formulated to rule out one kind of predicate, and one kind only: individual-level predicates derived through existential quantification over stages.

In this way an important intuition operating in Carlson’s theory becomes applicable to accusative-quotative constructions. Even though *j* may already be in the context, saying “Jake is sick” (in its stage-level sense, which, being a stative stage-level predicate, is the only one possible in Carlson’s system) commits the speaker to an assertion of existence of *something*: In Carlson’s system, this is the existence of a stage that realizes *j* and is sick.⁶²

Where a habitual/generic interpretation is possible (i.e., with generalization over episodic stage-level predicates), there is no existential quantification over stages, and it happens that such predications can appear in accusative-quotative constructions.⁶³

- (44) Tarou-no rentogen-dake-kara sensei-wa kare-o tabako-o suu
 Tarou-GEN x.ray-only-from doctor-TOP he-ACC tobacco-ACC smoke
 to handan-dekita.
 COMP judge-was.able
 ‘Just from Tarou’s x-ray, the doctor was able to judge him to smoke tobacco.’

⁶²Or, in terms of the informal reasoning I’m adopting here, it commits the speaker to an assertion of the existence of an eventuality in which *j* is sick.

⁶³Kitano (1990) was one of the first to point this out.

But we encounter one problem with the notion that there is a partition on predicates. For example, with the right combination of subject, predicate, and context, it is possible to interpret a stative stage-level [locative post-positional phrase + existential predicate] as not asserting existence. Predications such as these are ruled out by the **Constraint on predicates**, but are predicted to be allowed in accusative-quotative complements under a constraint against existential assertion.

- (45) Tarou-wa bunsu-o bunbo-no sita-ni aru to
 Tarou-TOP numerator-ACC denominator-GEN under-LOC exist COMP
 kantigai.sita.
 mistook
 ‘Tarou mistook the numerator to be under the denominator.’

Note that the complement predication in (45) receives a “characteristic property” reading. For all the rarity of examples like (45) (particularly with kind-denoting subjects), it would be *ad hoc* to claim that there are two predicates *bunbo no sita* ‘under the denominator’, one a stative stage-level predicate, and one a non-derived individual-level predicate.⁶⁴

So while some researchers (e.g., Oka (1988, pp. 223-224, fn. 12), Ogawa (1996), Sakai (1996, pg. 203), Kawai (2006, pg.330), etc.) have suggested that Carlson’s distinction stage-level/individual-level is at the bottom of the restrictions on predicates in accusative-quotative constructions, we can already see between these supposedly complementary sets of predicates some “migration” that isn’t predicted. In the rest of this

⁶⁴What licenses sentences like (45) is generic quantification over eventualities. This is one alternative for licensing eventuality-dependent predications. For interpreting assertions concerning physical location, which are preeminently eventuality-dependent predications, generic quantification is much more rare than existential quantification over eventualities. As a third alternative, anaphoric reference to a discourse antecedent eventuality is possible. We saw one involving a restrictive modifier denoting a perspective in ex. (i.) in fn. 54 on 249.

Section I will demonstrate two more ways that the adoption of Carlson’s distinction is not observationally adequate.

4.2.3.1 Temporally bound individuals

Carlson (1979, pg. 65) proposes that simply attributing a predicate directly to an individual (rather than to a stage thereof) gives a predication its generic sense, as a consequence of the intensional nature of individuals in general (Condoravdi: 1997, pg. 9). The predicate “be sick,” being both stative and stage-level, is supposed to only be applicable to individuals through the relation *R* and existential quantification over stages. But consider how the meaning of “be sick” might be affected by its context of use, in particular with regard to accusative-quotative constructions in Japanese. Considering the **Negative prediction for past tense** together with the **Empirical observation** suggests that propositions directly introducing novel entities into the context of interpretation are in general excluded from the set of propositions expressible in accusative-quotative complement clauses. If the predicate *byouki da* ‘be sick’ in its use denoting a temporary state must include in its translation an existential assertion for the subject (a stage), then we would predict that it cannot appear as the head predicate in an accusative-quotative complement clause. However, *byouki da* does appear in that context, although when it does it often takes on a slightly different meaning of “be constitutionally abnormal” or “be perverted”:

- (46) Hanako-wa Kenta(to.iu.hito)-o byouki da to
 Hanako-TOP (person.known.as)Kenta-ACC sick COP COMP
 omotte.iru.
 think

‘Hanako considers Kenta (as a person) to be a sick individual.’

One might choose to assume that there are two different lexical entries for “be sick,” one a stative stage-level predicate (type $\langle e^s, t \rangle$), and the other an individual-level predicate applying to an object or a kind (type $\langle e^i, t \rangle$). Given that there is a discernible difference in meaning, this move seems more plausible than in the case of *bunbo no sita* in (45). That in the context of the accusative-quotative construction, the predicate *byouki da* denoting a temporary state cannot be paired with a subject denoting an individual that endures through time is still captured perfectly well by a general restriction against existential assertion. But if we adjust the lexicon in the way I suggested, Carlson’s partitioning of the set of predicates survives the counter-example in (46).

However, there is a more fundamental problem. By a different manipulation of context (most crucially, the “sort” of accusative subject associated with the predicate) we can retain the meaning of *byouki da* in its use denoting a temporary state, but only if it applies to an overtly temporary “individual.” Read (47) below in the context provided:

- (47) *Context: Mariko tells Hanako that Kenta has a fever, is vomiting, and complains of stiffness in his joints.*

Hanako-wa sou.itta Kenta-o byouki da to omotte.iru.
 Hanako-TOP so.described Kenta-ACC sick COP COMP think
 (lit.) ‘Hanako believes the Kenta so-described to be sick.’

In (47), the referent of the accusative subject *sou itta Kenta* ‘the Kenta so-described’ has the status of a temporally-bound “individual,” presupposed to exist in the context. Let’s assign it a non-logical constant k^{temp} .

The first problem is that as a temporally bound entity, *sou itta Kenta* is not fully intensional. At many points of evaluation, the intensional individual denoted by *Kenta* (call him k) has a different manifestation (or extension), but the “quasi-individual” denoted by *sou itta Kenta* (that is, k^{temp}) is so contextually restricted that it arguably has a manifestation at only one point.⁶⁵ And while at some level of understanding we might want to think of the relation between k^{temp} and k as part/whole, in our organization of the elements in the model this relationship cannot be expressed by R because k^{temp} is not a stage: Given slight adjustments in context, *sou itta Kenta* is capable of combining with individual-level predicates like *baka da* ‘be a fool’ and *otoosan ni sokkuri da* ‘be just like his father’. Nevertheless, because its very nature is “temporary,” k^{temp} accepts the temporary sense of the predicate applying to it. Either the **Constraint on predicates** doesn’t apply in this case, or we must call into question Carlson’s assumption that there are no stage-denoting noun phrases.

But we have already seen that temporally bound “individuals” are not the only pieces of data that don’t fit in Carlson’s ontology. As we saw in (45) above, a predicate with a form as stative and temporary as *X no sita ni aru* ‘be under X ’ can receive a “characteristic property” reading under the right conditions. Predicates categorized as being stative and stage-level appear in syntactic settings where they are not predicted, and/or with unpredicted readings, as long as they are paired with the right kind of subject, and used in the right kind of pragmatic context. The inter-relation of noun phrase reference and predicate meaning that Carlson originally pointed out is still valid, but the ontology he proposes cannot capture all the facts.

Consider how temporally bound individuals “carry” an eventuality in their description (be it overtly as in *kinou no zousui* ‘yesterday’s chop suey’ in (5-b) on pg. 10 in Section

⁶⁵Consider that a repeat mention of *sou itta Kenta* at some subsequent point in discourse is just as likely to denote a new “quasi-individual,” $k^{temp'}$, as denote a stage of k^{temp} .

1.1, or by implication — through being restricted to a momentary perspective, for example). When subjects such as these are involved, it becomes possible to interpret eventuality-dependent predications without asserting the existence of an eventuality. Such examples of “coercion” borrow discourse resources in order to conform with the principle underlying the **Empirical observation**.

4.2.3.2 Eventual characteristics

While, to the best of my knowledge, the particular weakness in Carlson’s semantic system noted above hasn’t been touched upon in the literature,⁶⁶ a similar observation about migration between what are assumed to be complementary sets of predicates (but migration in the opposite direction) has been made fairly frequently (e.g., Kratzer (1989); Ikawa (1998); Fernald (2000); Kuroda (2003); Kim (2004); Chabot (2007), *inter alia*).⁶⁷ For example, using short-interval temporal modifiers as adjuncts in predications with “individual-level” predicates shows how these latter can be interpreted as “stage-level”:

(48) John is a goalie this morning (although he usually plays forward).

(Fernald (2000, pg. 23, #47c) citing Donka Farkas (p.c.))⁶⁸

⁶⁶Diesing (1992) discusses how adding descriptive material to indefinite noun phrases can “force restrictive clause formation” (e.g., **There are children with red rashes sick* Diesing (1992, pp. 49, #70a)), but doesn’t extend the point this far.

⁶⁷With particular reference to Japanese, Ikawa (1998) shows how individual-level predicates can show up in perception verb complements. Kim (2004) shows how individual-level predicates can show up in internally-headed relative clauses. Kuroda (2003) shows how individual-level predicates can receive existential interpretations.

⁶⁸Lees (1960, pg. 12) notes the restriction to “non-inherent” adjectives in combination with a locative adverbial:

- i. (a) John is popular in America.
- (b) *John is wise in America.

Chabot (2007, pg. 63, fn. 15) cites Anston Møch Klev’s (p.c.) observation that a predicate such as *born in the Netherlands* is construable as iterative in a world where reincarnation is commonplace. I would add that it is also iterative given the right subject noun phrase:

- (49) When the applicant is born in the Netherlands, use the short application form.

In a similar vein, de Hoop and de Swart (1989) point out migration between predicate types by the supposedly “individual-level” predicate *be blonde*, constructing an example where this predicate is licensed in *when*-conditionals by virtue of being construed in a context in which change of state is understood as possible:⁶⁹

- (50) It seems like Madonna dyes her hair every other week. *When she is blonde, she vaguely resembles Marilyn Monroe.*

Chabot (2007, pg. 48, #42), citing de Hoop and de Swart (1989)

-
- ii. (a) John is happy in his new home.
(b) *John is tall in his new home.

Lees (1960, pg. 26, fn. 10) tentatively proposes that there might a class of adjectives including *happy* that can occur before locatives, and another that cannot, a dichotomy between “inherent” and “accidental” properties. This anticipates both Milsark and Carlson to a certain extent. Kratzer (1989, 1995) makes a similar point about the co-occurrence of locative pre-positional phrases and individual-level predicates. The pre-positional phrase must modify the noun phrase and not the verb phrase. Of course, a simple dichotomy such as Lees proposes is not workable. Waves are *tall* accidentally but giraffes are *tall* inherently. And the definition of *utibenkei* is to be *a lion at home and a mouse abroad*.

⁶⁹Basically the same point was made by Kratzer (1989, pg. 148) in essentially the same way: “If a distinction between stage-level and individual-level predicates is operative in natural language, it cannot be a distinction that is made in the lexicon of a language once and for all. If I dyed my hair every other day, my property of having brown hair would be stage-level.”

The interpretation of a predication, it appears, is a function of the nature of the subject, the predicate, and the context, all in complex interaction.⁷⁰

4.2.4 Theoretical primitives

Carlson's insights into the effects of predicates on nominal reference are extremely important, and his formalizations also make it possible to examine interpretations at a fine degree of delicacy. But the notion of what constitutes an individual in discourse seems to be too plastic to be adequately expressed in such a simple ontology. Without some modifications (probably involving of a formal theory of how to appropriately restrict the contextual domain) this plasticity will force us to abandon his partition on predicates.

Carlson's theory does articulate a cleavage between existential quantification versus "characteristic property" attribution, a distinction that is quite robust as regards the interpretation of predications in accusative-quotative complements: In each of (44), (45), (46), and (47) above, the proposition expressed by the accusative-quotative complement doesn't directly assert existence of either the accusative subject or of an eventuality in which the accusative subject participates. This can be understood as a different manifestation of the same principle we saw in operation in the licensing of past tense in accusative-quotative complement predicates in (41). They can be unified under the general notion of "eventuality." When eventualities are involved in the interpretation of accusative-quotative complements, their existence is never asserted but always presupposed.

⁷⁰ "Since the permanence of the property can vary with the particular context involved, the classification of a particular predicate may also vary. For instance, being red can be in individual-level property of strawberries, but when applied to person it can be a stage-level property referring to a transitory state of blushing (this sort of variability in classification is similar to that seen in classifying a noun such as *wine* as a mass or count noun)" (Diesing: 1992, pg. 41).

This point alone, properly understood, can account for a wide range of seemingly heterogeneous facts concerning tense interpretation, predicate type, and subject noun phrase reference in the accusative-quotative construction in Japanese, facts which syntactic approaches have failed to account for individually in any satisfying way, and which syntacticians have never even attempted to unify before.

Can this restriction against existential assertion can be derived from some semantic or syntactic principle? Perhaps if the distinction it hinges on can be reduced to a statement about the presence or absence of an operator, ranging over a sort-specific variable, such as a variable for a Davidsonian argument, a sortal-semantic account can be offered. Perhaps a semantic feature distinguishing between two types of projection for a functional category **Pred** can be posited, and that would give the basis for a syntactic account. But given that felicitous existential assertion is context-dependent, and that its complementary assertion-type (which I’ve been calling call “property ascription”) also places conditions on its context of use, the proper level of abstraction is, I believe, in pragmatics. The rest of the argument is straightforward, except for the status of the class of entities called “eventualities.”

Empirical observation: Propositions expressed by the accusative complement cannot directly assert the existence of an entity or an eventuality *as evaluated with respect to the contextual domain defined by the belief world of the agent of attitude*. (repeated from pg. 187)

Property ascription: (informal) Property ascriptions are statements of set membership or equality over entities in the contextual domain. (See pg. 6 in Section 1.1 for an equivalent definition.)

Existential assertion: Existential assertions are statements entailing change in the constitution of the contextual domain.

Eventualities: Eventualities are spatio-temporally bound entities in which existence registers. Some noun phrases denote eventualities, and some involve eventualities in their description. Some predications (e.g., predications involving specific tense reference or predications involving episodic predicates, *inter alia*) require eventualities. The existence of an eventuality can be presupposed or asserted, like that of any entity. Presupposed eventualities can serve as antecedents to empty pronouns denoting eventualities. Assertion of the existence of eventualities involves existential quantification over a variable of the same sort as the empty pronoun.

The statements above comprise part of an observationally adequate description of one of the necessary conditions on the accusative-quotative construction in Japanese. A sufficient condition of “aboutness” has yet to be formulated in a workable way.

4.2.5 Semantic partition

Regarding the internal structure of the accusative-quotative complement, there might be ways to apply the proposals of Diesing (1988, 1992) to cover the facts. The lack of existential quantification over certain elements denoted in accusative-quotative complement clauses might be related to what Diesing (1988, 1992) calls “semantic partition.” Basically the idea is that in an existential assertion there is only a “bi-partite” structure with an existential operator (not necessarily represented in the sentence) and the rest is nuclear focus, with indefinite noun phrases introducing variables that are bound by the existential operator.

- (51) a. A man owns a llama.
 b. $(\exists_{x,y})[x \text{ is a man} \wedge y \text{ is a llama} \wedge x \text{ owns } y]$

Diesing (1992, pg. 6, #8)

While new variables introduced for the first time in the nuclear scope may receive an existential reading, in sentences involving quantified subjects or sentential operators, etc., there is a “tri-partite” structure (Heim: 1982) with an operator, a restrictive clause, and a nuclear scope. Any variable introduced in the restrictive clause is bound by the operator, and thus there can be no existential quantification over these.

For example, the quantified noun phrase *every llama* in (52) will automatically induce partitioning, placing the noun phrase so quantified in the restrictive clause. The indefinite noun phrase *a banana* in the verb phrase (an indefinite “internal” argument”) introduces a variable for the first time in the nuclear scope, and existential closure over the verb phrase binds it:

- (52) a. Every llama ate a banana.
- b.
- | | | |
|------------------|--------------------------|--|
| Every_x | $[x \text{ is a llama}]$ | $(\exists y)y \text{ is a banana} \wedge x \text{ ate } y$ |
| \uparrow | \uparrow | \uparrow |
| quantifier | restrictive clause | nuclear scope |

Diesing (1992, pg. 7, #10a,b)

In Japanese there are sentences which, depending on context, can be read as either generic statements or statements about the occurrence of a specific eventuality:

- (53) Syokuzigo daizitugyouka-wa hamaki-o kononde nonda.
 After.dinner tycoons-TOP cigar-ACC preferring smoked
 ‘Tycoons smoked cigars by preference after dinner.’
- a. Hamaki-no kazu-ga tarita.
 Cigar-GEN number-NOM sufficed
 ‘The cigars were sufficient in number.’
- b. Tikagoro sono.syuukan-wa sutarete.iru.
 Lately this.custom-TOP be.obsolete
 ‘Lately this custom has fallen into disuse.’

In Diesing’s analysis, the interpretation forced by the continuation in (53-a) could be represented as a bi-partite structure with an existential operator binding the variables of discourse-novel arguments. Conceivably, both the subject and the direct object can be so bound, unless they have a definite reference in the discourse. The interpretation forced by the continuation in (53-b) would be represented as a tri-partite structure with a generic operator *Gn* in the quantification, *daizitugyouka* ‘tycoon’ in the restrictive clause, and the elements internal to the verb phrase in the nuclear scope.

Suppose that the accusative-quotative construction imposes semantic partition on its complement clause. Where does the partition get drawn? It is possible to introduce variables into accusative-quotative complements with universally quantified accusative subjects and still have those variables be bound by existential closure:

- (54) Mariko-wa omi'ai-no aite-o dare.mo [ketten-no
 Mariko-TOP matchmaking-GEN counterpart-ACC everyone flaw-GEN
 hito.tu ya huta.tu]-wa aru to omotta.
 one or two-TOP exist COMP thought.
 ‘Mariko believed each of the suitors to have (at least) one or two flaws.’

So clearly it is not a requirement of accusative-quotative constructions that all variables appearing in the complement be introduced in the nuclear scope.

Given what we have observed in Japanese so far, we might suppose that the accusative subject and an eventuality argument must be in the restrictive clause. This would account for the fact that there is never existential assertion with regard to these in an accusative complement. This would also rule out episodic predicates that don't have generic interpretations. Because clearly it is not the case that the accusative-quotative context admits any and all sentences that are expressible in the tri-partite structure:

- (55) ??Hanako-wa rama-o subete banana-o tabeta to omotte.iru.
 Hanako-TOP llama-ACC all banana-ACC ate COMP think
 (intended) 'Hanako believed all the llamas to have eaten bananas.'

In a set of possible worlds where the property resulting from having eaten a banana is sufficiently relevant to the constitution of a group of *llamas*, (55) might be acceptable as a description of a propositional attitude held by *Hanako*, particularly if she were concerned about why they might be constipated. Alternatively, in a set of possible worlds where *llamas* all have characteristics that can only have evolved through the habitual ingestion of *bananas*, (55) might be acceptable as a description of a propositional attitude held by *Hanako* if she were inferring their habits by examining their fossilized remains. But without a premise that will either encourage a resultative reading or a generic reading, most speakers will reject a sentence like (55) out of hand.

In the resultative reading, there is no strong argument for including an eventuality argument directly in the representation: Resultative predicates are stative. In the

generic reading, however, there may be an argument for quantifying over a properly restricted set of eventualities as well as over the *llamas* that participate in them.

Diesing's **Mapping hypothesis** predicts that depending on the position of a bare common noun subject as verb phrase-internal or verb phrase-external, its interpretation will either be able to receive an existential interpretation or will be precluded from having such an interpretation.

Mapping hypothesis Material from VP is mapped into the nuclear scope.

Material from IP is mapped into the restrictive clause.

Diesing (1992, pg. 10, #14)

Diesing (1992, pg. 26) proposes that individual-level predicates co-occur with an IP that assigns a *theta*-role to the [Spec, IP] node, a role with “roughly the meaning ‘has the property *x*’, where *x* is the property expressed by the predicate.” From this position the lexical subject noun phrase controls an empty category PRO in the verb phrase internal subject position [Spec, VP], which receives a *theta*-role from the verb. But the lexical subject noun phrase of individual-level predicates is base-generated in the external subject position.⁷¹

But we have seen that a partition on predicates will not do the job with respect to the accusative-quotative structure. The context of interpretation is crucial.⁷²

⁷¹Diesing (1992, pg. 140, fn. 17) notes that positing the verb phrase as the domain of existential closure would require a clausal analysis for small clause complements of verbs like *consider*, which only have generic readings (e.g., *I consider firemen to be available* (1992, pg. 140, fn. 17, #i-a)) but not for *with*-clauses which only allow existential readings (e.g., **With firemen intelligent, we have nothing to fear* (1992, pg. 140, fn. 17, #iv-b)). Incidentally, the small clause complements of perception verbs also do not admit generic readings, but force a reading of “active *be*” (Partee: 1977) (e.g., *?I saw Kim be wise*. The progressive is OK here (Dowty: 1979)). (See also Felser's (1999, pg. 45, #115) “SLP Constraint” and (1999, pg. 52, #136) “*GEN constraint on bare plurals”).

⁷²Incidentally, Diesing (1992, pg. 28) cites Bonet (1989) as claiming that there is no stage- versus individual-level contrast exhibited by floating quantifiers, so Diesing claims that there does not need to be a direct connection between the external and internal subject positions.

