General Session

Special Session
Language Isolates and Orphans

Parasession
Writing Systems and Orthography

Editors
Nicholas Rolle
Jeremy Steffman
John Sylak-Glassman

Berkeley Linguistics Society
Berkeley, CA, USA
Contents

Acknowledgments v

Foreword vii

Basque Genitive Case and Multiple Checking
Xabier Artiagoitia ................................................................. 1

Language Isolates and Their History, or, What’s Weird, Anyway?
Lyle Campbell ................................................................. 16

Putting and Taking Events in Mandarin Chinese
Jidong Chen ................................................................. 32

Orthography Shapes Semantic and Phonological Activation in Reading
Hui-Wen Cheng and Catherine L. Caldwell-Harris ......................... 46

Writing in the World and Linguistics
Peter T. Daniels ................................................................. 61

When is Orthography Not Just Orthography? The Case of the Novgorod Birchbark Letters
Andrew Dombrowski .......................................................... 91

Gesture-to-Speech Mismatch in the Construction of Problem Solving Insight
J.T.E. Elms ................................................................. 101

Semantically-Oriented Vowel Reduction in an Amazonian Language
Caleb Everett ................................................................. 116

Universals in the Visual-Kinesthetic Modality: Politeness Marking Features in Japanese Sign Language (JSL)
Johnny George ................................................................. 129

Equative and Predicational Copulas in Thai
Nancy Hedberg and David Potter ......................................... 144
On the Reflexive-Antipassive Polysemy: Typological Convergence from Unrelated Languages
Katarzyna Janic .......................................................... 158

Position and Height Asymmetries in Hiatus Resolution: A Case Study of Korean VV Sequences
Hijo Kang ................................................................. 174

Negative Concord in Western Armenian
Hrayr Khanjian .......................................................... 188

Emergent Hidden Grammar: Stochastic Patterning in Korean Accentuation of Novel Words
Hyun-Ju Kim .............................................................. 203

Evidentiality in Korean Conditional Constructions
Iksoo Kwon ............................................................... 218

The Source-Goal Asymmetry in SLA
Wojciech Lewandowski ................................................. 233

Subject Relatives and Expletives in Early New High German
Caitlin Light .............................................................. 247

An Embodied Account of Argument Structure Development
Josita Maouene, Nitya Sethuraman, Mounir Maouene, and Linda B. Smith .............. 261

A Gujarati Origin for Scripts of Sumatra, Sulawesi and the Philippines
Christopher Miller .......................................................... 276

A Quantitative Analysis of Nominative/Genitive Alternation in Japanese
Satoshi Nambu ............................................................. 292

A Sibling Precedence Approach to the Linearization of Multiple Dominance Structures
David Potter ............................................................... 307

Surface Faithfulness Phenomena and the Consonantal Root in the Modern Hebrew Verb System
Tom Recht ................................................................. 322

Partial Wh-Movement and Wh-Copying in Dutch: Evidence for an Indirect Dependency Approach
Ankelien Schippers .......................................................... 338

Computational Cognitive Morphosemantics: Modeling Morphological Compositionality in Hebrew Verbs with Embodied Construction Grammar
Nathan Schneider ........................................................... 353
Some Hypotheses About Possible Isolates within the Atlantic Branch of the Niger-Congo Phylum
Guillaume Segerer ................................................................. 368

From Relativization to Nominalization and More: Evidence from the History of Okinawan
Reijirou Shibasaki ................................................................. 382

A Cross-linguistic Study of Sound Symbolism: The Images of Size
Kazuko Shinohara and Shigeto Kawahara ..................................... 396

Testing for Frequency and Structural Effects in an English Stress Shift
Morgan Sonderegger ................................................................. 411

Neighborhood Density in Phonological Alternations
Sverre Stausland Johnsen .......................................................... 426

Person Indexicals in Uyghur Indexical Shifting
Yasutada Sudo ........................................................................ 441

Metathesis and Reanalysis in Ket
Edward Vajda .......................................................................... 457

An Empirical Investigation of Typicality and Uniqueness Effects on Article Choice in Attributive-Possession NPs
Gregory Ward, Christopher Ahern, and Tom Hayden .................. 472

