## Chapter 6 Synthesis and further research

## 6.1 Synthesis

This section brings together the summary sections of chapter two (main verb uses), chapter three (pre-verbal uses) and chapter four (post-verbal use). Figure 14, repeated below, links the main verb meanings of ba. The meanings on the left of the dashed line are transitive and the meanings on the right are intransitive.

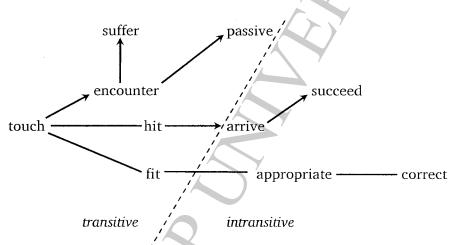


Figure 14: Semantic map of main verb meanings (repeated)

Marking negation with ba can be seen as an extension of meaning from "correct' (see §5.3). The proposed pathway is that 'correct' initially was used as a sentence final particle for asserting the truth of the proposition (not seen in modern Sgaw) and then extended to include emphatic negative sentences ('it's not true that X'). This wide scope use then was used for narrow scope negation and the original sentence final ba was placed after the predicate under the scope of negation.

Considering now the post-verbal meanings I showed that there were two major subtypes (Chapter 4). The first are the argument-marking functions of Applicative and Receive. I propose that these functions developed out of the transitive 'touch' meaning. This proposal has not been made in the literature on grammaticalization

(see chapter 1.11), but can be seen as a simple extension of 'touch'. Consider the following representative example:

Here and unexpressed agent do an action of cleaning on the patient people. When something is cleaned, there is contact between some cleaning product the agent has and the patient. This contact in the spatial domain is then extended to other domains like emotions: angry-touch = 'angry at'; speech: talk-touch = 'talk to' and transfer: get-touch = 'receive'.

The use of the meaning 'touch' being extended into more grammatical functions has not been documented in the literature (see for example Heine & Kuteva 2002). The closest example would be Enfield's (2003) analysis of 'acquire' in Southeast Asia languages, but none of those languages have developed applicative/recipient meanings from 'acquire'.

Moving now to the second major type of post-verbal functions which include a number of modality meanings. Table 7, repeated below, shows how the modal domains of possibility and necessity can be organized. Post-verbal uses of 6a fall into the upper half of the table. These meanings would fit in the Non-epistemic possibility region (Participant-external and Participant-internal cells).

Table 7: Modality types (Auwera & Plungian 1998: 82) (repeated)

Possibility							
No							
Participant-	Participant-external possibility		Epistemic				
internal possibility (Dynamic possibility, Ability, Capacity)	(Non-deontic possibility)	Deontic possibility (Permission)	possibility (Uncertainty)				
Participant-	(non-deontic	Deontic necessity	<b>Y</b>				
internal necessity (Need)	necessity)	(Obligation)	Epistemic				
	Participant-external necessity		necessity (Probability)				
Non-epistemic necessity							
Necessity							

Heine & Kuteva (2002) list sources for permission as 'ability', 'get' and 'leave'. Sgaw ba does not include meanings of leaving or getting, but it does include 'ability'. However, ability is found in a different syntactic structure – as a clause final "comment" on the clause. Alwera & Plungian (1998) observe that participant-internal and external possibility are often derived from the lexical meanings 'be strong', 'know', arrive at', finish, and 'suffice'. The closest meaning that ba has to this is 'arrive', but 'arrive' in Sgaw has only a temporal meaning and the jump from the temporal domain to ability or permission seems to be too great. I would suggest that these modality meanings are an extension from 'correct' and/or 'appropriate'. It seems that the step from 'appropriate' or 'correct' is much smaller. Permission could be stated as "it is appropriate that X does Y". And then from there 'circumstance', 'opportunity', 'ability', and 'experience could be derived.

Permission was defined follow Bybee, Perkins & Pagliuca (1994) as those enabling conditions that exist socially that allow an agent to complete the predicate action. Here someone else is giving their consent for the action to happen. They are in effect saying "It is appropriate for X to do Y".

<sup>&</sup>lt;sup>11</sup> The clause final placement of ability is an areal feature of Southeast Asia.

The next step would be for this meaning to be extended from the social domain to the physical domain, from someone permitting the action to happen to the situation permitting the action to happen. Circumstance was defined just like permission; the only difference is that the enabling conditions exist *physically* rather than *socially*.

The next two functions are opportunity and experience. These two meanings are moving out of the modality domain, yet are still closely related. Opportunity adds the *unexpected* to circumstance and experience shifts the focus from the enabling conditions to the effect on the agent of the predicate action.