Kratzer (1989, 1995) takes a different approach, but one that is perhaps no easier to use in formulating the sort of partition we see in accusative-quotative constructions. The proposal is that stage-level predicates can have a Davidsonian argument in external subject position, whereas individual-level predicates always their subject noun phrase overt and base generated in the external subject position (viz. [Spec,IP]), and lack a Davidsonian argument altogether. This makes “lowering” into the verb phrase at the level of logical form impossible, thus accounting for the lack of an existential interpretation. This approach, too, relies on a partitioning of predicates, however, and as such won’t cover the facts of the accusative-quotative construction.

Furthermore, while these approaches do provide a way to generate an existential reading for an accusative subject after “raising” (with existential closure over the matrix verb phrase), existential closure is accomplished at the wrong level (that is, under the scope of the belief operator generated by the matrix verb (as was discussed in Section 3.4.1)).

4.3 Concluding remarks

The data in this Chapter involves judgments on grammatical acceptability more than it does semantic interpretation. While much of the reasoning is abstract, the data is concrete, and hopefully it will serve to support the hypothesis that something like the **Semantic/pragmatic constraint** is indeed operative as a necessary condition on licensing the felicitous use of accusative-quotative constructions.

The question of “aboutness” (i.e., of whether a *sufficient* condition for accusative-quotative complement predication can be formulated) still remains. But we are not done with syntax just yet. There are other patterns exhibited by accusative-

quotative constructions that cannot be considered as falling directly out of a prohibition on existential assertion, but can be explained by the stipulation in the **Semantic/pragmatic constraint** that property ascription be *on* the denotee of the accusative subject. These are the topic of the next Chapter.

CHAPTER 5

COMPLEMENT CLAUSES

So far we have been looking mostly at complement clauses expressing assertions in a fairly simple way. But there is a terrific variety of expressions that can be embedded in quotative clauses in Japanese (see for example Kuno (1986)). The clause-types that are embeddable in accusative-quotative constructions appear to comprise a proper subset of these. There are two clause types in particular that seem to be ruled out for reasons that might be semantic: questions with *wh* subjects, and specificational pseudocleft sentences.

In this Chapter I examine the inadmissibility of *wh*-agreement between an accusative subject and the complementizer of the embedded complement (Section 5.1), and the inadmissibility of specificational pseudoclefts as complement predications in accusative-quotative constructions (Section 5.2). The facts suggest the unacceptability of *wh*-noun phrase (“indeterminate”) accusative subjects being construed with an embedded question might be due to semantics rather than syntax.

The meaning of an information question (e.g., *Who just knocked over the water pitcher?*) can be described as involving a set of possible answers (with a presupposition that the set is not empty) but the identity of the member that satisfies the description *having just knocked over the water pitcher* — the value that answers the

question — is unidentified. Information questions with *wh*-focus on the subject don't embed into accusative-quotative complements:

- (1) Zirou-wa nani-ga/*-o resipi-ni kakete.iru da-rou (ka)
 Zirou-TOP what-NOM/-ACC recipe-DAT be.lacking COP-CJTR Q
 to omotta.
 COMP thought
 ‘Zirou thought, “What might be missing in that recipe?”’

The meaning of a specificational pseudocleft sentence (e.g., *What Jorge broke was the water pitcher*) also involves something like a covert question *What did Jorge break?* (a set of entities presupposed to be non-empty), the value for which is unidentified until it is given in the nominal predicate that follows. Specificational pseudocleft sentences don't embed into accusative-quotative complements:

- (2) Zirou-wa resipi-ni iru no-wa/*-o komezu da to
 Zirou-TOP recipe-NOM need NMLZ-TOP/-ACC rice.vinegar COP COMP
 mita.
 saw
 ‘Zirou reckoned what the recipe needed to be rice vinegar.’

I submit that the inability of Japanese sentences of these types to embed into accusative quotative constructions may be unified under one principle. On an abstract level a parallel with non-specific indefinite reference and existential quantification can be drawn.

Consider that a non-specific indefinite noun phrase can be thought of as an open formula (e.g., **cat'**(*x*) ‘a cat’). The range of possible values for the cat whose existence is asserted is just the set of entities that have the *cat* property, but in an existential

assertion, the value is not given — is unidentified. Existential assertions, of course, don't embed into accusative-quotative complements:

- (3) Zirou-wa yuzu-ga/*-o suupu-ni haitte.iru to omotta.
 Zirou-TOP citron-NOM/-ACC soup-LOC be.present COP thought
 ‘Zirou-thought there was citron in the soup.’

The underlying principle that rules out all three might be something as simple as a mismatch in logical type. Under the basic constraint that the accusative-quotative complement express property ascriptions (as evaluated in the relevant domain), property ascriptions are statements of set membership (with equations as a special case). But the three sentences types that are ruled out all involve subject noun phrases that denote sets of entities. For a set membership relation to obtain, the property-denoting element would have to be one order higher in abstraction (a set of sets).

I'm not prepared to offer a formal solution beyond this conjecture. But the parallels are interesting, and it is one way to present some heretofore unexamined data having to do with “epistemic specificity” in accusative-quotative constructions.

5.1 *Wh*-accusative subjects and embedded questions

Although den Dikken (2001, pg. 62); (2006) writes that he is not aware of *wh*-questions being used predicatively, cases are attested in the Japanese accusative-quotative construction (at least for a subset of matrix verbs):¹

¹It would of course be profitable to ask why [+Q] predications are possible in Japanese but not in some other languages. But the focus here is on restrictions upon the co-occurrence of accusative-quotative constructions with [+Q] complements. At this point the general restriction on these has been formulated (M. Kuno (2002a)), but not adequately described or explained.

- (4) Kanozyo-wa kare_i-no koto-o [_{e_i} hahaoya]-ga ittai dare
 She-TOP he-GEN matter-ACC mother-NOM in.the.world who
 da-rou to omotta.
 COP-CJTR COMP thought
 ‘She wondered about him, “Who on earth might his mother be?” ’
- (5) Boku-wa [Mary-o dare-no koibito ka] to omot-ta.
 Boku-TOP Mary-ACC who-GEN girlfriend Q COMP think-PAST
 (lit.) ‘I wondered Mary to be whose girlfriend.’

(adapted from Ueda (1988, pg. 46, fn. 19, #i), citing Kimihiro Ohno (p.c.))

Note that *kare* in (4) corresponds to a genitive noun phrase complement of *hahaoya*, the predicate nominal in the complement predicate. Because of *no koto* incorporation, *-ga/-o* alternation is impossible for (4). And note that *Mary* in (5) is the thematic subject of the nominal predicate in the complement. As *Mary* hasn’t undergone *no koto* incorporation in (5), *-ga/-o* alternation is possible.

Taking a clue from the English gloss, the example above could be used as support for an argument that the accusative-quotative construction is an example of prolepsis, but this would ignore the restrictions against existential/eventive assertions that obtain in the complements of accusative-quotative constructions in general, and in [+Q] complements of many accusative-quotative constructions as well:²

- (6) ??Keizi-wa yougisya-o ittai doko-ni itta da-rou (ka)
 Detective-TOP suspect-ACC in.the.world where-LOC went COP-CJTR (Q)
 to omotta.
 COMP thought
 (intended) “The detective wondered about the suspect_i, where in the world
 must *e_i* have gone?”)’

²Also note that in some contexts it is not necessary to have an overt question marker on the complement clause in order for the complement to be unambiguously interpreted as a question.

When we consider all the ways that questions interact with the accusative-quotative construction, we can also get a different view of what kind of “specificity” we have been talking about, and more confirmation of the claims made about the contextual domain at which the requirement for specificity applies.

Let’s go through the syntactic facts briefly.

5.1.1 [+Q] accusative-quotative complements

The question marker *ka* can appear in the accusative-quotative complement (depending on the matrix predicate, among other things).³ First let’s look at yes-or-no questions:

- (7) Yamada-wa Tanaka-o baka ka to omotta.
 Yamada-TOP Tanaka-ACC fool COP COMP thought
 (lit.) Yamada wondered about Tanaka, “Is he stupid?” ’

(adapted from Kuno (1976, pg. 40, #87) (my gloss))

The admissibility of sentences like this is surprising to English speakers, and examples are difficult to gloss in a way that is representative of the Japanese syntax. An approximation to a literal translation would read *Yamada considered Tanaka to be such that “Is he stupid?”* Note that in (7) the accusative subject *Tanaka* is the thematic subject of the nominal predicate *baka da* ‘be stupid’. It is not easy to justify a claim that the question in the complement is a sentential predicate.

³Verbs which seem to require a definitive judgment (e.g., *minasu* ‘deem’; *handan suru* ‘judge’; *dantei suru* ‘determine’, etc.) resist this (See Berman (1989, 1991); Lahiri (2002) for some general discussion on verb classes related to questions).

There is a wide variety of possible constructions.⁴ C. Kitagawa (1977) gives (8) as an example where 1) the accusative subject has undergone *no koto* incorporation, and 2) a resumptive pronoun is in the subject position of the embedded question:

- (8) Yamada-wa [Tanaka-no koto]_i-o aitu_i-wa baka de.wa.nai
 Yamada-TOP Tanaka-GEN matter-ACC guy-TOP fool COP.TOP.NEG
 da-rou ka to omotte.ita.
 COP-CJTR Q COMP thought

‘Tanaka thought of Yamada as being perhaps a fool.’

(C. Kitagawa (1977, pg. 456) (C. Kitagawa’s gloss))

A better gloss might read, *Tanaka thought Yamada to be such that, “Might he not be a fool?”* C. Kitagawa’s (1977) example above is very natural Japanese, arguably more natural than Kuno’s (1976) example in (7).

The status of *Yamada no koto* as a major object seems to license the appearance of the resumptive pronoun in (8), and its presence suggests that the question embedded in the accusative-quotative complements is a sentential predicate: The structure *Yamada*

⁴Tomoda notes that *ka dou ka* ‘whether’ is possible under special circumstances (e.g., together with *-no koto* incorporation and the right kind of matrix verb):

- i. Haruko-wa Hiroshi-no koto-o buzi ka.dou.ka anzita.
 Haruko-TOP Hiroshi-GEN matter-ACC safe whether worried
 ‘Haruko worried whether Hiroshi was safe.’

Tomoda (1976-1977, pg. 375, fn. 10, #ii)

Actually sentences like this, including all of the examples in Y. Kitagawa (1986) pose difficulties. Particularly, the judgments of Kitagawa (1986) do not jibe with the intuitions of my informants, so I will take whatever I can from him, making attributions where appropriate, while leaving his data for consideration at some other time. The consequences of Kitagawa’s (1986) distinction between “real exceptional Case marking” and “quasi exceptional Case marking” are not clear, and the data he is concerned about most fall outside of my **Working description**. In the discussion that follows I will do my best to avoid verbs that take [*CP* [*S* ...] *ka*] as direct objects (e.g., *siru* ‘know’; *anziru* ‘worry’; *sas-suru* ‘divine’, etc.) Furthermore, there are verbs that take direct objects and sentential adjuncts in the form of questions (e.g., *hushigigaru* ‘wonder (at)’, etc.) These too I will try to avoid in the following discussion.

no koto relates to as a subject of predication is saturated. So while the accusative subject happens to be co-indexed with the resumptive pronoun, it is (arguably) not the thematic subject of the overt complement predicate, but rather is the subject of the sentential predicate. This distinction will become important later on when we consider *wh*-noun phrases appearing as accusative subjects.

Wh-noun phrases can also appear as internal arguments of predicates with higher valences and a referring accusative subject as thematic subject of the complement predicate:

- (9) Ore-wa Mariko-o dare-ni nite.iru darou ka to omotta.
 I-TOP Mariko-ACC who-DAT resemble COP-CJTR Q COMP thought
 I thought about Mariko, “Who does she resemble?” ’

A referring accusative major subject can appear with a sentential predicate in question form without *no koto* incorporation:

- (10) Hanako-wa kondo.no.byouki-o karada.no.doko-ga
 Hanako-TOP this.time’s.sickness-ACC where.in.the.body-NOM
 itaku.naru da-rou ka to omotta.
 become.painful COP-CJTR Q COMP thought
 ‘Hanako thought about this sickness, “Where is my body going to hurt?” ’

In general, when the accusative subject does not correspond to a thematic role in the sentential predicate (such as in (10)), eventuality-dependent predications can appear more freely than with thematic subjects: They are merely part of the description of the sentential predicate. To a certain extent this even follows for accusative major subjects co-indexed with resumptive subjects:

- (11) Yamada-wa [Tanaka-no koto]_i-o aitu_i-wa mata dozi.o.humu
 Yamada-TOP Tanaka-GEN matter-ACC guy-TOP again commit.a.blunder
 no de.wa.nai da-rou ka to omotte.ita.
 NMZ COP.TOP.NEG COP-CJTR Q COMP thought

‘Tanaka thought about Yamada, “Might he not commit another blunder?”’

Accusative major subjects appearing with [+Q] complements, then, seem to be less restricted with respect to eventuality-dependence than are accusative thematic subjects of overt predicates [+Q] complements, and, it seems less restricted with respect to eventuality-dependence than are accusative major subjects of [-Q] complements:

**Tanaka wa Yamada o mata dozi o humu darou to omotta* (intended) ‘Tanaka considered Yamada so be such that he will probably commit another blunder.’

Otherwise, the accusative-quotative constructions embedding [+Q] complements examined above seem to behave in much the same way as other accusative-quotative constructions we have seen so far, as long as the accusative subject *refers*.

5.1.2 *Wh*-accusative subjects

Takemura (1975-1976) was the first to comment on the ungrammaticality of some indeterminate (or *wh*-phrase) accusative subjects (viz. those appearing together with [+Q] complementizers of embedded complement clauses):

- (12) *Watasi-wa dare-o kasikoi da-rou ka to omotta.
 I-TOP who-ACC be.clever-PRES COP-CJTR Q COMP thought
 (lit.) ‘I considered who to be such that, are they clever?’

Takemura (1975-1976, pg. 187, #25b)

Note that the construction embeds a [+Q] complement, and an accusative subject appears as the only indeterminate (i.e., *wh*-phrase) in the construction. It appears as though the accusative subject is somehow “forced” into agreement with the [+Q] complementizer, and this is what results in ungrammaticality.

Takemura relates the ungrammaticality of the *wh*-accusative subject to questions of specificity. According to his reasoning, interrogative words are by definition non-specific, and as such cannot occupy a position for which specificity is an automatic consequence. Left unqualified, this explanation would rule out *wh*-accusative subjects in agreement with matrix-level [+Q] complementizers as well, but these are perfectly acceptable:

- (13) Kimi-wa dare-o kasikoi to omotta ka.
 You-TOP who-ACC be.clever COMP thought Q
 a. ‘Who did you consider to be clever?’
 b. ≠‘Did you wonder who was clever?’

(derived from Takemura (1975-1976, pg. 187, #25b) (my (12)))

Neither from syntax nor from semantics is this a surprising outcome, given our understanding of the **Semantic/pragmatic constraint**. The accusative subject is clearly in the c-command domain of the question operator in (13). And the “non-specificity” (as Takemura has it) of the indeterminate takes its force in the context of interpretation defined by the belief world of the speaker, not the agent of attitude. Indeed, any true answer to the question in (13) would have a reference that is specific with respect to the beliefs of *kimi* ‘you’. We could qualify Takemura’s analysis by saying that the *wh*-noun phrase has to be construed as interrogative in a context of interpretation other than that defined by the belief world set of the agent of attitude.

But is there an independent way to generate this pattern through reference to syntactic principles? If agreement is the problem in (12), there should be a variety of ways to test for it. Note that in (12) the accusative subject is also the thematic subject of the overt predicate *kasikoi* ‘be clever’. A movement analysis predicts that a trace is left in the subject position of the subordinate clause. Could the presence of that (hypothetical) trace “force” the accusative subject to agree with the embedded clause, and this is ruled out by Takemura’s requirement on specificity? Or is the problem that indeterminate accusative subjects can never be construed with [+Q] complements (either because they are base generated above the c-command domain of the embedded complementizer or because of a semantic constraint on construal) and accordingly fail to be licensed without a matrix question operator under which to take scope?

One test (in (14) below) involves two indeterminate noun phrases (one in accusative subject position, and one in complement nominal predicate position) and two question markers (one on the complement clause, the other on the matrix clause).⁵

- (14) Kimi-wa dare-o dono.ziken-no hannin da-rou ka to
 You-TOP who-ACC which.case-GEN culprit COP-CJTR Q COMP
 mite.iru no?
 see Q
 a. ‘Who_i do you reckon to be such that “e_i is the culprit of which case?”’
 b. ≠ ‘Do you reckon whom to be the culprit of which case?’

(inspired by Y. Kitagawa (1986, pg. 269, fn. 6, #iv))

⁵The idea of using multiple *wh* is due to Kitagawa (1986), but I have changed many of the details in order to limit my observations to my data set, and I draw very different conclusions as well.

The example in (14) shows us that even in grammatical examples where an indeterminate accusative subject co-occurs with an [+Q] complement, the former is not construed with the latter.⁶

A more definitive test uses examples in which the accusative subject unambiguously occupies a matrix level position: examples in which 1) the accusative subject corresponds to a resumptive pronoun in the complement; 2) the accusative subject is not the thematic subject of the overt predicate in the complement; 3) a matrix level verb phrase adjunct (or a floating quantifier hosted by the matrix subject) appears between the accusative subject and the complement predicate. In addition to these, we might examine “major object accusative subjects,” but we’ve already noted in Chapter 3 that their behavior is mixed, so the presence on *no koto* by itself is not diagnostic. We’ll take advantage of them in (15), as they license resumptive pronouns:⁷ The (a) sentences in the three pairs below have indeterminate accusative major subjects and a [+Q] complement. Each of the (b) sentences in the three pairs below add a nominalizer with rising intonation (*no?*) at their end, and this functions as a question marker.

- (15) a. *Yamada-wa [dare-no koto]_i-o aitu_i-wa baka de.wa.nai
 Yamada-TOP who-GEN matter-ACC guy-TOP fool COP.TOP.NEG
 da-rou ka to omotte.ita.
 COP-CJTR Q COMP thought
 (no gloss)

⁶Kitagawa’s (1986, pg. 259) claim that “no exceptional Case marking is possible in indirect questions” is a fundamentally different claim, and not supported by the intuitions of my informants (nor by examples like Tomoda’s i. above, and examples like *Tarou wa mada sinzin o mikata ka teki ka to kangaete ita* (lit.) ‘Tarou was still considering the newcomer whether to be friend or foe.’ But demonstrating this is orthogonal to the point I’m discussing here.

⁷Kitagawa (1986) assumes that *no koto* incorporation by itself is sufficient to indicate that the accusative subject is base-generated outside of the complement clause.

- b. Yamada-wa [dare-no koto]_i-o aitu_i-wa baka de.wa.nai
 Yamada-TOP who-GEN matter-ACC guy-TOP fool COP.TOP.NEG
 da-rou ka to omotte.ita no?
 COP-CJTR Q COMP thought Q

‘Who_i did Tanaka consider to be such that, “Might not e_i be a fool?” ’

(derived from C. Kitagawa (1977, pg. 456) (my (8) above))

- (16) a. *Butyou-wa dare-o [e_i teinen-suru toki]-ga tikai no
 Yamada-TOP who-ACC retire-do time-NOM be.close NMZ
 de.wa.nai ka to omotte.ita.
 COP.TOP.NEG Q COMP thought

(no gloss)

- b. Butyou-wa dare-o teinen-suru toki-ga tikai no
 Yamada-TOP who-ACC retire-do time-NOM be.close NMZ
 de.wa.nai ka to omotte.ita no?
 COP.TOP.NEG Q COMP thought Q

‘Who_i did the section manager consider to be such that, “Might not e_i ’s retirement be coming up?” ’

- (17) a. *Sono.hito-wa nani-o kozinteki.ni kakasenai mono na
 That.person-TOP what-ACC personally can’t.do.without thing COP
 no ka to kangaete.iru.
 NMZ Q COMP think

(no gloss)

- b. Sono.hito-wa nani-o kozinteki.ni kakasenai mono na
 That.person-TOP what-ACC personally can’t.do.without thing COP
 no ka to kangaete.iru no?
 NMZ Q COMP think Q

‘What_i does that person consider personally to be such that, “Is e_i an indispensable thing?” ’

In the (a) sentences of the last three pairs, only the complement clauses are [+Q], and the accusative major subjects are the only indeterminates. As the accusative subjects are unambiguously matrix level arguments, the argument that they are “forced” to agree with the [+Q] complement clauses (violating a semantic constraint) doesn’t seem to hold up. By contrast, the (b) sentences of the last three pairs are minimally different in that they each include a matrix level question marker. In every case, the indeterminate accusative subject is construed with the matrix level question, and the embedded question is interpreted as a sentential predicate.⁸

The badness of the (a) sentences in the three pairs above, then, seems to be due to either 1) a semantic constraint against indeterminate accusative subjects being construed with [+Q] complements, or 2) inability due to be licensed under [+Q] complements due to syntactic factors: constituency, category, configuration, etc.

M. Kuno (2002a, pg. 239) observes that the accusative subject, “when it appears as a WH-phrase, cannot take embedded scope.” This is the closest thing to an accurate characterization of the observable pattern in the literature.⁹ A *wh*-accusative

⁸Incidentally, only the example in (16-b) can have *-ga/-o* alternation.

- i. (a) *Yamada-wa [dare-no koto]_i-ga aitu_i-wa baka de.wa.nai da-rou ka
 Yamada-TOP who-GEN matter-NOM guy-TOP fool COP.TOP.NEG COP-CJTR Q
 to omotte.ita.
 COMP thought
 (no gloss)
- (b) Butyou-wa dare-ga teinen-suru toki-ga tikai no de.wa.nai ka
 Yamada-TOP who-NOM retire-do time-NOM be.close NMZ COP.TOP.NEG Q
 to omotte.ita.
 COMP thought
 (no gloss)
- (c) *Sono.hito-wa nani-ga kozinteki.ni kakasenai mono na no ka
 That.person-TOP what-NOM personally can’t.do.without thing COP NMZ Q
 to kangaete.iru.
 COMP think
 (no gloss)

⁹M. Kuno (2002a) concludes (somewhat hastily) that the inability of *wh*-accusative subjects to be construed with [+Q] complements is that they are base-generated in [Spec,CP], outside of the

subject in Japanese and a [+Q] complement can co-occur in an accusative-quotative construction, but the former is never construed together with the latter.