Perception of Illegal Contrasts: Japanese Adaptations of Korean Coda Obstruents
James D. Y. Whang ................................................................... 488

Diglossia versus Register: Discursive Classifications of Two Sinhala Varieties
Cala Zubair ............................................................................... 499
Acknowledgments

The editors of the 36th Annual Meeting of the Berkeley Linguistics Society are grateful to conference participants, our volunteers, session chairs, and the faculty, all of whom made the event an intellectually stimulating and enriching event. We would like to extend our sincere gratitude to the contributors of this volume for their professionalism, responsiveness, attention to detail, and patience in the editorial process, without which this would not have been possible.

Within our department, special thanks go to Paula Floro and Belén Flores for all their support with BLS 36 and this annual conference in general. The editors wish to also thank the executive committee of BLS 36 who organized and ran the conference, and Zachary O’Hagan for expertise in the final compilation using LaTeX.

Finally, we would like to thank the following organizations for their generous financial support:

Department of Linguistics
Graduate Assembly
Social Sciences Division
Student Opportunity Fund
International Computer Science Institute (ICSI)
Foreword

This monograph contains 34 of the 51 talks given at the 36th Annual Meeting of the Berkeley Linguistics Society (BLS 36), held in Berkeley, California, February 6-7, 2010. The conference included a General Session, one Special Session entitled *Language Isolates and Orphans*, and one Parasession entitled *Writing Systems and Orthography*. It was planned and run by the second-year graduate students in the Department of Linguistics at the University of California, Berkeley. The members of this executive committee were Jessica Cleary-Kemp, Clara Cohen, Stephanie Farmer, Melinda Fricke, Laura Kassner, and John Sylak-Glassman.

The papers contained herein were edited principally for style by the three editors Nicholas Rolle, Jeremy Steffman, and John Sylak-Glassman, and then given back to contributors to make changes. Nicholas Rolle took upon primary editorial responsibilities, Jeremy Steffman was an undergraduate editorial assistant, and John Sylak-Glassman helped to edit papers. Upon the final resubmission, the final versions of these papers were incorporated by Zachary O’Hagan and Nicholas Rolle into the monograph found here. Our goal has been the speedy publication of these proceedings, and as such, certain aspects – e.g., the complete unification of formatting – have been sacrificed. It is our belief that this does not detract from the final publication in any way.

Nicholas Rolle
Jeremy Steffman
John Sylak-Glassman

January 2016
Equative and Predicational Copulas in Thai

NANCY HEDBERG\textsuperscript{a}, DAVID POTTER\textsuperscript{b}
Simon Fraser University\textsuperscript{a}; Northwestern University\textsuperscript{b}

Introduction

In this paper we report on an experimental study of the copula system in Thai. We argue that the Thai copula system is crucial to the debate over whether specificational sentences should be given an inverse predicational analysis or an equative analysis. We conclude that Thai data supports the equative approach. The paper is organized as follows. We first introduce the inverse and equative analyses, and provide a little background on Thai. We then discuss our sentence acceptability task survey, and introduce the idea that the test items in the survey may have been subject to type-shifting. After that, we describe some interviews we did with Thai speakers aimed at fixing the semantic types of the test items. Finally, we discuss the results of the interviews and conclude.

1 The Inverse vs. Equative Controversy

Higgins 1973 presented a classification of copular sentences in English into four types of interpretation, as shown in (1). The examples here are taken from Mikkelson 2005.

\begin{enumerate}
\item a. Predicational: Susan is a doctor
\item b. Specificational: The winner is Susan
\item c. Identity: She is Susan
\item d. Identificational: That woman is Susan
\end{enumerate}

The controversy has to do with which of Higgins’ categories should be grouped together into different senses of the copula. The proper analysis of specificational sentences is at the heart of the controversy.

The Inverse Analysis has a number of recent adherents, including Williams 1983, and Partee 1986 for English, Moro 1997 for Italian, Frank 2002 for English,

This approach takes specificational and predicational sentences to derive from the same base, typically taken to be a small clause. Predicational sentences result from raising the subject of the small clause, an e type argument, to subject position of the sentence, as in (2). In contrast, specificational sentences result from raising the predicate of the small clause, an <e,t> type argument, as in (3). In this analysis then, reverse specificational sentences are just predicational sentences with subject focus, as in (4).

