1. CATEGORY JUSTIFICATION

I am applying under Category Five as there is little external funding available for my proposed research.

2. ABSTRACT

A central goal of research in Linguistics is to understand the nature of our linguistic knowledge and how we acquire such knowledge. Part of the answer involves determining which part of our linguistic knowledge is innate and which is acquired through exposure to the language in our environment. Research addressing this question has focused on determining what is universally true about human languages, on the assumption that linguistic universals are potential candidates for innate linguistic knowledge. My recent work attempts to clarify our knowledge of change and whether there exist general principles governing how change is expressed across languages. On the basis of evidence from Mandarin Chinese, I hypothesize that there are (at least) two types of change, and that there is a general principle relating the position of the change marker in a sentence with the type of change expressed. I propose to test this hypothesis on Malay.

3. PRESENT STATUS OF KNOWLEDGE

A central goal of research in Linguistics is to determine what we know when we know a language and how we acquire such knowledge. Part of the answer to this problem involves figuring out which part of our linguistic knowledge is due to our biological endowment and which is acquired through exposure to the language in our environment. Research addressing this question has focused on determining what is universally true about human languages and how languages may vary, on the assumption that linguistic universals and limits to variation are potential candidates for innate linguistic knowledge. My recent research addresses these general questions in the domain of linguistic aspect, which is concerned with the structure of events and states and their development over time. My specific focus is on the notion of change. I attempt to clarify our linguistic knowledge of change and determine if there exist general principles governing the expression of change across languages.

The notion of change plays an important role in how we categorize descriptions of events and states and their development over time. For example, the occurrence of the event described by John broke the vase is commonly assumed to entail a “change of state” in that there is a transition from the situation where the vase was not broken to one where it is broken. This entailment is due to the inherent meaning of the verb break, together with the object the vase, in combination with the verbal form broke, which
expresses perfective aspect (as well as past tense) (Smith 1997, Rothstein 2004). I will refer to this type of change that is due to the meaning of the verbal complex and perfective aspect CHANGE-PERF.

The notion of change has also been associated with the meaning of adverbs such as *already*. *Already* has been claimed to express a “change of state” (Traugott and Waterhouse 1969). In a sentence such as *the light is already on*, the speaker uttering the sentence asserts that the light is on at the moment of speech and assumes that it was not on before. Because of this meaning of *already*, the sentence *one plus one is already two* is odd given that the person uttering this sentence would have to assume that the relevant mathematical truth did not hold before. I will refer to the change that is due to adverbs like *already* CHANGE-AL.

One question that arises is how CHANGE-PERF is related to CHANGE-AL. Besides “change of state”, *already* has been associated with a “contrary to expectation” interpretation. The speaker uttering the sentence *the light is already on* may assert that the light is on, and assume that someone else may expect that the light is not on. The sentence indicates that what is asserted is contrary to expectation. These two interpretations are associated with the same item not only in English with *already*, but also in German with *schon* (Hoepelman and Rohrer 1981), suggesting that their connection is not accidental. This leads to the question of how the “contrary to expectation” meaning, which I will subsequently refer to as CONTRA-AL, is related to CHANGE-AL.

In a recent paper (Soh, in press), I argued that CHANGE-PERF and CHANGE-AL involve two distinct types of change. They differ from each other in how the preceding and subsequent phases of the transition are related, and in the type of entities involved in the transition. These two types of change however are closely related as a single lexical item in a language, namely the –le particle in Mandarin Chinese, may express either type of change. The particular type of change expressed however is determined by the (structural) position of -le in a sentence. The –le particle may appear immediately after the verb or at the end of the sentence.

(1)  
\[ \begin{align*} 
\text{a.} & \quad \text{Tamen daoda-le shan-ding.} \\
& \quad \text{they \ reach-LE \ mountain-top} \\
& \quad \text{‘They reached the top of the mountain.’} \\
\text{b.} & \quad \text{Tamen daoda shan-ding \ le.} \\
& \quad \text{they \ reach \ mountain-top \ LE} \\
& \quad \text{‘They have already reached the top of the mountain.’} 
\end{align*} \]

When –le appears after the verb, it expresses CHANGE-PERF. When it appears at the end of the sentence, it expresses CHANGE-AL. I hypothesize that there is a general principle connecting sentence structure and meaning, relating the position of the marker of change with the type of change that can be expressed.

In another paper (Soh 2007), I addressed how CONTRA-AL is related to CHANGE-AL. Like English *already* and German *schon*, Mandarin sentence final –le is also associated with both “change of state” and “contrary to expectation” interpretations (Li and Thompson 1981). Using evidence from Mandarin sentence final -le, I argued that the two interpretations are related in that both their use involves reference to what the speaker believes about what is accepted among the participants in a conversation, and that the “contrary to expectation” meaning is a type of change.
The analyses in these two papers suggest the following relations among the different types of change.

(2)

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CHANGE
  CHANGE-PERF  CHANGE-AL
  CHANGE (of state)-AL  CONTRA-AL
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In addition, they led to the hypothesis that there is a connection between the positioning of an item in a sentence and the type of meaning it may express. CHANGE-PERF is associated with a marker of change close to the verb, while CHANGE-AL and its subtypes are associated with a marker of change at the end of the sentence.