Observation: A *wh*-accusative subject in Japanese cannot be construed together with a [+Q] complement in an accusative-quotative construction.

Of the question is, why should this be the case? The answer from syntax would be that an accusative subject, being in a position that is high in the structure, is outside the domain of the [+Q] morpheme marked on the embedded complementizer. But, as we shall see, there are problems with such an explanation.

5.1.3 Pros and cons for a syntactic account

First it should be remembered that (as observed in Homma (1998) and as we saw in Section 3.5.1.1) an accusative subject that is the thematic subject of an overt predicate in an accusative-quotative complement takes scope under focus particles marked on the embedded complementizer. This is the converse of pattern # 5 on pg. 104 in Section 3.1. If the [+Q] marking is a feature of the complementizer, as is commonly assumed, then appealing to a high position is not an option for explaining the unacceptability of sentences like (12). I'll return to this point below.

Another complication for a syntactic account is the fact that not all indeterminate accusative subjects licensed through an agreement relation with the embedded complementizer are disallowed. We saw in Section 3.4 that under the scope of a negated

c-command domain of the [+Q] complementizer. M. Kuno claims to be the first to propose this structural description, but see Kaneko (1988) for an earlier instance of the proposal. Both proposals rule out [+Q] complements in agreement with arguments other than the accusative subject (under the assumption that [Spec,CP] is crucial for quantifier raising in general). But we started this section noting that such constructions are attested. Both accounts rule out scope ambiguity between accusative subjects and internal arguments of the complement, which has also been attested.

matrix predicate, an indeterminate accusative subject can be construed together with a focus particle *-mo* marking the complementizer of a complement (depending on the predicate that selects the clausal complement). In the context [_{VP} [_{accusative subject} [indeterminate]] ... *to-mo* ... NEG] the indeterminate receives a universally quantified interpretation with scope under the matrix negation (pattern # 3 in the list on pg. 104 in Section 3.1):

- (18) Masao-ga dare-o baka da to-mo omotte.i-nai.
 Masao-NOM who-ACC fool COP COMP-mo think-NEG
 ‘Masao does not think anyone to be a fool.’

(adapted from (Sakai: 1996, pg. 197, #12c) (my gloss, repeated from (33-b) on pg. 143)

Agreement with the embedded complementizer *-to-mo* licenses internal arguments of nominative-quotative complement predicates:

- (19) Hanako-wa Tarou-ga nani-o katta to-mo omowa-nakat-ta.
 Hanako-TOP Tarou-ga what-ACC bought COMP-NPI think-NEG-PAST
 ‘Hanako didn’t think that Tarou had bought anything.’

(adapted from Kishimoto (2001, pg. 599, #2b) (my gloss))

Agreement with the embedded complementizer licenses major object accusative subjects (at least if they are thematic subjects of the embedded predicate):

- (20) Kawaii.osiego.ni.kansite-wa, Tarou-wa ae-te [dare-no
 Regarding.precious.students-TOP Tarou-TOP dare-CONT who-GEN
 koto]_i-o kurasu.no.naka-de *e_i* itiban.kasikoi to-mo
 matter-ACC among.class-LOC most.clever COMP-mo
 dantei-si-nakat-ta.
 determine-do-NEG-PAST
 ‘With regard to his darling students, Tarou didn’t dare determine any one of
 them to be the most clever in the class.’

(repeated from (35) on pg. 145 in Section 3.5.1.1)

And agreement between an indeterminate-headed accusative major subject and the
 embedded complementizer is also possible:

- (21) Sensei-wa dare_i-o [*e_i* oya]-ga baka da to-mo
 Teacher-TOP who-ACC parents-NOM stupid COP COMP-mo
 omotte.i-nai.
 think-NEG
 ‘The teacher doesn’t consider anyone to be such that their parents are stupid.’

If the indeterminate is not the head of the accusative major subject noun phrase, the
 licensing doesn’t work:¹⁰

- (22) a. *Aya-wa [_{NP} dono [_N gakusei]]-o oya-ga kanemoti da
 Aya-TOP which.student-ACC parents-NOM rich COP
 to-mo omotte.inai.
 COMP-even think-NEG
 (intended) ‘Aya does not believe any student to be such that their parents
 are rich.’

¹⁰Actually, some speakers find all discontinuous licensing with *-mo* on the complementizer bad.

- b. *Aya-wa [_{NP} dono [_N gakusei]]-o Mai-ga sitto-site.iru to-mo
 Aya-TOP which.student-ACC Mai-NOM envy-do COMP-even
 omotte.inai.
 think-NEG
 (intended) ‘Aya does not believe any student to be such that Mai envies
 them.’

(adapted from Homma (1998, pg. 28, #21b,22c) (my glosses, repeated from
 ex. (36-b) on pg. 146 in Section 3.5.1.1)

If what is at stake in the examples of licensing the structure [_{VP} [_{accusative subject} [indefinite]] ... *to-mo* ... NEG] is agreement (as some, like Hiraiwa (2005) suppose) then there is arguably no structural impediment against agreement between an indeterminate accusative subject and a [+Q] complementizer on the embedded clause — this following under the defensible assumption that both *ka to* and *to mo* are complementizers, or at least occupy structurally similar positions.

Such an assumption is susceptible to attack, of course. For example, it is possible to treat the direct object *wh*-complements of factive verbs as open sentences (23-a) or as indirect questions (23-b).

- (23) Tarou-wa dare-ga sagisi ka-o sitte.iru.
 Tarou-TOP who-NOM swindler Q-ACC know
 a. $\forall x$ [x is a swindler][Tarou knows that x is a swindler]
 b. ‘Tarou knows who the swindler is.’

When the predicate nominal is understood as uniquely referring (as in the interpretation in (23-b)) or when the subject is universally quantified (as in (24)) the embedded question is read as an indirect question:

- (24) Tarou-wa daremo(-ga) sagisi ka-o sitte.iru.
 Tarou-TOP everyone(-NOM) culprit Q-ACC know
 ‘Tarou knows whether everyone is a swindler.’

But indeterminate accusative subjects don’t get licensed by *-mo* when it absorbs accusative case on a direct object [+Q] complement under matrix negation:

- (25) *?Tarou-wa dare-o sagisi ka-mo sira-nai.
 Tarou-TOP who-ACC swindler Q-mo know-NEG
 a. \neq ‘Tarou doesn’t know for anyone whether he is a swindler.’
 b. \approx ‘Tarou doesn’t even know who is the swindler.’

The badness of (25) could also be accounted for by reference to a double-*o* constraint violation, as well as by the very semantic condition we’re trying to find alternatives to. So this argument in favor of a syntactic account is not as strong as it might be.

Kitagawa (1986, pp. 259–260) claims that all “exceptional Case marking” into indirect questions is impossible:

- (26) Kanozyo-wa dono.otoko-ga/*-o sagisi da ka sira-nak-atta.
 She-TOP who-NOM/-ACC swindler COP Q know-NEG-PAST
 ‘She didn’t know which guy was a swindler.’

(adapted from Kitagawa (1986, pp. 260, # 29b) (Kitagawa’s judgment and gloss))

If Y. Kitagawa’s claim were the case, it would also rule out (25) on independent grounds. But it turns out this claim only holds if the accusative subject is a *wh*-noun phrase:

- (27) Tantei-wa konkai.no.irai-o kanozyo.no.suisen ka-sae
 Private.eye-TOP this.latest.job-ACC her.recommendation Q-even
 sira-nak-atta.
 know-NEG-PAST
 (lit.) ‘The private eye didn’t even know about this latest job whether it was
 from her recommendation.’

As an accusative-quotative construction embedding an indirect question, (27) is a counter-example to Y. Kitagawa’s (1986) generalization. There may be another explanation for the badness of (25): Under the intended interpretation ((25)-a), it violates a constraint against vacuous quantification. That is, *dare* is already quantified as interrogative under *ka*, so it can’t be quantified universally under *-mo*. If there is no open formula over which *-mo* can quantify, *-mo* can only be interpreted as a focus marker (similar to *sae* ‘even’), hence the (marginal) interpretation in ((25)-b). Note that the nominative-quotative counterpart to (25) can’t be read as an indirect question about a universally quantified subject, but is fine as an information question:

- (28) Tarou-wa dare-ga sagisi ka-mo sira-nai.
 Tarou-TOP who-NOM swindler Q-mo know-NEG
 a. \neq Tarou doesn’t know whether everyone is a swindler.
 b. Tarou doesn’t even know who is the swindler.

Granted, we have discovered a failure to agree between an indeterminate subject and *-mo* marked on *-ka*, but in the process we have also found another environment where an indeterminate accusative subject can’t be construed with a [+Q] complementizer (25).

These arguments do not resolve the question of whether *ka to* and *to-mo* are both compound complementizers. Nevertheless, they support the view that, structurally, agreement between an accusative subject and a subordinate clause complementizer is possible, but construing indeterminate accusative subjects with [+Q] subordinate clause complementizers is ruled out on independent grounds. We must look elsewhere for the reason why the two are in fact never construed together.

If no structural principle is blocking agreement between indeterminate accusative subjects and [+Q] complements (as we have demonstrated above), then what principle do sentences such as (1), (12), (15-a), (16-a), and (17-a) violate, that they should be so unacceptable? I submit it is Takemura's requirement for specificity (properly restricted to the relevant context of interpretation). Under the belief operator, the indeterminate accusative subject must be interpreted as referring. In order to be licensed by a question marker it can only be (and indeed must be) construed as interrogative *outside of the domain of the belief operator*. In the absence of a matrix level question marker, the indeterminate doesn't get licensed.

The formulation of this explanation should be familiar from previous discussions of the **Empirical observation** and the **Semantic/pragmatic constraint**. And it covers the empirical facts captured under the **Observation** above.

5.1.4 Indeterminacy and non-specificity

As Lahiri (2002, pg. 7) explains, Karttunen (1977) treats *wh*-noun phrases as existential quantifiers. For example, the semantic translation of *which house* would be as follows:

$$(29) \quad \lambda Q \lambda p \exists x [\text{person}'(w)(x) \wedge Q(x)(p)]$$

where Q is a variable of type $\langle e, \langle \langle s, t \rangle, t \rangle \rangle$

If we assume that a *wh*-noun phrase has existential force, we can guess by analogy with specific indefinite noun phrases¹¹ that that existential force is interpreted at a domain level wider than that of the agent of attitude.

But we cannot make such an assumption. Karttunen (1977) was describing the truth conditions of questions rather than their dynamic effect on contexts. Information questions (famously) carry presuppositions of existence: *Who left the refrigerator door open?* In such a context, there can be no force in an assertion that *somebody who?* exists. Thus, simply referring to a constraint against existential assertion in the relevant domain does not get us where we want to go.

Nevertheless, the parallel between specificity and indeterminacy suggests an explanation should be in the offing: The contextual domain in which a specific interpretation is required for an accusative subject is defined by the belief world set of the agent of attitude, and the contextual domain in which an existential interpretation is allowed for an (indefinite) accusative subject is defined by the belief world set of the speaker/hearer. In seeming parallel fashion, for indeterminate accusative subjects also, the contextual domain in which a specific interpretation is required is defined by the belief world set of the agent of attitude, while the domain of *wh*-construal for the accusative subject is defined by the belief world set of the speaker/hearer.

Is there a motivation for this parallel behavior at some other level of abstraction?

Let's consider the next clause-type before trying to supply an answer.

¹¹Berman (1991) gives an overview of the similarities between *wh*-phrases and indefinite noun phrases. It's not much help here, though.

5.2 Specificational pseudoclefts

Given 1) a careful definition of the accusative-quotative construction, 2) a careful definition of the specificational pseudocleft, and 3) a careful understanding of the properties of certain cognitive verbs, a very robust negative predication can be made:

Negative prediction: Specificational pseudocleft sentences cannot be expressed as accusative-quotative complements.

I will offer a concrete example before we get too far into the exposition. (30-a) below is a specificational pseudocleft sentence with the focus phrase (the phrase immediately preceding the copula, or the “copular complement”) associated in a special way with the nominalized clause (the “non-referential phrase”) that forms the topic phrase of the sentence. (30-b) is an example with the predication in (30-a) embedded in a cognitive verb construction.

- (30) a. O.tou.sama-ga atatta no-wa go.zikan.mae.ni.tabeta kaki
 Father-NOM made.sick NMZ-TOP five.hours.earlier.ate oyster
 datta.
 COP-PAST
 ‘What made your father sick were the oysters he ate five hours previously.’
- b. Sensei-wa o.tou.san-ga atatta no-wa/??-ga/*-o
 Doctor-TOP father-NOM made.sick NMZ-TOP/-NOM/-ACC
 go.zikan.mae.ni.tabeta kaki datta to omotte.iru.
 five.hours.earlier.ate oyster COP-PAST COMP believe
 ‘The doctor believes what made our father sick to be the oysters he ate five hours previously.’

The accusative-quotative alternative in (30-b) is unacceptable, and under the definitions spelled out below, so is any accusative-quotative construction that embeds a specificational pseudocleft. The generalization is robust for Japanese (once we control for a small number of verbs with special properties). Why should we see this pattern of judgments?

5.2.1 Some basic distinctions

In order to avoid “noise” in the examples we use, a few distinctions have to be clarified.

The relationship between the presuppositional phrase and the complement of the copula in a specificational pseudocleft is the same in every case: It is that between an element to be identified, and its identifier, to use Martin’s (1975) terminology.¹² Another way to describe the relationship is as follows: that relationship which obtains between an open formula and the unique value its variable assumes in a context that is restricted in the relevant way. For example, in a sentence like *What was too hot was the tea*, the presuppositional phrase is *what was too hot*. Depending on the context, practically any entity could be a value of the variable of the open formula **too hot**’(x), and for many contexts, the candidates are indefinitely numerous. But a presupposition accompanies the use of a specificational pseudocleft sentence:

¹²Martin (1975, pp. 863–869) gives an introduction to the specification pseudoclefts (“clefts” in his terminology), referring to the focus phrase as the *identifier*, the *no*-headed relative clause noun phrase as the *identified*, and the function of the nominalizer *no* as cataphoric. He distinguishes these cataphoric (forward-looking) constructions from those in which the *no*-headed relative clause noun phrase is anaphoric (“backward-looking”). More broadly, in my terms, the two types could be called, respectively, “non-referring” and “referring”. Martin (1975, pg. 239) describes “identificational” sentences in the following way: “An IDENTIFICATION involves two entities: The IDENTIFIED, a variable, is given a value by the IDENTIFIER. The Identifier (Ir) specifies which of the possible values the speaker wishes to assign to the Identified (Id).”

Specificational presupposition: (roughly) There is an entity (or a group of entities) in the relevant (restricted) context that uniquely supplies a value for the variable in the open formula expressed by the presuppositional phrase in a specificational pseudocleft sentence.

A presupposition is simply a condition on the context of interpretation. For a felicitous utterance for *What was too hot was the tea*, the context must be restricted enough so that the denotation of *the tea* uniquely supplies the value for *what was too hot*.¹³ In this sense, the “context” is extremely malleable: It can be restricted by the questions under discussion in the discourse of the moment. We often revise our context of interpretation to accommodate the presuppositions of our interlocutor. In our example, our understanding of *too hot* might be revised once we recognize the reference of *the tea*: It might be a particular potful, or it might be a crop growing on the hills in Shizuoka in unseasonably warm weather.

The positions in presuppositional phrases that correspond to the variables in the open formula (for English, the gaps corresponding to the *wh*-phrases, for Japanese, the gaps corresponding to nominalizer *no*) are not always argument positions, so the **Specificational presupposition** is too restrictive as stated here. Note also that while there is a presupposition that *something* uniquely supplies the relevant value for the open formula, the meaning of the presuppositional phrase does not of its own point to that something in the model. It does not *refer*.

¹³For argument gapping examples like this one, specification can also be described in terms of 1) a predicate imposing a set partition on the contextual domain, plus 2) a definite noun phrase with a reference extensionally equivalent to the partition defined by the predicate.

With these provisos in mind, let's look at Japanese. Note that in a root context such as (31-a) the nominal predicate *baka da* 'be a fool' tends to be interpreted as predicative on a simple topic:¹⁴

- (31) Tanaka-wa baka da.
 Tanaka-TOP fool COP
 'Tanaka is a fool.'

This is preserved in an accusative-quotative complement:

- (32) Yamada-wa Tanaka-o baka da to omotte.ita.
 Yamada-TOP Tanaka-ACC fool COP COMP thought
 'Yamada considered Tanaka to be a fool.'

(repeated from (1-b) on pg. 2 in Section 1.1)

Now take the nominal predicate (*baka da*) and add a gap (e_i) in subject position to form a clause: (e_i *baka da*). This clause with a gapped position expresses an open formula. Now nominalize the clause (e_i *baka na no_i*), then topicalize the resulting noun phrase (e_i *baka na no_i wa*) and we have a form which can function as (among other things) a presuppositional phrase (when in the grammatical context of a specificational pseudocleft sentence). As a context-neutral term to describe expressions incorporating this form let's adopt the modifier "*no*-headed."

What follows is a crucial distinction: Leaving context out of account for the moment, in a sentence of pseudocleft form, there are two possibilities for the interpretation of a "*no*-headed topic" like *baka na no wa*: The *no*-headed noun phrase can be interpreted

¹⁴Bare common noun predicate nominals in Japanese are actually ambiguous between individual reference, kind reference, and predicative meaning.

as 1) a “free relative” (i.e., functioning semantically as an open formula) as in (33-a), or as 2) a referential noun phrase (a definite description in relative clause noun phrase form) as in (33-b):

- (33) Baka na no-wa Tanaka da.
 Fool COP NMZ-TOP Tanaka COP
 a. (lit.) ‘Who is a fool is Tanaka.’
 = ‘It is Tanaka who is a fool.’
 b. ‘The one who is a fool is Tanaka.’

In the interpretation in (33-a), the value of the open formula *baka na no* is specified by the proper noun *Tanaka* in the complement of the copula.¹⁵ In the interpretation in (33-b), the sentence is equational: “Known entity A is extensionally equivalent to known entity B.”¹⁶

The topic/comment sentence in (33) (a pseudocleft sentence) can be embedded entire in a quotative complement, and both interpretations remain available:

- (34) Yamada-wa baka na no-wa Tanaka da to omotte.ita.
 Yamada-TOP fool COP NMZ-TOP Tanaka COP COMP thought
 a. ‘Yamada thought it to be Tanaka who is a fool.’
 b. ‘Yamada thought the one who is a fool to be Tanaka.’

¹⁵The complement of the copula is variously called the “value phrase,” (den Dikken: 2001), the “identifier,” (Martin: 1975), the “focus,” etc. Although it often carries new information, it is not invariably the focus of the sentence (discussed in more detail below).

¹⁶As Iatridou and Varlokosta (1998, pg. 23) suggest for pseudoclefts in general, in Japanese a *no*-noun phrase that denotes a discourse familiar entity can appear in an equative sentence. That the copular complement is referential does not entail that the pseudocleft is specificational. Here I take equation to be a special case of predication, whereas specification is something else altogether. Note that here “predication” is being used in a sense similar to how I have defined “property ascription.”

Let's see which meaning is preserved when the topic noun phrase is made into an accusative subject:

- (35) Yamada-wa baka na no-o Tanaka da to omotte.ita.
 Yamada-TOP fool COP NMZ-ACC Tanaka COP COMP thought
 a. \neq 'Yamada thought it to be Tanaka who is a fool.'
 b. 'Yamada thought the one who is a fool to be Tanaka.'

The specificational interpretation (35-a) is not available for the pseudocleft sentence embedded in (35). But there is available an interpretation (35-b) for the embedded clause in which a specific person with the qualities of a fool (an entity with a known identity) is equated with the person known as *Tanaka* (another entity with a known identity).

Now the question is, why can't we interpret the embedded pseudocleft sentence as a whole as specificational in the grammatical context of an accusative-quotative complement? Or put another way, why must we interpret the *no*-headed phrase as being referential in contexts like these?

Another key distinction needs clarifying. In the immediately preceding examples, the copular complement in the [*no*-headed topic + copular predicate] construction happened to be a proper noun (a preeminently referential expression). Nominal predicates with referential complement noun phrases can be employed for either specification or equation (this latter a special case of predication). But consider a copular predicate with a complement that has a greater tendency to be interpreted as predicational: *kirei da* 'be pretty, clean'.¹⁷ A [*no*-headed topic + copular predicate] construction

¹⁷In traditional Japanese grammar, [N + copula] with nominal adjectives (such as *kirei*) in the complement are called *kei'you dousi* 'adjectival verbs'. Nominal adjectives can also appear in argument positions: *Kirei ga mokuhyou!* 'Prettiness is the goal!'; *Kirei o mezase!* 'Aspire to prettiness!'

with an adjectival noun as the copular complement tends to be interpreted as a predication, in which case the *no*-headed topic must be construed as a referring expression:

- (36) Zirou-ga e_i tukutta no_{*i*}-wa kirei da.
 Zirou-NOM made NMZ-TOP pretty COP
 ‘The one that Zirou made is pretty.’¹⁸

Contrast this with a specificational pseudocleft sentence, where the variable in the presuppositional phrase is given a value (e.g., *Zirou ga tukutta no wa haizara da* ‘What Zirou made was an ashtray’).