(2) A: What qualities does Susan have?
   B: Susan is the winner of the student prize.

(3) A: Who is the winner of the student prize?
   B: The winner of the student prize is Susan.

(4) A: Who is the winner of the student prize?
   B: SUSAN is the winner of the student prize.

The trees in (5) and (6) show a sketch of how this analysis of predicational and inverse sentences works, based on the syntactic analyses of Frank 2002. FP here is a small clause headed by some functional category.

(5) Predicational Tree

```
TP
   /\  
  /   \ 
DP_i  T' 
   \  / 
    T  CopP
         \   
          Cop  FP
                   \  
                    DP  F'
                        \  
                         t_i  F
                          \  
                           e  AP
                                \ 
                                 happy
```
Equative and Predicational Copulas in Thai

Predicational sentences result from raising the subject of the small clause; and specificational sentences, called ‘inverse’ sentences, result from raising the predicate of the small clause. Reverse specificational sentences like (4b) are treated as instances of predicational sentences, with a definite DP in predicate position of the small clause where the AP is in (5).

(6) Specificational tree on inverse approach

Thus, on the inverse approach, predicational, specificational and reverse specificational sentences receive identical semantic interpretations, and all result from the same syntactic base containing a vacuous copula that takes a small clause complement. Either the subject or the predicate of the small clause raises to the external subject position (specifier of TP).

A second copular analysis is the equative approach, taken by Zaring 1996 for Welsh, Heycock and Kroch 1999 for English, and Han and Hedberg 2008 for clefts in English. On this approach specificational and predicational sentences are derived from a distinct bases; both specificational and identity sentences are involve an equative copula. Han and Hedberg assume that the descriptive argument in specificational sentences is a generalized quantifier (Barwise and Cooper 1981), i.e. a definite description interpreted quantificationally, and that their semantic interpretation involves the equals sign. These sentences, then, receive the Russellian interpretation shown in (7), where the subject is of type <<e,t>,t> and the complement is an e type argument.

(7) $\exists x \ [\text{winner}(x) \land \forall y [\text{winner}(y) \rightarrow y=x] \land x = \text{Susan}]$
A sketch of a syntactic analysis for the specificational sentence on the equative approach, based on Han and Hedberg 2008, is shown in (8).

(8) Specificational tree on equative approach

On the equative approach that we propose, reverse specificational sentences result from the generalized quantifier <<e,t>,t> type argument occupying the complement position while the e type argument occupies the subject position. Thus, specificational sentences are viewed as reversible, like many identity and identificational sentences. Identity sentences like that in (1c) and identificational sentences like that in (1d) make use of the same equative copula as specificational sentences (λyλx[x=y]) but both subject and complement are of type e.

Predicational sentences on the equative approach receive the same syntactic analysis as on the inverse approach, as illustrated in (5), and they are interpreted as containing an initial e type (or <<e,t>,t> type) argument and then an <e,t> argument.

Thus, under the equative analysis, predicational, specificational, and reverse specificational sentences involve a small clause, the FP, and, in contrast with the inverse analysis, it is always the subject of the small clause that raises. It is therefore the semantics of these sentences that distinguishes them: specificational semantics result from a non-vacuous, equative copula and a quantificationally-interpreted DP; while predicational semantics follow from a vacuous copula and a predicatively-interpreted AP or DP.
Equative and Predicational Copulas in Thai

2 Background on Thai

We now provide some background on Thai. Kuno and Wongkhomthong 1981 discuss the interpretation of sentences with two different copulas in Thai, *bpen* and *kheuu*, ‘be,’ as illustrated in (9). They label sentences containing the copula *kheuu* as ‘identificational’ sentences.

(9) a. yîpùn *pen/khi:* pràthê:d údsa:hàkam.
  Japan is country industry
  ‘Japan is an industrial country.’

b. khon thî: chán rág *pen/khi:* cɔ:n
  person that I love is John
  ‘The person that I love is John.’