The next question, which I hope to take up is to determine to what extent the principle relating the positioning of the marker of change and the type of change expressed holds across languages. To test this hypothesis, one needs to find another language that also has the same form that appears to be related to more than one notion of change. Malay, which is spoken in Malaysia and Singapore, presents an ideal candidate. Malay is historically/genetically unrelated to Mandarin Chinese, but it has a form dah that appears to have similar interpretations as Mandarin –le. Like –le, dah may appear in two positions: before the verb or at the end of the sentence. This positioning of dah is similar to that of –le, though not identical in that while –le may follow the verb, dah may appear before the verb.

(3)  
   a. Aku dah sampai.  
      I       DAH arrive  
      ‘I arrived.’
   b. Aku sampai dah.  
      I      arrive   DAH  
      ‘I have already arrived.’

The slight difference in the positioning of Malay dah and Mandarin –le offers opportunities to fine-tune my hypothesis of the connection between sentence structure and meaning.

Specific questions that I will address in the proposed study include:

(i) What is the precise meaning of dah in Malay?
(ii) Is there a difference in the interpretation of dah when it appears before the verb and when it appears at the end of the sentence?
(iii) Is the meaning of Malay dah the same as Mandarin –le? If not, how do they differ?

Answers to these questions will advance our knowledge of the types of change that are distinguished in human languages, and clarify the relation among the different types of change that has remained unclear in the literature. If the principle relating the type of change expressed and the position that the marker of change occurs in a sentence holds also in Malay, we will be one step closer towards discovering a universal linguistic principle. This in turn advances the search for linguistic knowledge that may be part of our biological endowment.
4. PLAN OF WORK

To answer the above questions, I will conduct a corpus study to examine the contexts in which the form is used in natural discourse, in order to understand the meaning and distribution of *dah* in Malay. I will use the corpus of spoken Malay developed by Hiroki Nomoto, a graduate student in Linguistics at the University of Minnesota and his former adviser Isamu Shoho at Tokyo University of Foreign Studies in collaboration with researchers at the University Kebangsaan Malaysia (Multilingual Corpora (Malay). In addition, I plan to use a widely accepted linguistic research technique called grammaticality judgment experiments. I will construct test sentences with *dah* before the verb, with *dah* at the end of the sentence and sentences with both the preverbal and the sentence final *dah*. I will ask native speakers of Malay to determine if the sentences are acceptable or not, and if they are, what they mean. The subjects of the study will be recruited among students at the University of Minnesota. I hope to be able to recruit 10 native speakers of Malay from Malaysia and Singapore. I will also review the linguistic literature and reference grammars on Malay and related languages to determine what we already know about *dah* or its counterpart in other languages, and to confirm the accuracy of the available descriptions in Malay. I plan to begin the work for the study in July 2008. The results of the study will be presented at a linguistics conference and a manuscript will be submitted for publication in a refereed journal.

5. BUDGET JUSTIFICATION

A graduate research assistant (Hiroki Nomoto) is needed for 10 hours per week for 12 months to assist in the corpus study and the analysis of the data. He will also help me identify subjects for the grammaticality judgment experiments, construct the test sentences and conduct the experiments. Research subject payment is needed to help recruit subjects for the grammaticality judgment experiments.

6. NEED JUSTIFICATION

There is no other available funding for this project. I received a Grant-in-Aid of Research, Artistry and Scholarship for a joint project with Maria Sera, from Institute of Child Development, for the period between January 1, 2008 and June 30, 2009. The support is for our interdisciplinary research project on the acquisition of classifiers and conceptual development, and is unrelated to the proposed work on Malay. As part of the retention effort, the College of Liberal Arts has awarded me $xx to help support my research and scholarly work in 2007-2010. The current balance of the funds is $xx.
$xx is committed to three up-coming conference travels. The remaining balance of $xx is committed to my partial summer salary in 2008 and 2009. There is no fund left for a research assistant and human subject payments.

Planned conference travels:
(i) *The 20th North American Conference on Chinese Linguistics (NACCL-20)*, April 25-27, 2008, The Ohio State University, Columbus, Ohio, USA.
Joint paper with Shiao-wei Tham (Wellesley College) accepted for presentation: “Verb-le Clauses as Minimal Narratives”
[Estimated expenses: Air ticket: $350, Accomodation (3 nights): $400, Food: $200, Ground transport: $60, Registration: $50; Total: $1010]

Joint paper with Hiroki Nomoto (University of Minnesota) submitted for presentation: “Imperfective Aspect, the verbal prefix meN- and stative sentences in Malay”
[Estimated expenses: Air ticket: $1800, Accomodation (3 nights): $400, Food: $200, Ground transport: $180, Registration: $100; Total: $2680]

Joint paper with Shiao-Wei Tham (Wellesley College) accepted for presentation: “Aspect and Discourse Modes: A Corpus Study of Mandarin Aspectual Particles –le”

7. WORD COUNT

1646 words

REFERENCES CITED