Accordingly, a specificational pseudocleft with an argument gap in the presuppositional phrase (such as the sentence with the interpretation in (34-a)) always takes a definite noun phrase in the copular complement. As Komagata (1996, pg. 2) notes, the lack of a determiner system for noun phrases in Japanese complicates the analysis of semantic type, definiteness/indefiniteness and specificity/non-specificity, etc. Nevertheless, the syntactic behavior of pseudocleft sentences is dependent on the referential status of the elements in those constructions, so it is important to establish controls.

Kizu concentrates on sentences with case marked noun phrases in the copular complement (or “focus position”), because these are unambiguously specificational.¹⁹ Such noun phrases must satisfy the condition on definiteness (because they only occur with argument gaps), and the presence of case markings rule out their functioning as pred-

etc. To this extent they are not unambiguously predicative.

¹⁸That the *no*-headed phrase in (36) is interpreted as referential cannot be easily indicated in an English gloss. I will use “the one that ...” in place of “what ...” to indicate a referential reading, although this expression implies a partitive reference which might not necessarily obtain.

¹⁹Kizu (2005, pg. 209, fn. 8) attributes to an anonymous reviewer the observation that “a true case of cleft construction requires a case marker in focus position; otherwise, it is a construction with a relative clause complex NP in subject position (also see Hiraiwa and Ishihara (2002)).”

icates, obviously. But they don't exhaust the possibilities for what might appear as a predicate nominal in a specificational pseudocleft sentence.²⁰

Kizu (2005, pg. 212, fn. 23) notes the possibility of copular sentences with referential *no*-headed phrases in subject position, but doesn't explore many ways of distinguishing between these and specificational pseudoclefts for ambiguous surface sentences. In fact, there are some independent tests one can use, some of which I introduce below.

5.2.1.1 Terminology

The term “pseudocleft” has been used to distinguish the Japanese [S + *no-wa* + copular predicate] construction from the English “*it*-cleft” construction. The “*it*-cleft” is regularly specificational, while the Japanese [S + *no-wa* + copular predicate] construction can express both specificational and predication sentences.

I'll call sentences of the form [*no*-headed topic + copular predicate] where the *no*-headed topic is interpreted as non-referential “specificational pseudocleft sentences.” I'll call sentences of the form [*no*-headed topic + copular predicate] where the *no*-headed topic is interpreted as referential “predication pseudocleft sentences.” As it turns out, this is the crucial distinction between them.

There has been an unfortunate proliferation of terminology with regard to these sentence-types in general. Kizu (2005, pg. 5) notes the distinction between predication and specificational pseudoclefts, calling the *no*-headed elements that appear

²⁰This methodology excludes quite a variety of possibilities from the data set: Clefts of postpositional phrases (e.g., *Mariko ga itta no wa Uiin made da* ‘How Mariko went was as far as Vienna’), of adjuncts (e.g., *Sensei to au no wa asita da* ‘When I meet with the professor is tomorrow’), of quotative complements (e.g., *Siritai no wa sansei ka dou ka to iu koto da* ‘What I want to know is whether you approve or not’), and of eventive verb phrases (e.g., *Tarou ga sita no wa nusumigiki suru koto da* ‘What Tarou did was eavesdrop’), among other possibilities.

in the former “headless relative clauses” or “free relatives,” while reserving the term “presuppositional clause” for the *no*-headed topic phrase of specificational pseudoclefts. Other researchers have used the term “free relative” to refer to the precopular phrase of the English specificational pseudocleft (other terms: “variable phrase,” “presuppositional phrase,” “identified,” (Martin: 1975), “non-referential phrase” (Kuno: 1970), etc.) Likewise, there are yet other terms for the precopular phrase of the English predication pseudocleft (for example, “referring phrase,” “denoting NP,” “referential free relative” (Higgins: 1979), “headless relative,” (Kizu: 2005), “free relative,” (Kizu: 2005), etc.).

The phrase that specifies the value of the *no*-headed phrase is often called the “focus” of the sentence, and with respect to information packaging, indeed it often plays that role, but not always.

- (37) a. Anna.takusan.no.osake-o susumeta no-wa Tarou dat-ta.
 That.much.booze-ACC pressed.upon NMZ-TOP Tarou COP-PAST
 (lit.) ‘Who pressed all that booze (on her) was Tarou.’
- b. Tigaimasu. Anna.takusan.no.osake-o tuide-ageta no-wa Tarou
 Be.wrong. That.much.booze-ACC pour-BNFV NMZ-CTRS Tarou
 datta.
 COP-PAST
 (lit.) ‘Who *poured* all that booze was Tarou.’

(derived from den Dikken (2001, pg. 29, #120a,b))

In (37) above, what is usually called the focus is actually *theme*, and while the *no*-headed phrase is marked with *-wa*, it is contrastive, and no less new information for retaining its presuppositional character.

Neither is the *no*-headed phrase invariably the topic: Although it is fairly consistently marked with *wa*, that could be new information in a contrast phrase, as is also seen in (37) above.

Henceforth I will call the *no*-headed phrase of a specificational pseudocleft a “non-referential phrase.” I will use “referential *no*-headed phrase” for the *no*-headed phrase of a predication pseudocleft. For the element that appears with the copula to form the copular predicate in pseudoclefts (for specificational ones, the so-called “focus” or “value phrase”), I will use the term “copular complement.”

5.2.2 Clefting complements from accusative-quotatives

My principle concern in this study is with embedding specificational pseudoclefts sentences in accusative-quotative constructions. However, there are a variety of ways in which clefting (or pseudoclefting) as a grammatical process can interact with a sentence. Some of these have been used as diagnostics to probe the syntactic structure of accusative-quotative constructions (under a variety of assumptions, I might add). While an appreciation of this work would be illuminating, I will restrict myself to a quick review of some of the best known results, and try to clarify some points on my own.

Higgins (1979) noted the specificational nature of sentences like *What John said was that the earth was flat*.²¹ But we can’t translate such sentences in to parallel structures in Japanese, because *to*-phrase complements cannot be pseudoclefted into the copular complement.

²¹Iatridou and Varlokosta (1998, pg. 21) refer to these as “CP pseudoclefts.”

- (38) *Zyon-ga e_i itta-no-wa [dame da to]_i da.
 Zyon-ga said-NMZ-TOP bad COP COMP COP
 (intended) ‘What_i John said e_i was [that it’s no good]_i.’

A *to*-phrase complement has to be extended into a relative clause with the verb *iu* ‘say’ and nominalized with an appropriate head (e.g., *koto* ‘fact’) in order for the proposition it expresses to figure in a root predicate nominal.²²

- (39) Zyon-ga e_i itta-no-wa [_{NP} [dame da to]_i iu koto] da.
 Zyon-ga said-NMZ-TOP bad COP COMP say fact COP
 ‘What_i John said e_i was [that it’s no good]_i.’

That Japanese quotative *to*-phrases cannot function as root predicate nominals²³ prevents us from drawing a direct parallel in Japanese to the sort of contrast found in English exemplified below:²⁴

- (40) a. What John believes is that the earth is flat.
 b. *What John believes is the earth to be flat.
- (41) a. It is that the earth is flat that John believes.
 b. *It is the earth to be flat that John believes.

²²Analyzing *koto* and *to iu koto* as complementizers allows some parallels to be drawn with English, and is a fairly common move in linguistic analysis, but it leads to complications also, to be discussed below.

²³Japanese quotative *to*-phrases *can* function as predicate nominals of relative clauses (e.g., *Tarou ga hannin da to no handan* ‘the judgment that Tarou was the culprit’).

²⁴This sort of contrast was noted in Bach (1977, pg. 637, #72a).

- i. *What I believe is John to have done that.

Bach (1977, pg. 637, #72a)

The nominalization required for *to*-phrase complements in copular predicates in Japanese adds a noun phrase projection above the complementizer phrase of the clause. This has consequences for the kinds of tests that can be conducted.

For example Tanaka (1992) claimed to find a contrast in pseudo-clefting of nominalized clauses between cases where the source of the proposition is, alternatively, a nominative-quotative and an accusative-quotative sentence. There was a widely accepted notion that only combinations of elements analyzable as forming a constituent of the *no*-headed relative clause of a pseudocleft sentence could appear in the focus of that sentence. Thus Tanaka attributes the ungrammaticality of the accusative-quotative alternative in (42) to illicit non-constituent clefting. Specifically, the example in (42) is claimed to be support for the view that the accusative subject and the quotative *to* clause, taken together, do not form a constituent.

- (42) Yamada-ga omotte-i-ru no-wa [Tanaka-ga/*-o baka
 Yamada-NOM think-AUX-PRES NMZ-TOP Tanaka-NOM/-ACC stupid
 da] to i-u koto da.
 COP COMP say-PRES fact COP
 ‘What Yamada is thinking is that Tanaka is stupid.’

(Tanaka: 1992, pg. 56, #45)

Ohtani (1998, pg. 111) also concludes that evidence like (42) above suggests that the accusative subject is not a constituent of the clausal complement.²⁵

But I would argue that the nominalization in (42) itself is bad on independent grounds if we analyze *to iu koto* as a relative clause with a fully lexical noun head. The [S *to iu koto*] phrase looks like and behaves like a relative clause noun phrase. Note that

²⁵Ohtani (1998, pg. 111) lifts this observation from Tanaka (1992) with minor alternations and without proper attribution.

extraction out of the downstairs S in [S + *to iu koto*] in (43-b) is unacceptable, while extraction out of the downstairs S in [S + *ka dou ka*] in (43-a) is acceptable.

- (43) a. Tarou-ga Zirou-ga Mariko-ni t_i ageta ka.dou.ka(-o)
 Tarou-NOM Zirou-NOM Mariko-DAT gave whether(-ACC)
 tasikametai handobaggu_i
 confirm.want handbag
 ‘the handbag that Tarou wants to confirm whether Zirou gave to Mariko’
- b. *Tarou-ga Zirou-ga Mariko-ni t_i ageta to iu koto-o
 Tarou-NOM Zirou-NOM Mariko-DAT gave COMP say fact-ACC
 tasikame.tai handobaggu_i
 confirm.want handbag
 (no gloss)
- c. *Tarou-ga Zirou-ga Mariko-ni t_i ageta to iu uwasa-o
 Tarou-NOM Zirou-NOM Mariko-DAT gave COMP say rumor-ACC
 tasikame.tai handobaggu_i
 confirm.want handbag
 (no gloss)

It is a common practice to analyze *ka dou ka* ‘whether’ as a complementizer. Japanese [+Q] complementizers are able to receive accusative case. Extraction is allowed in (43-a) across a single clausal boundary. What prevents extraction for (43-b) is arguably an added noun phrase boundary projected by *koto*, parallel to (43-c) with the fully lexical head *uwasa* ‘rumor’.

Takemura (1974, pg. 248, #23d) observed that subject raising is not possible from a *koto* complement:

- (44) *Zirou-wa Tarou-o hannin de.aru koto-o sinzita.
 Zirou-TOP Tarou-ACC culprit be fact-ACC believed
 (intended, lit.) ‘Zirou believed the fact that Tarou to be the culprit.’

(adapted from Takemura (1974, pg. 248, #23d))

If the [S + *to iu koto*] phrase is also a relative clause noun phrase (albeit a slightly more complex one), then the contrast in (42) doesn’t support the claim about constituency, because the proposed constituent is impossible on independent grounds: There is no verb in the relative clause in a position to assign *Tanaka* accusative case, and there are too many barriers between the embedded subject of *Tanaka ga baka da to iu koto* and the verb selecting the complex noun phrase *omotte iru*.

Here is a test Tanaka (1992) or Ohtani (1998) might have done well to conduct. First note that the verb *utagau* ‘doubt’ can take a *wh*-complement *ka dou ka* (45-a), and that it can support an accusative-quotative construction (45-b).²⁶

- (45) a. Tarou-wa syokureki-ga zyuubun ka.dou.ka(-o) utagatte.iru.
 Tarou-TOP resume-NOM be.adequate whether(-ACC) doubt
 ‘Tarou wonders whether his resume is adequate or not.’
 b. Tarou-wa syokureki-o zyuubun ka.dou.ka(*-o) utagatte.iru.
 Tarou-TOP resume-ACC be.adequate whether(-ACC) doubt
 ‘Tarou wonders whether his resume is adequate or not.’

Now observe that the accusative-quotative [+Q] complement cannot be clefted (46-b), while a topic/comment [+Q] complement can (46-a).

²⁶It is also interesting to note that accusative marking on the accusative-quotative *wh*-complement is dis-allowed, presumably a result of the double-*o* constraint.

- (46) a. Tarou-ga utagatte.iru no-wa syokureki-ga zyuubun
 Tarou-TOP doubt NMZ-TOP resume-NOM be.adequate
 ka.dou.ka(-o) da.
 whether(-ACC) da
 ‘What Tarou wonders is whether his resume is adequate or not.’
- b. *Tarou-ga utagatte.iru no-wa syokureki-o zyuubun
 Tarou-TOP doubt NMZ-TOP resume-ACC be.adequate
 ka.dou.ka(-o) da.
 whether(-ACC) da
 ‘What Tarou wonders is whether his resume is adequate or not.’

Given that the indirect question *syokureki ga zyuubun ka dou ka* is not an island for extraction (43-a), and is “permeable” to case marking from an external case assigner (45-b), independent grounds for ruling out pseudoclefting of the accusative-quotative complement in (46-b) have been removed, but the sentence is bad regardless. This unacceptability of (46-b) is stronger support for the claim that the accusative subject and the complement clause don’t form a constituent, assuming the conditions for clefting that Tanaka (1992) was referring to.

5.2.3 Clefting arguments from accusative-quotatives

But there are other formulations of the conditions for clefting, and other ways to use pseudoclefts to explore the structure of accusative-quotative constructions. First let’s confirm that an accusative subject can be clefted out of an accusative-quotative construction:

- (47) Tarou-ga zyuubun ka.dou.ka(*-o) utagatte.iru no-wa
 Tarou-TOP be.adequate whether(-ACC) doubt NMZ-TOP
 syokureki-o da.
 resume-ACC da
 (lit.) ‘What Tarou wonders whether to be adequate or not is his resume.’

Because the complement clause stays in complement position, a quotative *to* phrase is possible as well:

- (48) Tarou-ga zyuubun ka.dou.ka to utagatte.iru no-wa
 Tarou-TOP be.adequate whether COMP doubt NMZ-TOP
 syokureki-o da.
 resume-ACC da
 (lit.) ‘What Tarou wonders whether to be adequate or not is his resume.’

Note that because (for some reason) *-ga* marked subjects never directly precede the copula in argument gapped pseudoclefts with case marked nominal copula complements, the nominative counterpart to (48) (viz. *...*syokureki ga da*) is unavailable.

Koizumi (1995) argues that when multiple constituents appear as copular complements in a Japanese pseudocleft construction, there is a requirement that they be “clausemates.” This notion has been used to examine the question of constituent membership for the accusative subject by Y. Takano (2002a, 2003); Hiraiwa (2001); Tanaka (2002), etc.

For example, Hiraiwa (2001) shows that a matrix subject and an embedded indirect object can’t be clefted together:

- (49) *? [t_i [Mary_{*i*}-o t_j multe.i.nai to] omotta no]-wa John_{*i*}-ga
 Mary-ACC not.be.suited COMP felt NMZ-TOP John-NOM
 sono.sigoto_{*j*}-ni] da.
 that.job-DAT COP
 (lit.) ‘It is John to the job that considers Mary to be not suitable.’

(adapted from Hiraiwa (2001, pg. 72, #13c))

The result in (49) conforms to the predictions of Koizumi’s (1995) clausemate condition.²⁷ But, Hiraiwa (2001) also finds (50)— in which an accusative subject appears together with an embedded indirect object — to be acceptable:

- (50) John-ga [t_i t_j multe.i.nai to] omotta no-wa [Mary_{*i*}-o
 John-NOM not.be.suited COMP felt NMZ-TOP Mary-o
 sono.sigoto_{*j*}-ni] da.
 that.job-DAT COP
 (lit.) ‘It is Mary to the job that John considers to be not suitable.’

(adapted from Hiraiwa (2001, pg. 72, #13a) (Hiraiwa’s judgment))

Acceptability for (50) would suggest that the two constituents can be analyzed as being contained in the same minimal clause, in spite of a preponderance of independent evidence for the view that the accusative subject is in a matrix argument position.

Hiraiwa (2001, pg. 72, #13b) also finds support for the analysis of accusative subject as matrix argument in the next example, where a matrix subject and an accusative subject appear together as copular complements. Hiraiwa (2001) judges the sentence to be acceptable:

²⁷See Takano (2002b, pg. 245, #8) for similar observations.

- (51) [t_i t_j sono.sigoto-ni multe.i.nai to] omotta no-wa John_i-ga
 that.job-DAT not.be.suited COMP felt NMZ-TOP John-NOM
 Mary_j-o da.
 Mary-ACC COP
 (lit.) ‘It is Mary to the job that John considers to be not suitable.’

(adapted from Hiraiwa (2001, pg. 72, #13b))

The acceptability of both (50) and (51) is inconsistent with what we would predict given Koizumi’s (1995) clausemate condition . Hiraiwa’s conclusion is that “raising” is optional.

Predictably, Tanaka (2002, pg. 647, #37b) takes issue with judgments of the sort in both (51) (Hiraiwa’s (2001, pg. 72, #13b)) and (50), (Hiraiwa’s (2001, pg. 72, #13a)) dismissing such examples as bad. I also have not been able to find a native speaker who accepts (51) as grammatical.

Hiraiwa and Ishihara (2002, pg. 45, #29a,b) note that the clausemate condition for multiple case marked foci in a cleft sentence is not observed when the clefted phrases are *wh*-phrases:

- (52) Naoya-ga Mary-ga nonda to iituketa no-wa dare-ni
 Naoya-NOM Mary-NOM drank COMP tattled NMZ=TOP who-DAT
 nani na no?
 what COP Q
 ‘To whom, what, is it that Noaya told that Mary drank?’

Tanaka (2002, pg. 643, #23b,24b) sees the restriction as more strict, claiming that Japanese permits multiple foci for pseudoclefted sentences only if those foci 1) are *wh*-phrases, and 2) are clausemates. Still, he would not in principle disagree with

the idea that the accusative subject and the matrix subject are clausemates. Here is Tanaka's evidence:

- (53) a. t_i t_j [t_j Gengogaku-ni kuwasii to] omotte.iru no-wa
 Linguistics-with familiar COMP think NMZ-TOP
 [dare_i-ga dare_j-o] na no?
 who-NOM who-ACC COP NMZ
 (lit.) ‘It is who_i of whom_j that t_i thinks t_j as being familiar with lin-
 guistics?’
- b. * t_i [t_j Gengogaku-ni kuwasii to] omotte.iru no-wa
 Linguistics-with familiar COMP think NMZ-TOP
 [dare_i-ga dare_j-ga] na no?
 who-NOM who-NOM COP NMZ
 (no gloss)

(adapted from Tanaka (2002, pg. 643, #23b,24b))

According to these assumptions, (53-a) is acceptable because an accusative subject is a clausemate of the subject of the predicate selecting an accusative-quotative complement, while (53-b) is ruled out (Tanaka argues) because the matrix subject is paired with a downstairs subject. Actually, this minimal pair is not suited for deciding the point at issue because nominative marked noun phrases never appear as sole or final elements in the focus of clefted sentences (e.g., *Kinoo piza o tabeta no wa Mary (*ga) da* ‘Who ate pizza yesterday was Mary’ (Sadakane and Koizumi: 1995, #8a)).²⁸ (As a non-final element in a multiple argument focus, a nominative subject (or nominative object) *can* appear with overt nominative marking.)

²⁸See Takano (2002b, pg. 294, fn. 1), Kubota and Smith (2006, fn. 4), and Koizumi (2000, Appendix A) on this point.

The existence of examples clefting multiple arguments suggests that Tanaka’s (1992) assumption that there is a requirement that the copular complement in a clefted sentence be comprised of a single constituent is not the right generalization.

With regard to which positions in an accusative-quotative construction may be gapped to form a specificational pseudocleft, judgments differ. A conservative stance would hold that to the extent that (53-a) is acceptable, that is evidence that the accusative subject occupies a matrix argument position, reasoning from Koizumi’s (1995) clausemate requirement.

5.2.4 Embedding pseudoclefts in quotative complements

It is finally time to examine the **Negative prediction** with which I began Section 5.2.

5.2.4.1 Previous research

Various illuminating observations have been made regarding the possibilities for clefting accusative-quotative constructions. I will review the most important points that come out of the literature for languages other than Japanese briefly below. But the possibility of embedding pseudoclefted sentences in accusative-quotative constructions has remained unexamined until now.

With regard to this point in general, some observations have been made concerning English.²⁹ Bresnan and Grimshaw (1978, pg. 333, #14b) note that “interrogative complements” don’t fit well into small clause constructions (*?He considers whose shoes are muddy to be unimportant*), but are improved by topicalization (*Whose*

²⁹There is a proliferation of terminology in these studies, but hopefully the gist will be clear.

shoes are muddy, he considers unimportant) (Bresnan and Grimshaw: 1978, pg. 333, #16a).

Higgins (1979, Ch. 6) observes that the (referring) free relative in predicational pseudoclefts can undergo subject raising to subject, and subject-verb inversion, but the (non-referring) *wh*-phrase in a specificational pseudocleft cannot (1979, pp. 315, 316, #67a,b).

Hankamer (1974, pg. 227) claims that the same sort of **Negative prediction** that I make for Japanese above holds for English subject to object raising sentences (but judgments vary): Some English speakers will accept sentences like *The inspectors believe what caused the accident to have been the faulty brake fluid line on the left side*, but some reject them.