About (9b), they say “[9b] is a sentence that identifies the person that the speaker likes best with John. It cannot be interpreted as a sentence that presents as one of the characteristics of the person that the speaker likes best the fact that he is John. Hence, the sentence is exclusively identificational…” *Bpen*, on the other hand appears in ‘characterizational’ sentences like (9a).

Either copula can appear in (10). They say, “If the speaker’s intention is to present one of John’s characteristics, *pen* is used. On the other hand, if the speaker’s intention is to equate John and the person he (= the speaker) likes best, then *khi:* is used.”

(10) cɔ:n *pen/khi:* khon thî: chán rág
  John is person that I love
  ‘John is the person that I love.’

Kuno and Wongkhomthong explicitly relate *bpen* to Higgins’ predicational sentences and *kheuu* to his specificational and identificational sentences. We agree with this analysis, and hypothesize that, consistent with the equative analysis, *bpen* appears in predicational sentences and *kheuu* appears in specificational, identificational and identity sentences. Kuno and Wongkhomthong’s discussion is descriptively very rich and convincing. We designed our study to confirm their analysis by presenting relevant data to large groups of participants, to examine some gaps in the data they discussed, and to bring the Thai data to bear more concretely on the current copula sentence controversy.

Specifically, we argue that Thai distinguishes the copula used in predicational and specificational sentences along the lines that the equative analysis predicts (e.g. the distinction between (9a) and (9b)). We also argue that reverse specificational sentences need to be distinguished from predicational sentences, along the lines of the difference between the two copulas exemplified in (10). Crucially,
*kheuu* sentences with the two possible word orders receive the same interpretation, while *bpen* sentences with only one word order receive a different interpretation.

### 3 The Experimental Survey

We now introduce our experimental survey, which utilized a sentence acceptability judgment task. The stimuli presented both copulas, each in one of four sentence contexts, shown in (11). We included a specificational context, an identity context, and two predicational contexts. Thus, there were eight conditions all together.

In order to try to ensure a specificational instead of an identificational interpretation of the sentences, we used a description with no determiner but with a superlative modifier. In this way, we attempted to invoke a quantificational definite description reading associated with uniqueness (type \(<<e,t,t,><t,><t,>>\)) instead of a demonstrative referential reading associated with familiarity (type *e*). Our stimuli here consisted of occupational nouns with superlative modifiers. We used adjectival free relatives with a classifier instead of simple adjectives because simple adjectival sentences in Thai don’t contain either copula.

(11) a. **Specificational:** Definite Description + *bpen/kheuu* + Proper name

- Nak a daaeng khohn thee chan tai ruup maak thee soot
  - Actor person that I photograph superlative
  - *bpen/kheuu khoon* Angela
  - *politeness-marker* Angela
  - ‘The actor that I photograph most is Angela.’

b. **Identity:** Pronoun + *bpen/kheuu* + Proper name

- Khao bpen/kheuu khoon Angela
  - He/she is *politeness-marker* Angela
  - ‘She is Angela.’

c. **Predicational (1):** Definite Description + *bpen/kheuu* + Adjectival Free Relative

- Nak sa daaeng khohn thee chan tai ruup maak thee soot
  - Actor person that I photograph superlative
  - *bpen/kheuu khoon suay*
  - is person pretty
  - ‘The actor that I photograph most is a pretty person.’
Equative and Predicational Copulas in Thai

d. Predicational (2): Pronoun + bpen/kheuu + Adjectival Free Relative
Khao bpen/kheuu khohn suay
He/she is person pretty
‘She is a pretty person.’

Out of a total of 120 proper names, 120 descriptions and 120 adjectival modifiers, a pool of 960 stimulus sentences was created, 120 in each of the eight conditions. Eight test versions were created. Each test contained 120 test stimuli. Subject and object tokens were counterbalanced across test versions, and each of the eight conditions were presented 15 times in each test. Each test also contained 120 fillers: 60 grammatical sentences and 60 ungrammatical sentences. Fillers were independently rated grammatical or ungrammatical by three native speakers. Also, while the grammatical sentences were perfectly grammatical, the ungrammatical sentences ranged from ‘word soup’ to mildly ungrammatical.