Williams (1997, pg. 21) observes that “the small clause construction with *consider* cannot be specificational: ...I consider John the mayor; *I consider the mayor John...” Williams (1997, pg. 22) supposes that in small clauses the relation between an accusative subject and a nominal predicate can only be an “aboutness relation.”

den Dikken (2001, pp. 35,36,41,45,46,55–58), Hankamer (1974); Williams (1983b); Heggie (1988), and Moro (1997) look at whether [variable \prec value] statements can embed into accusative subject constructions and small clause constructions. English seems to allow the former (for non-predicate foci) but not the latter (in any case whatsoever (Heycock and Kroch: 1999, pg. 374)). Whether subject raising to subject is allowed is not entirely clear. Williams (1983b) assumes that the free relative in a specificational pseudocleft is a predicate, and that predicates in general can’t raise, but also notes that the data for accusative subjects is not clear: Some English speakers accept sentences like *What caused the accident seems to have been the faulty brake*

fluid line on the left side, but some reject them.

Ogihara (1987) claims that pseudoclefts “can be used appropriately in exactly the same situations” as what he calls “obligatory focus” constructions (i.e., [“exhaustive listing *ga* + individual-level predicate]) of equivalent truth value. Ogihara claims, in fact, that such pairs of construction types are equivalent in felicity conditions.

Examinations of specificational pseudoclefts embedded entire in quotative complements is almost non-existent. Semantic treatments of Japanese pseudoclefts do exist (e.g., Komagata (1996); Kubota and Smith (2005, 2006)), but the field is relatively new. The most recent comprehensive treatment in syntax is Kizu (2005), who also happens to give three tokens of specificational pseudoclefts embedded entire in nominative-quotative constructions. These comprised the whole of the data I have been able to find in the literature (discussed in the next Section). It appears that the unacceptability of specificational pseudoclefts as accusative-quotative complements has been un-noted up until now.

5.2.4.2 Data for Japanese

If there is any example from Kizu (2005) that I should cite it is the following:

- (54) a. Tarou.to.Hanako_i-ga [sensei-gata_j-ga otagai_{*i/j}-ni
 Tarou.and.Hanako-NOM sensei-PLRL-NOM each.other-DAT
 tayotte.iru to] omotte.iru.
 depend COMP think
 ‘Tarou and Hanako think that the teachers relied on each other.’
- b. Tarou.to.Hanako_i-ga [[sensei-gata_j-ga e tayotte.iru no]-wa
 Tarou.and.Hanako-NOM sensei-PLRL-NOM depend NMZ-TOP

otagai_{i/j}-ni da to] omotte.iru.
 each.other-DAT COP COMP think

‘Tarou and Hanako think that it was each other that the teachers relied on.’

(adapted from Kizu (2005, pp. 115–116, #26a,b))

This is one of the few examples of a specificational pseudocleft embedded in a quotative complement that I have been able to find in the literature.³⁰ In all the examples, the pseudocleft is the embedded clause in a nominative-quotative construction. Kizu produced this example to show how the matrix subject is able to bind the reciprocal in the focus of the embedded pseudocleft sentence, and the embedded subject is also able to bind the reciprocal as well.

Independently from this, I would like to call attention to the fact that an analogous accusative-quotative complement is unacceptable:

- (55) *Tarou.to.Hanako-ga [[sensei-gata-ga e tayotte.iru no]-o
 Tarou.and.Hanako-NOM sensei-PLRL-NOM depend NMZ-ACC
 otagai-ni da to] omotte.iru.
 each.other-DAT COP-PAST COMP think

(intended) ‘It was each other that Tarou and Hanako considered who the teachers rely on to be.’

(derived from Kizu (2005, pg.116, #26b))

The reason is that argument gapped *no*-headed topics appearing with copular predicates that have case marked noun phrases as complements are unambiguously spec-

³⁰There are others from the same source: Kizu (2005, pp. 117–118, #30a,b; pg. 121, #34b). For illustrating my particular point, (54-b) serves as well or better than any of the others.

ificational. Specificational pseudoclefts cannot appear as the clausal complements of accusative-quotative constructions. When the interpretation of a pseudocleft is ambiguous and it appears as in an accusative complement, its interpretation will be predicational.

5.2.4.3 Analogous data

There are some other predicational relationships that don't fit in accusative-quotative complements. One is that between category and avatar (or in Martin's (1975, pg. 251) terminology, "exemplary" sentences):

- (56) Ii hansyou(to.iu.no)-wa kono reibun da. (Ii hansyou to site kono reibun ga aru.)

Good counterevidence(what.is.called)-TOP this example.sentence COP

'A good counterexample is this example sentence.'³¹

Here is another example where the identified is in subject position and the identifier is the predicate nominal:

- (57) Kaze-ga kuru tokoro-wa koko da.
Wind-NOM come place-TOP here COP

'The place where the wind hits is here.'

³¹Martin (1975, pg. 251) gives *Sakana wa tai (ni kagiru no) da* '(When it comes to) fish, (it) is sea bream (that is the best)' as token of an exemplary sentence.

Neither of these sentences (in the interpretations suggested) can serve as the source for the complement in an accusative-quotative construction.

5.2.4.4 Connectivity

The distinction between predication and specificational pseudoclefts comes from Akmajian (1970) and Higgins (1979). Higgins claims that only specificational pseudoclefts exhibit “connectedness,” a phenomenon in which elements in the focus behave for the purposes of binding as though they were c-commanded by arguments in the non-referential phrase (e.g., *What Mary found in the box was a poem about *her/herself*). Predicational pseudoclefts do not exhibit this behavior (e.g., *What Mary found in the box was of great concern to her/*herself*).³²

Let’s see whether Higgins’s claim can be extended to Japanese.

- (58) a. [Tarou to Hanako]_i-ga suki na no-wa otagai_i-no
 Tarou and Hanako-NOM fond COP NMZ-TOP each.other-GEN
 koto da.
 matter COP
 ‘Who Tarou and Hanako like is each other.’
- b. [Tarou to Hanako]_i-ga sorezore kaita no-wa
 Tarou and Hanako-NOM respectively drew NMZ-TOP
 otagai_i-ni sokkuri da.
 each.other-DAT spitting.image COP

³²Some of the examples that are used in English to show this distinction (or ambiguity, as in *What John is is foolish*) are unavailable in Japanese, because in Japanese, a predicate cannot be clefted. This is similar to the way that English it-clefts fail to cleft predicates (Heggie: 1988, 1993; Matsuda: 1997) (e.g., **It is brave that is what Sally is*), as opposed to English pseudoclefts (e.g., *What Sally is is brave*), which can cleft predicates ((Kizu: 2005, 207, fn. 2; pg. 208, fn. 6), den Dikken (2001, pg. 295, #7,12)) den Dikken (2006) in Everaert and van Riemsdijk (2006).

‘What Tarou and Hanako respectively drew was the spitting image of each other.’

Note that binding condition A is satisfied in (58-a). The pseudocleft in (58-a) is specificational, so this connectedness is predicted. But against Higgins’s prediction, the predicational pseudocleft in (58-b) also exhibits connectedness. The reciprocal (*otagai* ‘each other’) is licensed by an antecedent that doesn’t c-command it. In fact, a relative clause with a lexical head like *nigao’e* ‘portrait, likeness’ would allow binding of the reciprocal in (58-b) to be licensed just as well, so binding condition A (in this configuration at least) obviously doesn’t constitute a test for connectivity.³³

Kizu (2005, pg. 37, #53a,b) performs similar experiments, not to look for connectivity contrasts between specificational and predicational pseudoclefts, but to explore the structure of specificational pseudoclefts.

- (59) a. Tarou_i-ga e semeta no-wa zibun_i da.
Tarou-NOM accused NMZ-TOP self COP

‘It was himself that Tarou accused.’

³³Komagata (1996, pg. 14) makes a similar criticism of an example Inoue (1976, #183a) offered to show connectivity: *Tyanpion ga ziman sita koto wa zibun no tuyosa da* ‘The thing which the champion boasted of is his strength’.

- b. Tarou to Hanako_i-ga hihan.sita no-wa otagai_i-no
 Tarou and Hanako-NOM criticize NMZ-TOP each.other-GEN
 ronbun da.
 paper COP

‘It was each other’s papers that Tarou and Hanako criticized.’

(adapted from Kizu (2005, pg. 37, #53a,b))

Komagata’s (1996) and my criticism applies to her examples as well. A lexical head like *hito* ‘person’ in place of nominalizer *no* for (59-a) and another like *sakuhin* ‘work’ as a substitute in (59-b) would result in grammatical sentences (at least for some native speakers).

We either need to use a different binding condition (B or C), or a different anaphor.

For binding condition A, Komagata (1996, pg. 19, #75) uses the local, subject-oriented anaphor *zibun zisin* ‘one’s own self’ instead of *zibun*, and shows lack of connectivity in a predication pseudocleft: Only the matrix subject can bind the anaphor:

- (60) Naomi_i-wa [[Ken_j-ga yonda] no-ga kageki.de osoraku
 Naomi-TOP Ken-NOM read NMZ-NOM radical probably
 zibun.zisin_{i/??j} ni.tuite.no.hihan de-mo-ar-u to] itta.
 oneself criticism.about COP-also-COP-PRES COMP said

‘Naomi said that what Ken read was radical and also probably a criticism of oneself.’

(adapted from Komagata (1996, pg. 19, #75))

If there is connectivity in specificational pseudoclefts, we would expect both subjects to be able to bind the anaphor in (61):

- (61) Naomi_i-wa [[Ken_j-ga yonda] no-ga rei.no
 Naomi-TOP Ken-NOM read NMZ-NOM the.aforementioned
 zibun.zisin_{??i/j} ni.tuite no hihan da to] itta.
 oneself about COP criticism COP COMP said
 ‘Naomi said that what Ken read was that criticism about herself/himself.’
 (adapted from Komagata (1996, pg. 19, #72) (Komagata’s judgment))

Given that the embedded subject *Ken* can bind the anaphor in the matrix copular complement noun phrase, there does appear to be connectivity for specificational pseudoclefts (without c-commanding it). According to some analyses, the clefted element *zibun zisin ni tuite no hihan* ‘criticism about self’ is supposed to have “reconstructed” to an object position in the quotative complement clause.

Kizu (2005) also uses *zibun-zisin* to come to the conclusion that there is indeed connectivity in specificational pseudoclefts. But Kizu finds that if the clefted elements correspond to arguments in a quotative complement of the clause in the non-referential phrase (62-b), there is no connectivity:

- (62) a. Tarou_i-ga [Hanako_j-ga zibun.zisin_{*i/j}-ni yasasi-sugiru to]
 Tarou-NOM Hanako-NOM self.same-DAT easy-exceed COMP
 omotte.iru.
 think
 ‘Tarou thinks that Hanako is too kind to her/*himself.’
 b. [Tarou_i-ga [Hanako_j-ga e yasasi-sugiru to] omotte.iru
 Tarou-NOM Hanako-NOM easy-exceed COMP think
 no]-wa zibun.zisin_{i/*j}-ni dat-ta.
 NMZ-TOP self.same-DAT COP-PAST
 ‘It was him/*herself that Tarou thought Hanako was too kind to.’

(adapted from Kizu (2005, pg. 112, #20ab))

This Kizu calls “long-distance clefting.” Here are two more examples, but using the long-distance anaphor *zibun* ‘self’:

- (63) a. Tarou_i-ga [Hanako_j-ga zibun_{i/j}-no hahaoya-ni atta to]
 Tarou-NOM Hanako-NOM self-GEN mother-DAT met COMP
 sinzite.ita.
 believed
 ‘Tarou believed that Hanako met his/her own mother.’
- b. [Tarou_i-ga [Hanako_j-ga e atta to] sinzite.ita no]-wa
 Tarou-NOM Hanako-NOM met COMP believed NMZ-TOP
 zibun_{i/*j}-no hahaoya-ni dat-ta.
 self-GEN mother-DAT COP-PAST
 ‘It was his/*her own mother that Tarou believed that Hanako met.’

(adapted from Kizu (2005, pg. 106, #10a,b))

- (64) a. Tarou_i-ga [Hanako_j-ga zibun_{i/j} ni.tuite hanasita to] omotta.
 Tarou-NOM Hanako-NOM self about spoke COMP thought
 ‘Tarou thought that Hanako talked about himself/herself.’
- b. [Tarou_i-ga [Hanako_j-ga e hanasita to] omotta no]-wa
 Tarou-NOM Hanako-NOM spoke COMP thought NMZ-TOP
 zibun_{i/*j} ni.tuite dat-ta.
 self about COP-PAST
 ‘What Tarou thought that Hanako talked about was himself/*herself.’³⁴

(adapted from Kizu (2005, pg. 106, #11a,b) (Kizu’s gloss))

In “long distance clefts,” it seems, connectivity is disallowed for specificational pseudoclefts.

³⁴Kizu (2005, pg. 220, fn. 11) acknowledges that the focus in (64) is a PP but claims NPs show no difference to PPs with respect to reconstruction effects.

Here we might expect connectivity from an accusative subject clefted out of an accusative-quotative construction, on the grounds that it is not included in the quotative complement of the source sentence, but no test is available: The anaphora are subject-oriented and the argument to be clefted is itself the subject. In such a case we cannot cleft an argument containing the anaphor separate from the antecedent to that anaphor.

Kizu (2005, pg. 107) finds that “the focus phrase is not reconstructed to its theta position in long-distance clefts.” To show the generality of the claim, Kizu (2005, pg. 108, #12a,b) examines variable-binding and finds no connectivity there.

- (65) a. Sono.gakusya_i-ga [daremo_j-ga zibun_{i/j}-no bunseki-ni
 That.scholar-NOM everyone-NOM self-GEN analysis-DAT
 tayotte.iru to itta.
 depend COMP said
 ‘That scholar said that everyone depended on self’s analysis.’
- b. Sono.gakusya_i-ga [daremo_j-ga *e* tayotte.iru to itta
 That.scholar-NOM everyone-NOM depend COMP said
 no-wa zibun_{i/*j}-no bunseki-ni dat-ta.
 NMZ-TOP self-GEN analysis-DAT COP-PAST
 ‘It was self’s analysis that that scholar said everyone depended on.’

(Kizu: 2005, pg. 108, #12a,b)

In (65-b), if the anaphor in the matrix copular were able to reconstruct to an argument position in the quotative complement clause in the non-referential phrase, it would be able to co-vary with the value assignment of the universally quantified subject of that clause. But it cannot.³⁵ The presence or absence of connectivity is important here to

³⁵Incidentally, Mineharu Nakayama (p.c.) notes that bound variable reference with an antecedent in the presuppositional phrase is possible (indeed, *forced*) with the local anaphor *zibun zisin*:

the extent that it indicates the distinction between specificational pseudoclefts and predicational ones. Next we consider another area where the distinction needs to be clarified.

5.2.4.5 Noun substitution with lexical covert questions

Some researchers include in the class of pseudoclefts constructions in which a lexical “covert question” such as *amount*, *whereabouts*, *identity*, *answer*, etc. appears in place of the variable argument (in English, the *wh*-phrase, in Japanese, the nominalizer *no*): *The price was \$39.99*. Topics that take this form all seem to be referential, however. First note how the example with connectivity (66-b) specifies the amount:

- (66) a. What John borrowed was enough to put him through Law School.
 b. What John borrowed was enough to put himself through Law School.

While the example with connectivity (66-b) specifies the amount, the example without connectivity (66-a) merely attributes to the amount a property. Similar to (66-a), the copular clause with a lexical “covert question” as subject in (67) has only a predicational meaning, and shows no connectivity:

- (67) The amount John borrowed was enough to put him/*himself through Law School.

i. Tarou-wa daremo-ga ai-site.iru to sinzite.iru no-wa zibun.zisin-no hahaoya da.
 Tarou-TOP everyone-NOM love-do COMP believe NMZ-TOP self-GEN mother COP

It is impossible for a lexical noun phrase to substitute for the nominalizer in Japanese specificational pseudoclefts. If nominalizer *no* in the topic phrase is replaced by a suitable lexical noun, the resulting topic is a referring relative clause noun phrase (e.g., *Tarou ga tabeta mono wa piza da* ‘That thing that Tarou ate was (a) pizza’).

Furthermore, *ga/no* conversion is also impossible for specificational pseudoclefts. Here too, if the case marking of the subject argument in the topic phrase is converted from *ga* to *no* (as is normally possible in transitive predicate relative clauses), the resulting topic phrase becomes a referring relative clause noun phrase (e.g., *Tarou no tabeta no wa piza da* ‘The one that Tarou ate was (a) pizza’).

The inability to substitute an appropriate lexical noun for the nominalizer *no* in the *no*-headed phrase and preserve meaning suggests that the topic phrases of specificational pseudoclefts are not simply relative clause noun phrases referring to entities.³⁶ Their semantic function is similar to the *wh*-phrase in an information question.

5.2.5 Referential and non-referential *no*-headed topics

The crux of my argument about the inadmissibility of specificational pseudoclefts embedded in accusative-quotative constructions as quotative complements is this:

³⁶Kizu (2005, pp. 8, 57–99) claims that the particle *no* in the non-referential phrase of clefted sentences is a complementizer and not a nominalizer. She bases this claim on a comparison of such elements with internally headed relative clauses, which are commonly analyzed as being CPs. However, if there are parallels in distribution, they end at the accusative subject position, where internally headed relative clauses are acceptable, but non-referential phrases of specificational pseudoclefts don’t appear.

- i. Ore-wa [kaban-ga kauntaa-ni notte.iru no]-o tuma-ga wasurete.itta yatu da
I-TOP handbag-NOM counter-LOC is.seated NMZ-ACC wife-NOM forget.went item COP
to omou kedo...
COMP think but ...
‘I believe that bag on the counter to be the one my wife left, but ...’

I don’t assume that the *no*-headed phrase in question is a CP. Surface form and semantic function suggest it is a nominalization.

Accusative subjects must refer, but the *no*-headed topics of specificational pseudoclefts never refer. In a predicational pseudocleft, the *no*-headed topic always refers.³⁷ In the case of pseudoclefts with definite noun phrases in the copular complement, the interpretations are ambiguous between predicational (68-a) and specificational pseudoclefts (68-b), and not always resolvable by context.³⁸

- (68) Hanako-ga e katta no-wa sono.hon da.
 Hanako-NOM e bought NMZ-TOP that.book COP
 a. ‘The one that Hanako bought was that book.’
 b. ‘What Hanako bought was that book.’

(adapted from Kizu (2005, pg. 66, #18a))

For both interpretations the subject noun phrase carries with it a presupposition of existence. But for the predicational interpretation in (68-a), it can be claimed that reference to an individual is involved. The individual 1) has speaker/hearer-known properties other than that denoted by the definite description, and 2) is retrievable from context by virtue of those properties.

This does not necessarily obtain in the case of a specificational interpretation such as that indicated by the gloss in (68-b).³⁹ The same holds for English:

³⁷Iatridou and Varlokosta (1998, pg. 23) imply that both Higgins (1979) and Williams (1983b) assume that the free relatives in predicational pseudoclefts are always referring expressions.

³⁸Sharvit (1999) cites a variety of ways to differentiate between predicational and specificational pseudoclefts. Komagata (1996) offers some specifically for Japanese. Higgins (1979) claims that “connectedness” is only seen in specificational pseudoclefts. Iatridou and Varlokosta (1998, pg. 9) assume that (strong) quantifiers cannot function as predicates, so a pseudocleft sentence with strongly quantified nominal predicate must be specificational (an over-generalization, given that equational pseudoclefts are a subclass of predicational pseudoclefts) — But also note that Partee (1986) finds cases in which universally quantified noun phrases can act as predicates: *John is everything his mother wanted him to be* (Iatridou and Varlokosta: 1998, pg. 9, fn. 7, #i).

³⁹The referent of a non-referential phrase can be discourse familiar to some extent (e.g., we might know that Socrates drank something, and that what Socrates drank was some kind of poison).

- (69) a. *Context: Nobody hiked in. Everybody rode a wheeled vehicle.*

What/The one Mary rode was an all-terrain vehicle.

- b. *Context: Nobody hiked in. Everybody rode something.*

What/*The one Mary rode was an all-terrain vehicle.

The distinction is as subtle in Japanese as it is in English because the *no*-headed noun phrase (as a subject) is a form (like the *wh*-phrase in English) is ambiguous between the two interpretations, and the ambiguity is not always resolved by context.⁴⁰

The non-referential phrase of a specificational pseudocleft is sometimes analyzed as a “covert question,” with respect to which the copular predicate provides the answer. Williams (1983b) takes the view that the subjects in specificational sentences are non-referential. Mikkelsen (2004, pg. 69) follows this idea, proposing that they are type $\langle e, t \rangle$, and that this has consequences for their distributional possibilities in discourse.

Bare common nouns in Japanese can function as predicates denoting sets of entities.⁴¹

In Japanese, root copula constructions with bare common noun predicate nominals can be ambiguous between a predication interpretation (70-a) and a specificational

But the expression interpreted as a non-referential phrase is, for the purpose of the utterance, the set of entities that share the properties included in the description (plus a presupposition of existence — similar to the *wh*-phrase in a question). The copular predicate is, in this context, a mapping to a specific value in that set (an answer): *What Socrates drank was hemlock*. Logically and informationally, this mapping entails set membership. For this reason, some treat the non-referential phrase as a predicate, and the copular complement as an underlying subject.

⁴⁰In contrast to its versatility as a topic, Komagata (1996, pp. 11–12) notes that as a predicate nominal, the possibilities of the *no*-headed noun phrase are much more limited.

⁴¹Takubo (2005, pg. 8) notes that a Japanese bare common noun “can be vague in interpretation between referential and non-referential, i.e., it refers to either a definite or a specific individual, or any individual for which the property described by the common noun is true...” Dowty et al. (1981, pp. 182, 187–189) note that while English common nouns and intransitive verbs are of different syntactic categories, they are of the same semantic type $\langle e, t \rangle$. For Japanese, Komagata (1996, pg. 4) notes that bare common nouns in “second copular position” (i.e., in the function of predicate nominals) can be either of type *e* or of $\langle e, t \rangle$, the latter being the un-marked option.

one (70-b), depending on various factors, such as the semantic type of the subject. Since the *no*-headed noun phrase is ambiguous between a free relative and a definite description, the interpretation of the bare common noun predicate nominal can also shift between the name of a class and a property:

- (70) Tarou-ga suki na no-wa zebura da.
 Tarou-NOM fond COP NMZ-TOP zebra COP
 a. ‘The ones that Tarou likes are zebras (i.e., they all have the “zebra” property).’
 b. ‘What Tarou likes is zebras (i.e., the kind, zebras).’

With bare common noun nominal predicates, there is a tendency to pair a non-referential phrase reading of a *no*-headed subject noun phrase with the “kind” interpretation of the predicate nominal, yielding a special kind of sentence: a specificational pseudocleft.

With unambiguously property-denoting predicates (adjectivals, adjectival nominal predicates, stative verbal predicates, etc.), the non-referential phrase reading of a *no*-headed subject noun phrase is impossible to get. A sentence like (71) below will be used in a discourse context where a discourse familiar group is “activated,” so that the referent fitting the description in the *no*-headed subject noun phrase is partitive:

- (71) Hanako-ga suki na no-wa suppai.
 Hanako-NOM fond COP NMZ-TOP sour
 ‘The ones Hanako likes are sour.’

With definite noun phrase nominal predicates (and no particular context provided), there is a tendency to read a *no*-headed topic as a non-referential phrase, giving the whole expression the interpretation of a specificational pseudocleft. In fact, providing an activated superset in the discourse context (e.g., *object* in (72) below) doesn't prevent a specificational reading:

(72) *Context: He presented his child Daigoro with two objects: a ball and a dagger.*

Daigoro-ga eranda no-wa migigawa-no wakizasi desi-ta.

Daigoro-NOM chose NMZ-TOP right.side-GEN dagger COP-PAST

- a. 'The one Daigoro picked was the dagger on the right side.
- b. 'What Daigoro picked was the dagger on the right side.'

The non-referential phrase reading is still readily available. Note that in the case of the specificational pseudocleft, the referent of the copular complement that supplies the value does not have to be taken from an activated set; It just has to be specific with respect to the speaker: *Daigoro ga eranda no wa sono tikaku ni atta suzuri da* 'What Daigoro picked was an inkstone from nearby'.

According to Sharvit (1999) it is customary to treat the non-referential phrase and the copular complement of the specificational pseudocleft as having identical denotations. But this is a misleading way to characterize what is going on: From the point of view of information state at least, they are in a relationship similar to that between question and answer. In this sense the *no*-headed phrase of a specificational pseudocleft does not denote a unique entity, and is not a "referring" expression. In fact, the *no*-headed phrase of a specificational pseudocleft denotes a set of entities that satisfy the description it forms, and is accompanied by a presupposition that the intersection of that set and the contextual domain is not empty. The denotation of the copular

complement is extensionally equivalent to the intersection of those sets. In this sense, the *no*-headed phrase of a specificational pseudocleft is just like a predicate.

A sentence with a *no*-headed subject noun phrase and a bare common noun as nominal predicate (such as (73-a) below) must be interpreted as predication if the *no*-headed phrase refers (i.e., is either specific indefinite, partitive or definite in reference). A specificational interpretation can be had if the *no*-headed topic is non-referring and forms a description that partitions the contextual domain. But a referring *no*-headed subject noun phrase paired with a definite noun phrase copular complement is interpreted as an equational pseudocleft.

There are some cases where what appears to be a definite noun phrase predicate nominal actually is property denoting (e.g., *Ore ga eranda no wa itiban teki sita zinbutu da* ‘Who I picked is the best person for the job’) but they tend to appear with *no*-headed clauses that are difficult to interpret as non-referential. In fact, constructions so formed can bear a strong surface resemblance to specificational pseudoclefts: *Ore wa wareware ga mituketa no o yui’itu no tokikata da to omotte iru* ‘I consider what we found to be the only solution’, etc.) — den Dikken (2001, pg. 30) cites Declerck (1988, pg. 32) as saying that when exhaustiveness is an entailment, adding *only* to the copular complement will block the specificational reading.

Now consider Takemura’s (1975-1976) observation that accusative subjects must be at least specific. When we embed a pseudocleft sentence with an ambiguous form in an accusative-quotative construction, the result is a predication interpretation for the complement: *??Ore wa wareware ga sagasite iru no o itiban teki sita zairyou da to omotte iru* ‘I consider what we are looking for to be the best material for the job’. Such a sentence would be pragmatically acceptable in a situation where *we* are searching for something familiar, but *I* don’t want to use that item’s name. But it

cannot be interpreted as embedding a specificational pseudocleft.

Let's sum up:

1. Predicational pseudoclefts invariably have referential phrases as topics.
2. Adjectival predicates and nominal-adjective predicates (also known as “adjectival verbs”) only appear in the copular complement in pseudocleft sentences when paired with referential *no*-headed topics.
3. Referential *no*-headed topics can pair with definite noun phrase nominal predicates. The result is typically an equational pseudocleft (a sub-class of predicational pseudoclefts).
4. Non-referring argument-gapped *no*-headed topics only pair with definite noun phrase nominal predicates.
5. Pseudoclefts with case marked noun phrases as predicate nominals in the copular complement are unambiguously specificational.
6. Specificational pseudocleft sentences cannot be expressed as accusative-quotative complements. Ambiguous pseudocleft sentences will be interpreted as predicational in that context.

That no property can be ascribed unless it be of an entity (cf. W. C. Williams's (1944) famous dictum “no ideas but in things”) seems to find confirmation in the distribution of referring expressions in predicational pseudoclefts.⁴² Once this is understood,

⁴²The notion that properties can only be attributed to entities is sometimes offered as a rough formulation of Milsark's Generalization (1977, pg. 16). Entities are part of the basis for the formation of “categorical judgments” the judgment type that subsumes property ascription in the philosophy Kuroda (1972a,b) introduced to modern linguistic research from the work of Brentano (1873)(1874) and Marty (1908, 1918). It is also operative in the distinction between stages and individuals in Carlson (1977a,b), and the definition of predicate types therein.

the distribution the class of pseudoclefts in accusative-quotative complements is predictable. The need to appeal to semantic principles in this case might be seen as independent motivation for a semantic approach to the conditions on embedding *wh*-accusative subjects construed in questions in the accusative-quotative complement. Clearly, in the case of specificational pseudoclefts the problem is not a matter of scope.

But observation # 6 in the list above (viz. the **Negative prediction**) is only a robust generalization if we make a further distinction having to do with verb types. This will allow us to exclude certain apparent counter-examples from the data set.

5.2.6 Specificational verbs

It appears that some matrix verbs that subcategorize for questions (e.g., *kimeru* ‘decide’; *atete miru* ‘try and guess’; *suisoku suru* ‘infer’; *zimon suru* ‘ask oneself’, etc.) are able to embed specificational pseudocleft sentences as accusative-quotative constructions:

- (73) Tarou_i-wa (zibun_i-no) itiban.suki.na-no-o Mariko da to
 Tarou-TOP (self-GEN) most.fond.be-NMZ-ACC Mariko COP COMP
 kimeta.
 decided
 ‘Tarou decided who he liked best as being Mariko.’

But in fact, in many cases the accusative element in these constructions is a thematic argument. Recall the entailment test and the subject/predicate inversion test discussed in Section 2.8. If (73) above is true, then (74-a) is entailed. If (74-a) is entailed, the subject/predicate inversion in (74-b) is predicted to go through.

- (74) a. Tarou_i-wa (zibun_i-no) itiban.suki.na-no-o kimeta.
 Tarou-TOP (self-GEN) most.fond.be-NMZ-ACC decided
 ‘Tarou decided who he liked best.’
- b. Mariko da to Tarou_i-wa (zibun_i-no) itiban.suki.na-no-o
 Mariko COP COMP Tarou-TOP (self-GEN) most.fond.be-NMZ-ACC
 kimeta.
 decided
 ‘Tarou decided who he liked best, saying, “It’s Mariko.”’

The structure of (74) then, is actually that of a cognitive matrix verb selecting a thematic object, with a quotative adjunct modifying the verb phrase. This much is clear.

But there’s a subtle difference between (74-a) and (74-b) that I don’t predict. I predict that if the accusative-marked element is a thematic object, then the quotative element functions as a quotative adjunct. But (74-b) is closer to a resultative secondary predicate, as in (75):

- (75) Tarou_i-wa (zibun_i-no) itiban.suki.na-no-o Mariko-ni kimeta.
 Tarou-TOP (self-GEN) most.fond.be-NMZ-ACC Mariko-LOC decided
 ‘Tarou decided who he liked best to be Mariko.’

For many (perhaps all) verbs supporting the resultative secondary predicate pattern, if (75) above is possible, analogous constructions including quotative elements appearing after the thematic argument and before the verb (viz. the construction in (74)) are also perfectly OK: *tukitomeru* ‘ascertain’; *sitei suru* ‘specify’; *siboru* ‘narrow down’; *kagiwakeru* ‘sniff out’; *waridasu* ‘isolate’, etc.⁴³ I suspect that the performative nature

⁴³Analyzing the locative (LOC) particle *-ni* as a non-finite form of the copula may also be considered.

of the verbs in question is involved. Note that when the verb is not illocutionary (that is, when the action denoted does not automatically entail the truth of the proposition expressed in the quotative phrase), the situation is subtly different.

- (76) a. ??Tarou-wa Mariko-no itiban.suki.na-no-o Zirou da to
 Tarou-TOP Mariko-GEN most.fond.be-NMZ-ACC Zirou COP COMP
 atete-mita.
 guess-tried
 (intended) ‘Tarou guessed Mariko’s favorite to be Zirou.’
- b. Zirou da to Tarou-wa Mariko-no itiban.suki.na-no-o
 Zirou COP COMP Tarou-TOP Mariko-GEN most.fond.be-NMZ-ACC
 atete-mita.
 guess-tried
 ‘Tarou guessed who Mariko’s favorite is, saying, “It’s Zirou.” ’
- c. Tarou-wa Mariko-no itiban.suki.na-no-o atete-mita.
 Tarou-TOP Mariko-GEN most.fond.be-NMZ-ACC guess-tried
 ‘Tarou tried to guess Mariko’s favorite.’
- d. *Tarou-wa Mariko-no itiban.suki.na-no-o Zirou-ni
 Tarou-TOP Mariko-GEN most.fond.be-NMZ-ACC Zirou-LOC
 atete-mita.
 guess-tried
 (intended) ‘Tarou guessed Mariko’s favorite to be Zirou.’

For a verb like *atete miru* ‘try and guess’, the resultative interpretation of the quotative complement in (76-a) is ruled out (as is the resultative secondary predicate itself in (76-d)). As the truth of either (76-a) or (76-b) entails the truth of (76-c), we know that the accusative element in (76-a) and in (76-b) is a thematic argument of the matrix verb. The quotative adjunct interpretation is accordingly available. But the position of the adjunct in (76-a) suggests the (unavailable) resultative reading (as the

position between the object and the verb is the only position where such as reading is possible).

Another analysis for (76-a) is possible if we supply a discourse antecedent superset to the accusative noun phrase, allowing it a partitive reference: “Tarou guessed the one who Mariko likes best (identifiable to Tarou) to actually be that man known as Zirou.” *Zirou* is “unmasked,” as it were. Partitive pro-form reference for the *no*-headed phrase makes the sentence become a simple equational pseudocleft (in Kizu’s terms, an “identificational sentence”): *Out of the relevant set, Tarou guessed that particular one that Mariko likes best to be Zirou.* Under such an interpretation, the *no*-headed phrase is a definite description for which identity with *Zirou* is at issue. Under this interpretation too, the sentence is perfectly grammatical, but without a supporting context (such as a masked ball in a comedy of errors) the tendency is to reject the sentence as ungrammatical before arriving at an interpretation with a referential accusative subject. Thus two analyses (the accusative-quotative construction with a *no*-headed phrase, and the resultative secondary predicate construction with a *no*-headed phrase) are ruled out, while two others (the quotative adjunct and the partitive pro-form) are possible. It is this, I suppose, that leads to the somewhat questionable grammaticality of (76-a).

The point at issue, however, is that constructions formed on specificational verbs are string-similar with accusative-quotative constructions, and have the appearance of counterexamples to the **Negative prediction**. If we control for these, the generalization survives.

5.3 Conjectures

den Dikken (2001, pg.7, fn. 2) cites Givon's (1973, pg. 119) universal that "a predicate may never be less general than its subject." Having two predicative constituents, one on either side of the copula in a specificational copular sentences, doesn't compute (den Dikken: 2001, pg.28). This is a matter of logical type. Model-theoretically, a predicate expressing a quality Q denotes the set of entities that share that quality $\{x : Q(x)\}$ (of logical type $\langle e, t \rangle$).⁴⁴ A statement that an entity has quality Q is a statement of set membership: $y \in \{x : Q(x)\}$.

If the embedded complement of an accusative-quotative construction is always a property ascription, then the sort of constituent that functions as a predicate nominal could never appear as an accusative subject. The relation of set membership is not defined in such a case.

Givon's (1973) universal rules out non-specific indefinite noun phrase as accusative subjects, given what we know about the requirements on accusative-quotative constructions. It also explains the distribution of specificational pseudocleft sentences in a principled way, if we understand the non-referential phrase as the more general term, and the and copular complement as the less general (Blom and Daalder (1977), *inter alia*). This non-equative approach is especially appropriate for Japanese, because Japanese specificational pseudoclefts are non-reversible. If it were a pure equative copular relation, it ought (in theory) to be reversible without cost.

The denotation of *wh*-phrases in information questions is harder to pin down. So this argument is harder to extend to the case of embedded questions with *wh*-subjects. But the non-referential nature of the *wh*-phrase (at least in the context of interpretation

⁴⁴Expressions of of logical type $\langle e, t \rangle$ combine with expressions of type e (entities) to yield expressions of type t (truth values).

in which its true value is being questioned) is hard to deny.

A simple requirement that the reference of the accusative subject be identifiable (definite) with respect to the belief world set of the agent of attitude (a contextually restricted “epistemic specificity”) seems to cover all three cases. Even in a case like (77), the referent of the accusative subject noun phrase is uniquely retrievable from some modally accessible world:

- (77) Zirou-wa [tugi.ni.hoomu.ni.agatte.kuru.hito]-o zyosei da
 Zirou-TOP next.person.to.come.up.onto.the.platform-ACC woman COP
 to kaketa.
 COMP bet
 ‘Zirou bet the next person to come up onto the platform to be a woman.’

But a requirement for epistemic specificity can be considered as falling out of a more general requirement that affects not only the possibilities for the referential properties of accusative subjects, but also the possibilities for the types of predicates they co-occur with, and the effect that predication between the two has on the context of interpretation. I am referring of course to the **Semantic/pragmatic constraint**. Without reference to a principle like this, the facts about scope dependencies observed in Chapter 3, and the facts about predication-type observed in Chapter 4 would not also be covered.

CHAPTER 6

CONCLUSIONS

It is not easy to separate pragmatic factors from grammatical judgments. The notion of the autonomy of syntax demands it. But a frequent consequence of assuming that all solutions are syntactic is a failure to recognize the influence of pragmatic factors on the judgments of speakers. The only data we have to work with is comprised of strings of words paired with judgments about them. I assembled a collection of these, then cast about for a theory to fit the facts.

6.1 Coercive techniques

The germ of my basic thesis began with an example sentence from Kuno (1976). The example was intended to demonstrate that accusative-quotative constructions (in this case the sentence *Yamada wa sono hon o omosiroi to omotta* ‘Yamada considered that book to be interesting’) could not feed passive transformations, given that the agentive phrase is not allowed.

- (1) Sono hon-wa (*Yamada-ni) totemo omosiroi to
 That book-TOP Yamada-by very interesting COMP
 omow-are-ta.
 think-PASS-PAST
 ‘To the book’s chagrin, Yamada thought that it was interesting.’

(adapted from Kuno (1976, pp. 44, #103b) (Kuno’s gloss))

Kuno devoted quite a bit of effort to finding a syntactic explanation for the unacceptability of the agentive phrase in the passive construction above, even though a pragmatic explanation is readily available. Compare (1) with (2) below:

- (2) Sono hon-wa hyouronka-no minna-ni totemo omosiroi to
 That book-TOP critic-COP all-DAT very interesting COMP
 omow-are-ta.
 think-PASS-PAST
 ‘The book was thought by all the critics to be very interesting.’

The reception of a book is affected by its reputation, and what critics say is “relevant” to the status of a book in this sense. If the nature of the effect imposed by some action depends on the nature of the agent of that action, that seems to license the appearance of an agentive phrase in the passive. That all examples like (2) that include agentive phrases might be “adversity passives” (in the sense that the surface subjects are *affected*) was suggested to Sugimoto (1982, pg. 504) by John Haig (p.c.). But Sugimoto observes that such sentences do not necessarily carry an adversative connotation. Furthermore, subjects of adversity passives are normally animate (Mineharu Nakayama (p.c.)).

Whether the effect of the action on the denotee of the accusative subject noun phrase be positive or negative, the pragmatic facts of how the world works seem to be involved in whether we accept agentive phrases in passivizations of accusative-quotative constructions:

- (3) a. Hondana-no itiban.oku.no.tokoro-ni oite.aru sono.hon-wa
 Bookcase-GEN the.most.remote.place-LOC be.put that.book-TOP
 Yamada-ni tumaranai to omow-are-te.iru darou.
 Yamada-DAT uninteresting COMP think-PASS-is must.be
 ‘That book, which is stuck in the most remote part of the bookcase, must
 be thought by Yamada to be uninteresting.’
- b. Sono.hon-wa kaita.hon’nin-ni-sae tumaranai to
 That.book-TOP wrote.very.person-DAT-even uninteresting COMP
 omow-are-te.iru.
 think-PASS-is
 ‘That book is thought to be uninteresting even by the very person who
 wrote it.’

The description of the subject seems to have an effect (3-a). The relationship between the agent of action and the theme of the action seems to have an effect (as in (2) and (3-b)). Is a syntactic explanation worth looking for?¹ Saito (1985, pg. 95, fn. 4) also questions how Kuno could have come to the conclusion that a “raised” object in general cannot passivize, but declines to explain judgments such as that for (1).

Considerations such as these accompanied my introduction to the analysis of the accusative-quotative construction of Japanese. I considered distinctions between ob-

¹Sugimoto (1982, pp. 503-506) tries to derive the badness of sentences like (1) by reference to the logical type of predicates in his adaptation of Montague Grammar for Japanese. In short, his passivization rule only operates on a category of type *TV*, while the output of his raising rule is of type *t*. This blocks the unacceptable (1), but unfortunately also blocks the well-formed (2) and (3-a,b).

jective fact and subjective judgment. I considered the distinction between inherent properties and accidental ones. I considered the distinction between referentially opaque contexts and referentially transparent ones. And all the while I tested syntactic theories against an ever-growing body of facts. Here is one more set of examples that comes directly from the data set:

Sakai (1996) used a contrast in the sense of the modal auxiliary *sou da* ‘be likely to; look to be’ to argue that judgments on events are not expressible in accusative-quotative complements, while judgments on entities are:²

- (4) a. Zirou-wa nami-ga/*-o taka-sou da to omotta.
 Zirou-TOP wave-NOM/-ACC high-likely COP COMP thought
 ‘Zirou thought that the waves seem high.’
- b. Mayumi-wa kono.biru-ga/-o taore-sou da to
 Mayumi-TOP this.building-NOM/-ACC fall.down-likely COP COMP
 omotta.
 thought
 ‘Mayumi thought this building to be likely to fall down.’

(adapted from Sakai (1996, pg.202, #24b, 25b) (my glosses)

The final morphology for the complement predicates in both (4-a) and (4-b) is the (copular) auxiliary. But the meanings of the core predications are very different. The property of “seeming to be high” predicated of “waves” is event-bound (even though it is expressed through an adjectival predicate). The property of “being likely to fall down” predicated of “this building” is an enduring attribute (even though it is

²Sakai’s observations come close to the crux of the matter, but fall short. Ultimately, the question is not whether the reference is to events as opposed to entities, but rather whether existence must be asserted for either of these in order to interpret the predication in context.

expressed through a verbal predicate).³ According to much of what has been said about the accusative-quotative construction, this is a contradictory pair of sentences: The stative adjectival predicate *takai* ‘high’ is disallowed, while the telic predicated *taoreru* ‘fall down’ is licensed (from a position embedded in an auxiliary).

With the right relationship between the subject and the predicate, a clausal complement with *sou da* following an eventive predicate is possible:

- (5) a. Tarou-wa Mariko-ga/*-o buranko-kara oti-sou da
 Tarou-TOP Mariko-NOM/-ACC swing-from fall-about.to COP
 to omotta.
 COMP thought
 ‘Tarou thought that Mariko was about to fall off the swing.’
- b. Tarou-wa syasin.no.naka.no.Mariko-ga/-o buranko-kara
 Tarou-TOP Mariko.in.the.photograph-NOM/-ACC swing-from
 oti-sou da to omotta.
 fall-about.to COP COMP thought
 ‘Tarou thought Mariko in the photograph to be about to fall off the swing.’

Making the acusative subject into a temporally-bound individual is one technique for “coercing” a predicate that typically participates in existence-asserting predications into a property-ascribing predication.

The clearest example of this to have appeared in the literature (although accompanied by a very different analysis) is from Homma (1998):

³Sakai gives an even more convincing contrast in the following pair: *Takasi wa sono okasi o oisisou da to omotta* ‘Takasi thought that the cake looks delicious’ Sakai (1996, pg. 202 #24a) with *Takasi wa ooame ga/*o hurisou da to omotta* ‘Takasi thought that it was likely to rain’ Sakai (1996, pg. 202 #25a).