The participants were 49 native Thai speakers, who were students recruited from Chukalongkorn and Suan Dusit Universities in Bangkok, Thailand. We report on the results of 40 participants since nine participants were excluded as their mean rating of the ungrammatical sentences was above 4.

The procedure was as follows. The task was a written acceptability judgment task, with acceptability characterized as how ‘natural’ or ‘normal’ each sentence sounds to the participant. There was a seven point rating scale, ranging from 1 ‘completely unacceptable’ to 7 ‘completely acceptable’. Task materials and instructions were given in Thai. Participants were advised to judge based on their first impression and to not second-guess their judgments.

The experimental hypotheses were the following. (1) In specificational contexts, kheuu should be more acceptable than bpen. (2) In identity contexts, kheuu should be more acceptable than bpen. (3) In predicational contexts, bpen should be more acceptable than kheuu.

A summary of the results are presented in (12). For each condition, a one-way analysis of variance (ANOVA) was performed with copula as a repeated measure. In specificational contexts, kheuu did turn out more acceptable than bpen. This difference appears very close, but was statistically significant (bpen (4.40), kheuu (4.66), [F(1,39) = 4.565, p < .05]). In identity sentences, kheuu was again more acceptable than bpen and the difference was statistically significant (bpen (4.45), kheuu (5.97), [F(1,39) = 45.12, p < .001]). In the predicational (2) context (the one with a pronoun subject), bpen was more acceptable than kheuu and the difference was statistically significant (bpen (5.82), kheuu (5.14), [F(1,39) = 26.98, p < .001]). There was no significant difference between the copulas in the predicational (1) context.
Nancy Hedberg and David Potter

(12) Results of Experimental Survey

While our hypotheses were supported statistically, we were surprised at how close the results were, and we were puzzled at why sentences with the non-preferred copula were judged acceptable to such a great degree. We have thought about two different types of explanation for the closeness of the results: problems with the acceptability of our particular stimuli, and also the possibility of type shifting in the interpretation of our sentences.

With regard to the first possibility, we note that the specificational and predicational (1) sentences were somewhat awkward in that they convey more than one proposition. We don’t know how the participants judged the sentences, and the availability of a simpler and equivalently interpreted alternative discourse sequence may have reduced the rating of the test items. For example for the specificational sentence in (11a) it would be simpler to split the sentence into two: “Angela is an actor. ‘I photograph her most”’. Likewise for the predicational sentence in (11c), it might be easier to understand if the sentence were split into two, i.e. “I photograph one actor most. She is a pretty person”.

Note also that these two types of sentence were longer than the identity and predicational (2) sentences. Thus, the absolute ratings of these conditions are not comparable, and the length difference may have obscured the judgments of the participants.

The results may also have been influenced by a number of non-truth-conditional factors. For example, more than one participant noted that kheuu is strongly preferred in formal writing, and that it signifies a greater confidence in the truth of the statement.
Important however, we also decided that the sentences were possibly susceptible to type shifting of the arguments and that this might have affected the results. The differences were mostly less than 1 point on a 7-point scale. Could participants have been construing the sentences in different ways? After all, copular sentences are well known for supporting different construals, as discussed for example in Higgins 1973.

Perhaps the particular sentence elements can be shifted into different semantic types (Partee 1987). In particular, the adjectival free relatives consist of a classifier and an adjective. We were assuming that they were interpreted as predicates of type \(<e,t>\) but it is possible that they can be interpreted as referential (type \(e\)) or as generalized quantifiers (type \(<<e,t>,t>\)—that is as ‘the pretty person’. Also the definite descriptions, which we had assumed were interpreted as referential or as generalized quantifiers could possibly have been interpreted as predicates (type \(<e,t>\)), especially if occurring in complement position.

While an explanation for the closeness of the acceptability judgments in terms of type-shifting is possible for predicational (1) and predicational (2) contexts, we didn’t expect it to have an effect on the identity context or the specificational context since in those cases the proper name complement would seem to be an unshiftable argument of type \(e\). In order to test the hypothesis concerning type shifting in the predicational contexts, we conducted some interviews with native speakers. We also wanted to extend the domain of our investigation to include reverse specificational contexts in which definite descriptions occur as copular complements. We discuss these interviews in the next section.