- (6) a. Aya-wa nami*-o/-ga takai to omotte-iru.
 Aya-TOP wave-ACC/-NOM high COMP think
 ‘Aya thinks that the waves are high.’
- b. Aya-wa kyou-no nami-o/-ga takai to omotte-iru.
 Aya-TOP today-GEN wave-ACC/-NOM high COMP think
 ‘Aya considers today’s waves to be high.’

(Homma (1998, pp. 31–32, #44, 46))

Simply by including in the description of the accusative subject an element that fixes a spatio-temporal location for the denotation of the accusative subject, the use of a predicate like *takai* ‘high’ (characteristic of skyscrapers, and fevers, and recent gasoline prices, but not generally of waves) is made natural in an accusative-quotative complement.⁴ Fixing the denotation of the accusative subject noun phrase to a particular perspective (e.g., *tooku kara mita ano nami* ‘those waves seen from far away’) has the same effect. (I leave it to the reader to confirm this.)

Part of the argument for analyzing the accusative subject as a topic (Oka: 1988; Raposo and Uriagereka: 1995; Homma: 1998) is the “aboutness” relation that seems to obtain between the denotee thereof and the meaning of the complement predicate. The “aboutness relation” as it is exhibited in topics, however, encompasses many more possibilities than the restricted set that are licensed in accusative-quotative complements: Existential and eventive predications are allowed in topic/comment sentences — they too can be treated as properties in semantics. The other attractive parts of a topic analysis are 1) that the syntactic position of a topic is disassociated from the thematic position of the roles it takes, and that 2) the topic noun phrase is

⁴Homma (1998) took this data as suggesting that the accusative subject had the status of a topic (following Oka (1988) and others), but along with many *pros* are enough *cons* for this view to encourage us to look for different explanations.

(almost always) definite (e.g., *Densya wa zikoku doori toutyaku sita* ‘The train arrived on schedule’).⁵

An “aboutness relation” has been formulated specifically with the accusative subject construction in mind. Borkin (1984, pg. 63), in a remarkable study of the accusative-subject construction in English, made the observation that “Complements that characterize the subject are more easily broken up by Raising than are more neutrally viewed statements of fact.” In some theories this idea has been parlayed into a θ -role “has the property of.”⁶ It is not clear that this gets us any closer to an understanding of the semantic conditions for licensing accusative-subject constructions, and it is not what Borkin had been working toward. *Go to the dentist tomorrow at 11:00* can be modeled as a property, but is hardly a candidate for a complement predicate in a raising construction. Furthermore, *I imagined you to be taller* would require *you* to have the property of being *taller than you actually are*. If a θ -role “has the property of” is going to do any good, it has to be couched in a theory of modality. This is a direction worth considering, but I won’t discuss it further here. As things stand, a useful characterization of a sufficient condition (“aboutness”) for licensing accusative-quotative constructions still eludes us.

⁵Li and Thompson (1981) note that common noun phrase topics without modifiers indicating definiteness are all either specific or generic in Mandarin Chinese.

⁶For example, Mihara (1994b) and Sakai (1996) have used this idea. Ohtani (1998) as well, using data from Takao Gunji (p.c.), developed the following contrast pairs, arguing that the acceptability of accusative-quotative alternative in (7-b) is due to the relation “has the property of”:

1. (a) Ken-wa Naomi-ga/??-o saikin hutotte-kita to omotta.
Ken-TOP Naomi-NOM/-ACC recently gain.weight-came COMP thought
‘Ken thought that Naomi had gained weight recently.’
- (b) Ken-wa Naomi-ga/-o umaretuki hutotte.iru to omotta.
Ken-TOP Naomi-NOM/-ACC by.nature be.heavy COMP thought
‘Ken believed Naomi to be heavy by nature.’

(adapted from Ohtani (1998, pg. 114, #20ab, 21ab)

Ohtani (1998, pg. 114) called this manipulation of (6-a) to create a grammatical sentence in (6-b) “forcing.” Others call it “coercion” or “category shift.”

I bring up these considerations because they led me suspect, at an early stage, that a partition on predicates would not supply a satisfying, observationally adequate account of the conditions for licensing accusative-quotative sentences in Japanese, and the various roles that the descriptions included in accusative subject noun phrases play in the process. Borkin (1984, pg. 72) wrote with regard to characterizing definite referents versus describing events, etc., that, “all these facts are related, but precisely *how* they are related is not clear to me.” As it turns out, a formalization for English is a considerably more difficult challenge than one for Japanese. Once the right dimension is found for drawing the generalization, many (but of course not all) of the facts for Japanese can be subsumed under a few simple constraints.

6.2 Constraints revisited

Recognizing the possibility that there might be more than one context of interpretation operative in a statement of propositional attitude is a matter of common sense. This is also the key to recognizing the domain in which Japanese accusative subjects are required to be specific: The belief world set of the agent of attitude. Taking the dichotomous nature of specific indefiniteness at face value, it is a short step to model it as reference at one index of evaluation simultaneous with existential assertion at another. We are left with the conclusion that existential assertion is prohibited in one of the contexts of interpretation involved in accusative-quotative constructions: that of the agent of attitude. Recognizing that predications involving reference to times and situations are eventuality-dependent is a farther reach into abstraction. But given this dependence, we can see that the need for existential assertion in a given predication is a question of context: An eventuality-dependent predication can

fall under generic quantification. If it does, it is a candidate for appearing in an accusative-quotative complement. An eventuality-dependent predication can refer to a discourse antecedent eventuality. If it does, it is a candidate for appearing in an accusative-quotative complement. But an eventuality-dependent predication can (and frequently does) introduce a novel element into the discourse domain: an event, a new entity, a location. These predications are excluded from the accusative-quotative complement. Thus, what McNally (1998) called “spatio-temporal independence,” we can recognize as freedom from the need to assert existence (a consequence of the combination of what the predication needs and what the context already supplies). We wind up with two predication types: Existence assertions and property ascriptions. The facts of the matter actually force us to recognize a set of theoretical primitives.

Empirical observation: Propositions expressed by the accusative complement cannot directly assert the existence of an entity or an eventuality *as evaluated with respect to the contextual domain defined by the belief world of the agent of attitude*. (repeated from pg. 187)

Property ascription: (informal) Property ascriptions are statements of set membership or equality over entities in the contextual domain. (See pg. 6 in Section 1.1 for an equivalent definition.)

Existential assertion: Existential assertions are statements entailing change in the constitution of the contextual domain.

Eventualities: Eventualities are spatio-temporally bound entities in which existence registers. Some noun phrases denote eventualities, and some involve eventualities in their description. Some predications (e.g., predications involving specific tense reference or predications involving episodic predicates, *inter alia*) require

eventualities. The existence of an eventuality can be presupposed or asserted, like that of any entity. Presupposed eventualities can serve as antecedents to empty pronouns denoting eventualities. Assertion of the existence of eventualities involves existential quantification over a variable of the same sort as the empty pronoun.

(repeated from pg. 262 in Section 4.2.4)

This perspective on accusative-quotatives, then, is one of the clues to the techniques of “coercion,” a set of primitives by which to formulate a necessary (but not sufficient) condition on the licensing of the class of constructions. Because the notions involved are all dependent context, I have named the condition accordingly:

Semantic/pragmatic constraint: The proposition expressed by an accusative-quotative complement must be a property ascription on the referent of the accusative subject *when evaluated with respect to the belief world of the agent of attitude* (the referent of the matrix subject noun phrase).

(repeated from pg. 6 in Section 1.1)

6.3 Gleanings for syntax

Some of the analyses in the literature that attempt descriptions or explanations of the accusative-quotative construction find their arguments weakened by some of the observations I have made here. In particular, the prolepsis account and the double nominative derivation account will need adjustment if the facts of scope are to be subsumed under syntax, given that the accusative-quotative subject can be shown to

take narrow scope under the belief operator, and even to exhibit scope ambiguity with internal arguments of the complement predicate, as long as existential quantification is not involved. This is even the case with constructions in which the accusative subject is not the thematic argument of the overt predicate in the complement clause — in spite of the fact that such accusative subjects fail to take narrow scope under focus on the complementizer of the embedded clause. On the other hand, proponents of a movement analysis (or at least those who accept that reconstruction is possible for A-chains, such as Hornstein (1995)) might welcome this finding in particular.

A new way to license subject/predicate inversion has been added to the list: When the accusative-quotative construction appears as a sentential concessive adjunct, sentences like the following are possible: *Ikura tensai da to kodomo o omotte ite mo, soko made kyouiku nessin ni naru oya wa baka da naa* (lit.) ‘No matter how much “to be a genius” one considers one’s child, parents who become that maniacal about education are fools.’ Hopefully adding this to the inventory of configurations licensing subject/predicate inversion will provide another clue for a syntactic explanation. The fact that my findings appear to favor a movement analysis makes such an explanation all the more important, given that a movement analysis predicts such sentences to be bad under the Proper Binding Constraint.

The inability of accusative-quotative constructions to embed [*wh*-subject + [+Q] complement] complexes seems to elude easy formulation under theories based on syntactic configuration, given that syntactic probes based on negative polarity and question operators both suggest that agreement is structurally possible in minimally different constructions. In addition to clarifying the actual behavior of accusative-quotative constructions, and correcting an erroneous claim or two, I have also proposed a semantic explanation that is subsumed under the **Semantic/pragmatic constraint**.

I have done the most violence to the notion that a partition on the set of predicates can account for patterns of grammaticality in constructions that fit my **Working description**. But this is in the cause of observational adequacy, and if my findings help to undermine the assumptions of theories of natural language that don't give weight to observational adequacy, then so much the better.

I had hoped to make a contribution to lexicography, as I feel that reducing what we know about the syntactic behavior of lexical items into a concrete enumeration of lexical entries is work that theoreticians should not shirk. Some of the techniques I have developed for defining the data set will be of use in the search for a proper characterization of a natural class of accusative-quotative verbs. But precisely how to inter-relate aspects as diverse as transitivity, subjectivity, counterfactuality, etc., is a question that is still unresolved. With respect this problem, I must borrow a page from Borkin (1984) and say that, "all these facts are related, but precisely *how* they are related is not clear to me."

6.4 Implications

That a grammatical construction should be subject to a condition as elemental as the **Semantic/pragmatic constraint** should not be too surprising. The correlates for non-restrictive relative clauses seem to show similar restrictions, as do targets for antecedent-contained deletion. It has been claimed that the major subject is also (usually) subject to the same sort of constraint as that which applies to the accusative subject (Heycock and Doron (2003); Yoon (2007) — But see also Kuno (1973); Kuroda (2003)).⁷ On the other hand, it has been noted that the predications in internally-

⁷The restriction against existential and eventive predications is not limited these constructions. The same sort of restriction applies to the antecedents of provisional *hatarakikake* sentences (e.g.,

headed relative clause noun phrases are (almost always) existence-asserting, (Kim: 2004), and the complements of perception verbs are also (almost always) existence-asserting as well (Ikawa: 1998). These context-sensitive distinctions probably show up in other constructions or category classifications of Japanese as well.

But these distinctions also seem particularly susceptible to change. A cursory survey of accusative subjects in Classical Japanese shows that the **Semantic/pragmatic constraint** did not apply to analogous constructions in Heian literature. In a more contemporary timeframe, accusative noun phrases functioning as the logical subjects of finite complement clauses did not show up independently in a survey of written language as late as 1951. A summary of a corpus study by the Kokuritu Kokugo Kenkyuuzyo (1951) shows tokens of a construction containing the adjunct [NP *o motte*] (and accusative subject small clauses), but not one token of the accusative-

Seikaku ga ii hito naraba, atte miyou ‘If he’s a nice person, I’ll meet him’). According to Hasunuma and Maeda (2001, pg. 5), only adjectives, copular sentences, and stative verbs can appear in conditional adjuncts formed on provisional predicates in hortatives, desideratives, imperatives, etc.

1. (a) *Sikin-ga tarinakereba, kore.izyou.zigyou.o.kakudai suru.beki.de.wa.nai.*
Capital-NOM if.doesn’t.suffice, (we).shouldn’t.expand.the.business.further
‘If there isn’t enough capital, we shouldn’t expand the business any further than this.’
(b) **Akazi.kessan.ni.tenraku.sureba, kore.izyou.zigyou.o.kakudai suru.beki.de.wa.nai.*
If.fall.into.deficit.balance, (we).shouldn’t.expand.the.business.further
(no gloss)
2. (a) *Zikan.to.okane.ni.yoyuu.ga.areba, karutyaasentaa.de.nanika naratte.mo.ii.yo.*
If.there’s.leeway.with.time.and.money, it’s.OK.to.take.a.class.at.the.culture.center
‘If there’s leeway with time and money, it’s OK for you to take a class at the Culture Center.’
(b) **Tokai.ni.hikkoseba, karutyaasentaa.de.nanika naratte.mo.ii.yo.*
If.we.move.to.the.city, it’s.OK.to.take.a.class.at.the.culture.center
(no gloss)
3. (a) *Naiyou.ga.rikai.dekinakereba, sugu.ni.te.o.agete situmon.sinasai.*
If.you.can’t.understand.the.contents, ask.a.question
‘If you can’t understand the contents, ask a question.’
(b) **Kousi.no.sensei.ga.kureba, sugu.ni.te.o.agete situmon.sinasai.*
When.the.lecturer.comes, ask.a.question
(no gloss)

(Hasunuma and Maeda: 2001, pg. 5)

quotative construction as I have defined it. Furthermore, from the wide variation in judgments among researchers and informants, and from the initial results of surveys such as that directed by Hoji (2005a,b,c), it appears that there is considerable areal variation with regard to the effects of the **Semantic/pragmatic constraint**, the requirement for aboutness, and the inventory of accusative-quotative verbs. It would appear that, no matter how well a simple formula such as the one I propose here covers the facts of Modern Japanese at the moment, there is no guarantee that this will last. Just as requirements for animacy in subject noun phrases promoted through passivization in Meiji Japanese became relaxed through exposure to Western writings in translation, so might a restriction against existential assertion in propositions expressed by accusative-quotative complements become relaxed through further contact with languages like English. Language will continue to change as long as people persist in using it. I hope I have shed a little light on what it is speakers do when they use the accusative-quotative construction.

My main goal in this study has been to clarify one problematic area, where as it turns out, pragmatic reasoning has a discernible, and predictable, effect on judgments of acceptability. It is perhaps the regularity of these judgments that have persuaded so many researchers to look for a syntactic solution to the question of what licenses these constructions. I myself started with the hope that a syntactic solution was available. Ultimately the facts (rather than any one theory) are what led me to the formulation I've arrived at here, a formulation with more empirical power than any of the syntactic accounts proposed in the literature so far. I am confident that syntactic approaches will be able to take advantage of some of the findings in this study, but it seems clear that the sort of formal system that will be able to capture the patterns that I have articulated in this study will need 1) the insights of discourse representation theory

and file change semantics, and 2) the idea of multiple contexts of interpretation. A constraint against adding or subtracting from the relevant contextual domain covers a variety of data in an extremely parsimonious way, and does it by reference to that aspect of the phenomena we understand as their “meanings.” A wide survey (wide in the sense of testing the boundaries of what is acceptable Japanese in a variety of contexts, grammatical and pragmatic) has allowed me to ponder the common factor in what all those meanings “do.”

I hope the formulation I arrived at is not too far off from what David Lewis (1972) had in mind when he suggested that, “in order to say what a meaning *is*, we may first ask what a meaning *does*, and then find something that does that.” Understanding “meaning” as context update potential, it turns out that the most basic peculiarity of the propositions expressed by accusative-quotative complements is that they don’t “do” anything at all to one crucial contextual domain. The notion of property ascription captures this in a simple way: In this particular case it is the “something” that “does that.”

Appendices

APPENDIX A

LIST OF ACCUSATIVE-QUOTATIVE VERBS

Below is an alphabetical list of some verbs (V) attested to support accusative-quotative constructions of the form *A wa B o C to V* or *A wa B o C ka V*, depending on the inter-relations between A, B, C, V and the context of interpretation. Use of a given V₁ alone is not sufficient to license every combination of A, B, C, V₁ in every context.

For a given sentence, apply the following tests to exclude “imposters” from the data set of acceptable accusative-quotative constructions.

Entailment test: Does the truth of *A wa B o C to V* entail that *A wa B o V* is also true? If so, *A wa B o C to V* is not an accusative-quotative construction.

Subject/predicate inversion test: Can *A wa B o C to V* be expressed as *C to B o A wa V* or *C to A wa B o V* without a change in truth conditions? If so, *A wa B o C to V* is not an accusative-quotative construction.

Eventuality-dependence test: Does the predicative relation between B and C involve past or future temporal reference, events, existence, temporary states, or occupying location? If so, then either (1) reference to an eventuality in the description in expression B, or (2) generic interpretation for V will help license the accusative-quotative construction so formed. If either (1) or (2) is lacking, the construction is probably pragmatically anomalous. If it is pragmatically acceptable, chances are it is not an accusative-quotative construction.

For some of the verbs below, considerable ingenuity is required to create tokens of constructions that satisfy the conditions for passing the tests listed above. As an exercise, the challenge is instructive as to the nature of the accusative-quotative construction. Note that the list below is far from exhaustive.

Some accusative-quotative verbs

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| 1. <i>agameru</i> ‘hold in high esteem’ | 26. <i>egaku</i> ‘depict’ |
| 2. <i>ageru</i> ‘give as an example’ | 27. <i>enziru</i> ‘portray, act’ |
| 3. <i>akasu</i> ‘expose’ | 28. <i>gisyou suru</i> ‘give false evidence, perjure’ |
| 4. <i>anzi suru</i> ‘suggest, insinuate’ | 29. <i>gokai-suru</i> ‘misunderstand’ |
| 5. <i>arawasu</i> ‘express, reveal’ | 30. <i>goki suru</i> ‘misrecord’ |
| 6. <i>arigatagaru</i> ‘exhibit gratitude’ | 31. <i>goneru</i> ‘complain’ |
| 7. <i>atarasigaru</i> ‘exhibit wonder’ | 32. <i>gosan suru</i> ‘miscalculate’ |
| 8. <i>ateru</i> ‘guess’ | 33. <i>gurou suru</i> ‘deride, mock’ |
| 9. <i>awaregaru</i> ‘exhibit pity’ | 34. <i>gutiru</i> ‘complain’ |
| 10. <i>awaremu</i> ‘pity’ | 35. <i>gyoubou suru</i> ‘esteem’ |
| 11. <i>ayabumu</i> ‘regard with anxiety’ | 36. <i>hakanamu</i> ‘regard as vain’ |
| 12. <i>ayamatu</i> ‘mistake’ | 37. <i>handan suru</i> ‘judge’ |
| 13. <i>ayasimu</i> ‘suspect’ | 38. <i>handoku</i> ‘interpret’ |
| 14. <i>azakeru</i> ‘deride’ | 39. <i>han’ei suru</i> ‘reflect’ |
| 15. <i>bakuro suru</i> ‘expose’ | 40. <i>hanmei suru</i> ‘ascertain’ |
| 16. <i>boyaku</i> ‘exhibit dissatisfaction’ | 41. <i>hanron suru</i> ‘argue against, object’ |
| 17. <i>bubetu suru</i> ‘despise’ | 42. <i>hantai suru</i> ‘object, oppose’ |
| 18. <i>byousya suru</i> ‘describe’ | 43. <i>hayagatten suru</i> ‘jump to conclusions’ |
| 19. <i>byousyutu suru</i> ‘depict’ | 44. <i>hayatotiri suru</i> ‘jump to conclusions’ |
| 20. <i>dangen suru</i> ‘assert’ | 45. <i>hentyou suru</i> ‘favor’ |
| 21. <i>dantei suru</i> ‘assert’ | 46. <i>hibou suru</i> ‘malign’ |
| 22. <i>danziru</i> ‘assert’ | 47. <i>higamu</i> ‘take a jaundiced view of’ |
| 23. <i>dogaisi suru</i> ‘disregard’ | 48. <i>higamu</i> ‘exhibit resentment’ |
| 24. <i>doui suru</i> ‘agree’ | 49. <i>hihan suru</i> ‘criticize’ |
| 25. <i>douzyou suru</i> ‘sympathize’ | |