4 The Interviews

Four native Thai speaking professors and one businessman were interviewed in English. The notion of grammaticality was explained, with examples given in Thai. Then the crucial Thai sentence types were presented for grammaticality judgment, first out of context and then in two English contexts each. The contexts were designed to fix the semantic types of the test items.

The first question concerned the Predicational (1) sentence: *Actor that I like best kheuu/bpen khoon tall*, with contexts shown in (13).

(13) **Context A:** “Suppose that you are describing a number of qualities about your favorite actor. She is sweet, brunette, Canadian and witty. Then you say that the actor you like best is tall.”

**Context B:** “Out of a room full of actors, you are asked to identify the actor that you like the most. You identify the tallest person in the room as your favorite actor.”
Out of context, 5/5 participants preferred *bpen*. We felt that Context A supported an \(e + <e,t>\) predicational interpretation, and indeed all 5 participants preferred *bpen*. However, in Context B, we felt that type-shifting would apply, turning the response into a generalized quantifier + referential—i.e. specificational—sentence: *Actor that I like best is the tall person*, and indeed 5/5 participants preferred *kheuu* here. Thus, type-shifting could explain why there was no significant preference for either copula in this sentence context in the survey.

The second question concerned the Predicational (2) sentence: *He kheuu/bpen khohn tall*, with contexts shown in (14).

(14) **Context A**: “You witness a crime. The police officer asks you to describe the culprit. You list a number of traits, including that he is tall.”

**Context B**: “You witness a crime. Out of a police lineup, you are asked to identify the culprit. You identify the tallest person as him.”

Out of context *bpen* was preferred by 5/5 participants. Context A was indeed a predicational context: 5/5 participants preferred *bpen*, and we suggest that this supports an \(e + <e,t>\) interpretation of the sentence. However, we suggest that type shifting would occur in Context B, so that the sentence would be interpreted as ‘he/it is the tall person’, with an \(e\) or \(<<e,t>,t>\) type subject and an \(e\)-type complement—i.e. an identity sentence. In support of this, note that 5/5 participants preferred *kheuu* here.

The third sentence type included in the interviews had not been included in the survey: a reverse specificational sentence—*Mr Sun kheuu/bpen actor that I like best*, with contexts shown in (15).

(15) **Context A**: “Suppose that you are talking about the famous actor Mr. Sun. You say that he is short, fat and has a reputation for being short tempered. Nevertheless, you continue your description by saying that Mr. Sun is the actor that you like best.”

**Context B**: “I’m asking about different people in your life. I ask who your mother is and who your best friend is. Then I ask who the actor that you like best is.”

Out of context both copulas were accepted, with subjects unable to explain any meaning difference. We hypothesized that Context A would support a predicational interpretation \((e + <e,t>)\), and indeed, 5/5 participants preferred *bpen* here. However, we hypothesized that Context B would support a reverse specificational interpretation of the sentence and that *kheuu* would be preferred. This would be the assumption of the equative approach, which predicts that specificational
sentences should be reversible, as well as that there should be at least a semantic
difference between reverse specificational and predicational sentences, if not a
morphsyntactic difference. Interestingly, it turned out that 4/5 participants did
prefer *kheuu* although 1 preferred *bpen*. We conclude that 4/5 of the speakers
were interpreting the sentence as $e + <<e,t>,t>$ rather than $e + <e,t>$, thus supporting
the need to distinguish between those two interpretations.

The fourth, identity sentence type involved the sentence, *He kheuu/bpen Mr. Sun*, with contexts shown in (16).

(16) **Context A:** “You are introducing your friends to a group of people. You
say, ‘She is Jill. He is John. He is Mr. Sun’.”

**Context B:** “Suppose that you find yourself face to face with King Rama (who can change his shape at will). At first he appears in his true form. Then suddenly, he changes to look like your best friend. Then he changes to look like Mr. Sun.”