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| 50. <i>hikaku suru</i> ‘compare’ | 76. <i>ikigomu</i> ‘exhibit enthusiasm’ |
| 51. <i>hikerakasu</i> ‘show off’ | 77. <i>imasimeru</i> ‘reproach’ |
| 52. <i>hirumu</i> ‘quail’ | 78. <i>imu</i> ‘abhor’ |
| 53. <i>hitei suru</i> ‘deny’ | 79. <i>inamu</i> ‘deny’ |
| 54. <i>hiyakasu</i> ‘make sport of’ | 80. <i>itamu</i> ‘grieve’ |
| 55. <i>hokoru</i> ‘regard with pride’ | 81. <i>itamu</i> ‘lament, mourn, grieve’ |
| 56. <i>homeru</i> ‘praise’ | 82. <i>itoosimu</i> ‘think of fondly/pity’ |
| 57. <i>honomekasu</i> ‘insinuate’ | 83. <i>itosigaru</i> ‘show affection’ |
| 58. <i>hosyou suru</i> ‘guarantee’ | 84. <i>itukusimu</i> ‘love, pity’ |
| 59. <i>houkoku suru</i> ‘report’ | 85. <i>ituwaru</i> ‘misrepresent’ |
| 60. <i>hounen suru</i> ‘relax’ | 86. <i>iu</i> ‘call’ |
| 61. <i>hubingaru</i> ‘pity’ | 87. <i>iyagaru</i> ‘exhibit discomfort’ |
| 62. <i>husigigaru</i> ‘show puzzlement at’ | 88. <i>iyasimeru</i> ‘despise’ |
| 63. <i>hyou suru</i> ‘appraise’ | 89. <i>iyasimu</i> ‘despise’ |
| 64. <i>hyouhaku suru</i> ‘confess, declare’ | 90. <i>kaidoku suru</i> ‘decode’ |
| 65. <i>hyouka suru</i> ‘appraise, evaluate’ | 91. <i>kaisyaku suru</i> ‘intrepret’ |
| 66. <i>hyoumei suru</i> ‘declare’ | 92. <i>kakageru</i> ‘publish, put up’ |
| 67. <i>hyousyou suru</i> ‘symbolize’ | 93. <i>kakeru</i> ‘bet’ |
| 68. <i>hyousyutu suru</i> ‘express’ | 94. <i>kakisirusu</i> ‘write down’ |
| 69. <i>hyoutyou suru</i> ‘exemplify’ | 95. <i>kakisokonau</i> ‘misrecord’ |
| 70. <i>ibukaru</i> ‘suspect’ | 96. <i>kakunin suru</i> ‘verify’ |
| 71. <i>ibukasigaru</i> ‘show suspicion’ | 97. <i>kakusin suru</i> ‘be certain’ |
| 72. <i>ii-kiru</i> ‘state unequivocally’ | 98. <i>kakutei suru</i> ‘settle’ |
| 73. <i>iitirasu</i> ‘blab’ | 99. <i>kanasigaru</i> ‘exhibit sadness’ |
| 74. <i>ikaru</i> ‘be angry’ | 100. <i>kanasimu</i> ‘intuit’ |
| 75. <i>ikigaru</i> ‘try to be stylish’ | 101. <i>kangaeru</i> ‘think’ |
| | 102. <i>kan’ou suru</i> ‘show sympathy with’ |

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| 103. <i>kantigaisuru</i> ‘mistake’ | 127. <i>kiroku suru</i> ‘record’ |
| 104. <i>kanziru</i> ‘feel’ | 128. <i>kizyutu suru</i> ‘record’ |
| 105. <i>karonziru</i> ‘treat lightly’ | 129. <i>kobosu</i> ‘complain about’ |
| 106. <i>katazikenagaru</i> ‘exhibit gratitude, indebtedness’ | 130. <i>kogou-zyuyo suru</i> ‘bestow a title’ |
| 107. <i>katei suru</i> ‘suppose’ | 131. <i>kokoroeru</i> ‘understand, grasp’ |
| 108. <i>katusya suru</i> ‘depict vividly’ | 132. <i>kokuzi suru</i> ‘announce, proclaim’ |
| 109. <i>kawaigaru, kawayugaru</i> ‘exhibit affection’ | 133. <i>kotyou suru</i> ‘exaggerate’ |
| 110. <i>kayugaru</i> ‘exhibit itchiness’ | 134. <i>koukai suru</i> ‘regret’ |
| 111. <i>kazoetateru</i> ‘enumerate’ | 135. <i>kouzyutu suru</i> ‘express publicly’ |
| 112. <i>keibetu suru</i> ‘despise’ | 136. <i>kozi suru</i> ‘flaunt’ |
| 113. <i>keikou suru</i> ‘respect, esteem’ | 137. <i>kozitukeru</i> ‘make an excuse’ |
| 114. <i>keisan suru</i> ‘calculate’ | 138. <i>kozitukeru</i> ‘make pretenses, excuses’ |
| 115. <i>keisi suru</i> ‘look lightly upon’ | 139. <i>kuyamu</i> ‘feel regret’ |
| 116. <i>keisyou suru</i> ‘alarm’ | 140. <i>kuyasigaru</i> ‘feel consternation’ |
| 117. <i>keiyou suru</i> ‘describe’ | 141. <i>kyozyutu suru</i> ‘give false witness’ |
| 118. <i>keizi suru</i> ‘enlighten’ | 142. <i>kyuusin suru</i> ‘put one’s mind to rest’ |
| 119. <i>kemutagaru</i> ‘exhibit annoyance’ | 143. <i>ma ni ukeru</i> ‘take seriously’ |
| 120. <i>kenasu</i> ‘criticize’ | 144. <i>magiwarasu</i> ‘obfuscate’ |
| 121. <i>kensyou suru</i> ‘verify, investigate’ | 145. <i>matigaeru</i> ‘mistake’ |
| 122. <i>kensyutu suru</i> ‘detect’ | 146. <i>mayou</i> ‘waver, be lost’ |
| 123. <i>ki ni kakeru</i> ‘worry’ | 147. <i>meiki suru</i> ‘write clearly’ |
| 124. <i>ki ni suru</i> ‘take to heart’ | 148. <i>mezurasigaru</i> ‘exhibit curiosity’ |
| 125. <i>kikitigaeru</i> ‘mis-hear’ | 149. <i>miageru</i> ‘look up to’ |
| 126. <i>kinou suru</i> ‘infer’ | 150. <i>miayamaru</i> ‘misjudge’ |
| | 151. <i>mikagiru</i> ‘abandon’ |
| | 152. <i>mikiwameru</i> ‘ascertain’ |
| | 153. <i>mikubiru</i> ‘despise’ |

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| 154. <i>mikudasu</i> ‘despise’ | 178. <i>niramu</i> ‘stare’ |
| 155. <i>mimagau</i> ‘confuse’ | 179. <i>noberu</i> ‘relate’ |
| 156. <i>minasu</i> ‘regard’ | 180. <i>ogoru</i> ‘feel pride for’ |
| 157. <i>minuku</i> ‘see through’ | 181. <i>okasigaru</i> ‘exhibit amusement’ |
| 158. <i>miru</i> ‘see’ | 182. <i>okkuugaru</i> ‘exhibit annoyance’ |
| 159. <i>misekakeru</i> ‘misrepresent’ | 183. <i>omoi ataru</i> ‘guess’ |
| 160. <i>misokonau</i> ‘overlook, disdain’ | 184. <i>omoikomu</i> ‘believe erroneously’ |
| 161. <i>mitigaeru</i> ‘mistake (X for Y)’ | 185. <i>omoinayamu</i> ‘agonize’ |
| 162. <i>mitomeru</i> ‘admit’ | 186. <i>omoitigai suru</i> ‘mistake’ |
| 163. <i>mitoosu</i> ‘see through’ | 187. <i>omonbakaru</i> ‘cogitate’ |
| 164. <i>mitumoru</i> ‘estimate’ | 188. <i>omonziru</i> ‘treat weightily’ |
| 165. <i>miukeru</i> ‘see’ | 189. <i>omosirogaru</i> ‘exhibit interest’ |
| 166. <i>mokusatu suru</i> ‘treat with silent contempt’ | 190. <i>omou</i> ‘think, consider’ |
| 167. <i>mokuzi suru</i> ‘tacitly indicate’ | 191. <i>osigaru</i> ‘begrudge’ |
| 168. <i>monogataru</i> ‘bespeak’ | 192. <i>osimu</i> ‘feel reluctance’ |
| 169. <i>morasu</i> ‘leak’ | 193. <i>osorosigaru</i> ‘exhibit fear’ |
| 170. <i>nageku</i> ‘lament’ | 194. <i>otyarakasu</i> ‘tease’ |
| 171. <i>natukasimu</i> ‘regard with nostalgia’ | 195. <i>reizi suru</i> ‘illustrate with an example’ |
| 172. <i>nazasu</i> ‘call by name’ | 196. <i>rikai suru</i> ‘understand’ |
| 173. <i>netamu</i> ‘envy’ | 197. <i>rissyou suru</i> ‘demonstrate, substantiate’ |
| 174. <i>ninsiki suru</i> ‘apprehend’ | 198. <i>ronsyō suru</i> ‘prove’ |
| 175. <i>ninsyou suru</i> ‘confirm, authenticate’ | 199. <i>ronzyutu suru</i> ‘argue’ |
| 176. <i>ninti suru</i> ‘cognize, recognize’ | 200. <i>rosyutu suru</i> ‘expose’ |
| 177. <i>niowaseru</i> ‘insinuate’ | 201. <i>sadameru</i> ‘determine’ |
| | 202. <i>sagesumu</i> ‘disdain’ |
| | 203. <i>sas-suru</i> ‘guess, sense, judge’ |

204. *sasu* ‘indicate’
205. *sasyou suru* ‘misrepresent’
206. *seikakudukeru* ‘characterize’
207. *seitouka suru* ‘justify’
208. *senden suru* ‘advertise’
209. *setumei suru* ‘to explain, to justify’
210. *setuzi suru* ‘explain, demonstrate’
211. *siiru* ‘make distortions, calumniate’
212. *sikibetu suru* ‘discern’
213. *simesu* ‘indicate’
214. *simesu* ‘show, indicate’
215. *siru* ‘know’
216. *sisa suru* ‘suggest’
217. *siteki suru* ‘point out, indicate’
218. *soutei suru* ‘suppose’
219. *souzou suru* ‘imagine’
220. *suiron suru* ‘surmise’
221. *suisatu suru* ‘conjecture’
222. *suisoku suru* ‘guess’
223. *suru* ‘take as’
224. *suuhai suru* ‘worship’
225. *suukei suru* ‘esteem’
226. *syajitu suru* ‘depict faithfully’
227. *syoudaku suru* ‘acquiesce’
228. *syougen suru* ‘testify’
229. *syougen suru*² ‘relate in detail’
230. *syoumei suru* ‘prove’
231. *syoutyou suru* ‘symbolize’
232. *syouzyutu* ‘relate in detail’
233. *syutyuu suru* ‘claim’
234. *tasikameru* ‘confirm, authenticate’
235. *tatoeru* ‘compare, give as example’
236. *teiki suru* ‘point out, indicate’
237. *teizi suru* ‘bring up, offer’
238. *tenkan suru* ‘display’
239. *tinzyutu suru* ‘state, declare’
240. *torimatigaeru* ‘mistake’
241. *touroku* ‘register’
242. *tukitomeru* ‘ascertain, identify’
243. *tuuseki suru* ‘deeply regret’
244. *tuyogaru* ‘pretend strength’
245. *tyakasu* ‘make fun of’
246. *tyuusyou suru* ‘libel’
247. *uketoru* ‘interpret, accept’
248. *uketoru* ‘take’
249. *uradukeru* ‘back up, corroborate’
250. *uranau* ‘divine’
251. *urauti o suru* ‘back up, corroborate’
252. *urayamu* ‘envy’
253. *uresigaru* ‘exhibit joy’
254. *urusagaru* ‘feel annoyed’
255. *utagau* ‘doubt’
256. *utikesu* ‘deny’

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| 257. <i>uttaeru</i> ‘resort to, appeal to ’ | 268. <i>zihaku suru</i> ‘confess’ |
| 258. <i>utusu</i> ‘copy, reflect, portray’ | 269. <i>zihu suru</i> ‘brag’ |
| 259. <i>waisyouka suru</i> ‘minimize’ | 270. <i>zikaku suru</i> ‘understand of oneself’ |
| 260. <i>waridasu</i> ‘compute, deduce’ | 271. <i>zissyou suru</i> ‘prove’ |
| 261. <i>yomaseru</i> ‘read as’ | 272. <i>zisyau suru</i> ‘represent oneself’ |
| 262. <i>yomiayamaru</i> ‘misread’ | 273. <i>zyokei suru</i> ‘describe’ |
| 263. <i>yomisokonau</i> ‘misread ’ | 274. <i>zyozyutu suru</i> ‘relate, describe, depict, predicate’ |
| 264. <i>yomu</i> ‘read ’ | 275. <i>zyuudaisi suru</i> ‘attach importance to’ |
| 265. <i>yumemiru</i> ‘dream’ | 276. <i>zyuusi suru</i> ‘attach importance to’ |
| 266. <i>yorokobu</i> ‘rejoice’ | |
| 267. <i>yuzuru</i> ‘concede’ | |

A data base with verbs scored by explicit criteria and judgment/example pairs as bases for scoring would be ideal. Showing what is excluded from this class and why is as important to the project of defining a natural class of accusative-quotative verbs as enumerating tokens of the class. Ideally, the data should also be corpus-based. The tests and the list are just an initial outline of how such a project might proceed.

APPENDIX B

OVERVIEW OF CLASSIFIER TYPES

While the crucial data for my thesis is found in examples with floating weak quantifiers associated with subject noun phrases, the observations I make should regarding them should be understood in the larger context of the distribution of quantifiers and the way their interpretation changes according to syntactic context and category. Downing (1996) gives a taxonomy for syntactic contexts of numeral-classifier pairs, but doesn't use the weak/strong distinction in quantification, and excludes partitive uses from consideration. For the purposes of explication, I augment and refine Downing's taxonomy, describing a greater variety of quantifying constructions.

Quantity-classifier pair (Q-CL). The most general class of pairs, including proportion-classifier pairs and numeral-classifier pairs in their various syntactic contexts: pre-nominal, floating, appositive, etc.

Pronominal quantifier Quantifying expressions can sometimes function as nominal expressions, receiving case as arguments, being modified by relative clauses, appearing with focus particles, etc.

Proportional quantifier This includes 1) strongly quantifying expressions that do not incorporate classifiers (e.g. *minna* 'all'; *subete* 'all'; *hotondo* 'most', etc.); 2) universally quantifying negative polarity items in the pattern [one + CL + *-mo* ...NEG] (e.g., *ik kai mo* ...*-nai* 'not ...even one time') proportion-classifier pairs (see below) in general, and numeral-classifier pairs (see below) that have been modified with a universalizing suffix *-tomo* (e.g., *hutari tomo* 'two people all'). When associated with subjects in a floating construction, the distribution of this class is insensitive to the property-attributing/existential distinction between predication types.

Weak quantifier This includes 1) weakly quantifying expressions that don't strictly include classifiers (e.g. *oozei* 'many', *kazu ooku* 'many', *sukunakarazu* 'not a few', *sukosi* 'a bit'); 2) numeral-classifier pairs (e.g., *hyaku ippiki* 'one hundred and one animal'), 3) indeterminate-classifier pairs (e.g., *nan chou ka* 'how many

blocks Q’;¹ *iku do* ‘how many times’), and 4) the pattern [indefinite numeral + CL] (e.g., *suu zyuu doru* ‘a number tens dollars’). When associated with indefinite noun phrase subjects of existential predications in a floating construction, this class introduces elements with non-specific indefinite reference. The semantic function in other contexts depends on the syntactic position of the weak quantifier, on the referential nature of the host nominal, and on whether the predication is existential or property-attributing.

Proportion-classifier pair includes lexically proportional quantifiers paired with classifiers in all configurations (e.g., *zenbu/hotondo no inu* ‘all/most of the dogs’; *inu zenbu/hotondo ga* ‘all/most of the dogs’; *inu ga zenbu/hotondo* ‘all/most of the dogs’), etc.).

Numeral-classifier pair A weak quantifier (QF) (e.g., *ni hiki* ‘two animal’; *san kin* ‘three loaf’, etc.) When un-modified, their semantic function is dependent in part on their syntactic context, the referential nature of the host nominal, and the predication in which the host nominal participates.

Pre-nominal quantifier In the construction [QF *no* N’ + case particle] where *no* is an attributive form of the copula. With weak quantifiers and existential predicates, it can take a non-specific indefinite reading (e.g., *Roppiki no sika ga hasitte kita* ‘Six deer came running up’). Numeral-classifier pairs can also be used to imply definiteness, but do not force a definite reference. Paired with a common noun in this construction, a numeral-classifier pair is construed as expressing the cardinality of the set denoted by that common noun (in the contextually restricted domain) (my reinterpretation of Downing’s (1996, pg.222) account).

Floating quantifier The construction [N’ + case particle ... QF]. For weak quantifiers, semantic function is largely dependent on context.

Appositive classifier In the construction [N’ + QF + case particle]. The nominal element can be a proper name (e.g., *Tarou to Hanako hutari ga* ‘Tarou and Hanako, the two of them’), a pronoun (e.g., *karera hutari ga* ‘they both’), etc. Frequently used for repeat mentions of discourse referents (Downing: 1996, pp.228–230). Non-specific indefinite reference is possible with existential predicates. (Fukushima (1991, pp.32–33) analyzes these as nominals forming nominal compounds.)

Relative head quantifier Downing’s (1996, pg. 230–233) “summative appositive” (type 3), the construction [N’ + *no* + QF + case particle], where *no* is the attributive form of the copula. The construction can be described as an appositive copular relative clause modifying a pronominal quantifier. The nominal

¹Caseless indeterminates implies singularity (Hasegawa (1993, pg. 139, fn. 7), citing Kitagawa and Kuroda (1992): *Syotyou wa syoubousi o dareka yonda* ‘The chief called some firefighter or other’.)

element can be a proper name (e.g., *Tarou to Hanako no hutari* ‘the two, who are Tarou and Hanako’), a pronoun, etc., but is regularly a discourse-familiar (definite or specific indefinite) element.

Partitive reference Weak quantifiers appearing as pronominals can have a special semantic function of partitive reference. This function can obtain when, for example, a cardinality-classifier pair appears after a genitive case marker *-no* (e.g., *titi ga katte ita neko no ippiki* ‘one of the cats my father kept’ (Downing: 1996, pg. 231, #21)), but not after the attributive copula *no*. It also obtains between a definite subject and a floating non-universal quantifier (with (optionally covert) case marker) (e.g., *Rei no otoko ga hutari kite iru* ‘Two of those men are present’). It also obtains between a definite or specific indefinite common noun subject and a floating (non-universal) quantifier (with (optionally covert) case marker) in a property-attributing predication (e.g., *Otoko ga hutari situkoi* ‘Two of those men are violent’). As pronominals, they take case markers.

Universal numeral-classifier pair This functions as a cardinally specified universal quantification. When associated with definite nominals, the appositive quantifier-classifier pair and the relative head quantifier-classifier pair are examples. While universal cardinality-classifier pairs are not always pronominals, nevertheless they behave similarly to partitive cardinality-classifier pairs with respect to some of the contexts in which they take on their function of universal quantification: The function also obtains between a definite subject and a floating cardinality-classifier pair (e.g., *Rei no otoko ga hutari kite iru* ‘Both those men are present’). It also obtains between a definite or specific indefinite common noun subject and a floating cardinality-classifier pair in a property-attributing predication (e.g., *Otoko ga hutari situkoi* ‘Both those men are relentless’).

This is a very cursory catalogue of some of the more basic functions of quantifying expressions.² There are interesting functions that could be mentioned, such as the construction [indeterminate + CL (...) *mo*] (e.g., *Nan-ben yuutte mo wakatte kurenai* ‘However many times I say it, he just won’t understand’). There are interpretations that differ from mine as well: Hasegawa (1993, pg. 122, #21a) implies that a case marked numeral classifier takes on a definite reference: *John-ga (sono) 3-tu o katta* ‘John bought the three items’. There are also things I cannot explain: When bare common nouns occupy a topic position, numerally quantified expressions associated with them aren’t necessarily partitive. The bare common nouns can name a kind (a generic class), rather than a discourse-salient set:

²For a more complete account, start at Kamio (1983, pp. 87–101).

- (1) a. Kodomo(ni.tuite)-wa hutari(-ga) kimasita.
 Children(with.respect.to)-TOP two.people-NOM came
 ‘As for children (in general), two came.’
 b. Kodomo (ni tuite) wa hutari (*o) mituketa.
 Children(with.respect.to)-TOP two.people-NOM found
 ‘As for children (in general), I found two.’

The reference of the quantifying expression in such [host + quantifier] pairings is similar to that of quantifying expressions hosted from bare common noun topics. In fact, it is difficult to see how these differ from the reference of floating quantifiers hosted from indefinite noun phrases inside the verb phrase, except insofar as there is an overt mention of a kind. The topic is vast and I have only scratched it. But as it is, this is probably more information than I actually need to make my point.

In corpus analysis Downing (1996, pg. 250) notes that floating numeral-classifier pairs are more often associated with existential predicates *iru* ‘exist [+animate]’ and *aru* ‘exist [-animate]’ than are pre-nominal numeral quantifiers. Downing (1996, pg. 244) also notes that floating numeral-classifier pairs are 1) only used when the information about number that they carry is *new information*, and 2) this requirement is typically satisfied by tokens used in *introductions* (i.e., when a group of referents (including both specific and non-specific references) is being mentioned for the first time, or when a subset of a previously mentioned group is being introduced). While pre-nominal numeral-classifier pairs are used to indicate definiteness or specificity (with the exception of some instances involving the numeral *iti* ‘one’), floating numeral-classifier pairs do not carry this implication (Downing: 1996, pp. 220–221). Downing (1996, pg. 222) also states that pre-nominal numeral-classifier pairs also define and exhaust the grouping at issue, while (unmodified) floating cardinal numeral classifiers do not. (It is not clear exactly how to interpret this statement, given all the facts of reference.) Both pre-nominal numeral-classifier pairs and floating numeral-classifier pairs are also incompatible with pronouns (e.g., **Hutari no karera ga kita* (intended) ‘The two of them came’) (Downing: 1996, pg. 222, #5a). Repeat mention with floating numeral-classifier pairs is typically accompanied by a focus element (e.g., *dake* ‘only’; *nomi* ‘only’), a universally quantifying modifier (*-tomo* ‘all’), or a distributor (*-zutu* ‘each’, or reduplication of the numeral classifier) (Downing: 1996, pp. 286–287, fn. 17). In sum, when floating numeral-classifier pairs are used for repeat mentions, their reference is either distributive or emphatically exhaustive (universal or definite), and they take focus markers. None of these yield weakly quantified readings, and at least the non-universal instances are arguably pronominal usages of the expressions in question.

All of Downing’s (1996) observations are consonant with the basic idea that floating weak quantifiers co-occur with subjects of existential-eventive predications but not with subjects of property-attributing predications. Nevertheless, even when put all

together, empirical observations from a small corpus fail to get us to the connection with predicate type.

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