Out of context, *kheuu* was preferred. We thought Context A supported a referential + referential interpretation, and *kheuu* was preferred by 4 out of 5 participants. The fifth speaker judged both copulas to be ungrammatical. Again we judged Context B to support an $e + e$ interpretation. Three participants preferred *kheuu* here. One participant preferred a ‘become’ type sentence with *bpen*, and one participant felt that both copulas were ungrammatical.

Finally, the specificational contexts shown in (17) involved the sentence, *Actor that I like best kheuu/bpen Mr. Sun*.

(17) **Context A:** “Out of a roomful of actors, you are asked to identify the actor that you like the most. You identify Mr. Sun.”

**Context B:** “Suppose that you are huge movie fan. “You have always had a favorite actor, but the identity of your favorite actor changes constantly. Last year, actor that I like best was Mr. Jones. Last month, actor that I like best was Mrs. Kim. Currently actor that I like best is Mr. Sun.”

Out of context, *kheuu* was preferred by 5/5 participants. Context A was intended to be a specificational context. *Kheuu* was preferred (5/5). We concluded that this context supported a generalized quantifier + referential interpretation. Context B was a variant of this. Again, *kheuu* was preferred (5/5), but *bpen* was allowed by two participants who said that it was marginal. We thus concluded that even this context supported a specificational interpretation.

However, one participant noted that, in context B, if the temporal modifier ‘now’ is included, then both copulas can be marginal, but without this modifier,
then it seems to be a statement of fact and \textit{kheuu} is preferred. This seems to indicate that there is something else going on in the choice between \textit{bpen} and \textit{kheuu} besides semantic type, syntactic configuration and truth conditions. We intend to explore this possibility in future work.

To summarize our interpretations of the interviews, we conclude that our “definite descriptions” can be construed in terms of all three semantic types. Our “adjectival free relatives” can be construed as either referential or as predicates. \textit{Bpen} is preferred in $e + <e,t>$ contexts, and \textit{kheuu} is preferred in $e + e$, $<<e,t>,t>$ + $e$ and $e + <<e,t>,t>$ contexts.

The fact that \textit{bpen} is preferred in context A and \textit{kheuu} is preferred in Context B of the reverse specificational condition in (15) is strong evidence in favor of the equative analysis for both English and Thai because it is only the equative approach that predicts that reverse specificational sentences should be distinguished from predicational sentences in languages of the world—whether only semantically (as in English) or also morphosyntactically (as in Thai). If we consider the English interpretations of such sentences in relation to their Thai equivalents, they thus seem to be ambiguous in the way that the equative analysis predicts. The inverse analysis treats the English sentences as univocal. That is, it doesn’t allow for a reverse specificational interpretation distinct from a predicational interpretational since the complement argument in both cases can only be the predicate of a small clause with a vacuous copula selecting it. This approach thus cannot explain the difference between the Thai variants.

5 Conclusions

From the experimental survey, we conclude that the results support our experimental hypotheses. From the interviews we conclude that the small differences in the survey data can be explained to be the result of type shifting. Different participants construed the sentences in different ways, consistent with different ways of type shifting the sentence elements. A reverse specificational context was included in the interviews and favored \textit{kheuu}, a finding which supports the equative analysis. Currently we are planning a second round of interviews to more systematically test speakers’ judgments in context, and in this round of interviews we will again include a reverse specificational sentence type.

Our theoretical conclusion is that the Thai data support the equative analysis. Two different copulas appear in predicational vs. equative sentence types. \textit{Bpen} is preferred in predicational contexts. \textit{Kheuu} is preferred in identity, specificational and reverse specificational contexts. More generally, we would like to argue that if one language (Thai) lexically and syntactically distinguishes predicational from equative copular sentences, this lends support to a predicational vs. equative ambiguity analysis of other languages (such as English) which only have one copula.
References


Zaring, Laurie. 1996. Two "be" or not two "be": Identity, predication and the Welsh Copula. *Linguistics and Philosophy* 19:103-142.

Nancy Hedberg  
Department of Linguistics  
8888 University Drive.  
Simon Fraser University  
Burnaby, BC V5A 1S6  
Canada  

dernberg@sfu.ca  

David Potter  
Department of Linguistics  
Northwestern University  
2016 Sheridan Road  
Evanston, Illinois 60208  
dkp1@u.northwestern.edu