The only function of *ba* not yet discussed is ability. Ability has been mentioned in passing, but not focused on. Ability can be thought of as enabling conditions exist in the agent to complete the predicate action. This definition is close to circumstance and permission. However, ability occurs at clause final and permission and opportunity are post-verbal. Heine & Kuteva (2002) list four sources for ability – arrive, get, know and suitable, and Bybee, Perkins & Pagliuca (1994:188-189) list a number of lexical sources including finish, know, arrive, get, send and enough. I would suggest that ability developed out of permission/circumstance and that the syntactic distribution of 'arrive' influenced its new position in the clause.<sup>12</sup>

On the other side, 'appropriate' seems to derive the preverbal functions of obligation and necessity. Heine & Kuteva (2002) state that the meaning 'suitable', which also could be translated as 'appropriate', extends its function into ability and obligation. There is also a pathway from the lexical meaning 'good/proper' moving to function as deontic necessity and participant-external necessity (Auwera & Plungian 1998:98). So, a question comes up with whether 'appropriate' has extended into the appropriate or necessity. Looking back at section 3.5, it could be analyzed that the 'obligation' function would have come out first rather than 'necessity' function since there is a loss in social dimension when it goes this direction. Bringing together these observations, it could be concluded as the sense 'appropriate' has extended into the 'obligation' function first and then the 'obligation' function further extends into the 'necessity' function.

<sup>&</sup>lt;sup>12</sup> Also the frequent occurrence of clause final ability marking in Southeast Asian language would have helped this development.

Taking all these development together Figure 14 can be augmented:

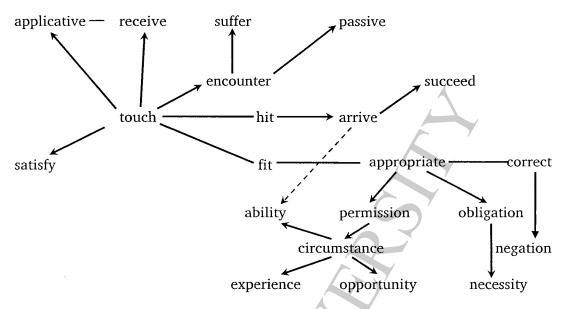


Figure 18: Complete semantic map for Sgaw 6a

## 6.2 ba in other languages

A search of the STEDT database (http://stedt.berkeley.edu/~stedt-cgi/rootcanal.pl) found very few possible cognates of ba outside of Karenic. The closed possible cognates are Achang  $pat^{31}$  'hit', Padam-Mising bek 'hit', and Sangtam Naga bæ 'must'. Considering there are few entries within Sino-Tibetan outside of Karenic for the meanings expressed by Sgaw ba and the numerous entries for 'hit' and 'correct' within Karenic points to ba being an innovation at the Proto-Karen stage. Even stronger evidence comes from three other Karen languages. Table 12 lists the meanings of cognates of Sgaw ba in Bwe (Henderson (1997), Kayan (Manson p.c.), and Kayah (Karenni Literature Committee 1994).

Core meanings that occur across the four Karenic languages include (using the labels of this thesis) 'hit', 'touch', 'suffer', 'obligation', 'permission', 'appropriate', 'succeed' and 'applicative'. There are also a number of meanings not found in Sgaw.

Table 12: Meanings of cognate of Sgaw ba in three Karen languages

Bwe		Kayan		Kayah	
δε	'hit, strike, touch, make contact with'	ba	'hit'	bε	'hit target'
	make contact with			$b\varepsilon^1$	'touch'
вε	'must, should, ought to'	ba	'must'	$barepsilon^1$	'must, should'
δε	'ail, suffer, undergo, cause to undergo'	ba	'suffer'	$b\varepsilon^1 s^h \varepsilon^3$	'afflict, hurt'
бε	'allowed to, happen to, get to'	ba	'worthy'	bε	'succeed'
бε	'enough, sufficient'	ba	'need'		
бε	correct, right, appropriate'	ba	'may, want'	,	
бε	'happen, take place'	ba	'necessary'		
вε	'concern, matter'	ba	ʻifʻ		
δε	'free, unoccupied'	ba	'recipient'		

## 6.3 Further research

This research has been limited to only one language. Further research into other Karenic languages would both extend and refine the semantic map proposed here.

As the Proto-Karenic word \*pa is not found outside Karenic another line of research would be to study other language families found in Southeast Asia. Linguists have suggested that the syntactic changes in Karenic are a result of contact with Mon-Khmer and Dai languages. These two language families would be the first families to consider. If the form is found in these languages, then another avenue of research would be to see how it functions in these languages, and if these functions can be mapped onto the semantic map developed here; and if not, do these language have some other form that have similar functions?

Also this study could be extended to other Tibeto-Burman languages. Burmese would be a good candidate as many Karenic language speakers also speak Burmese.

This study has not made a stand on whether the independent verbal uses of ba constitute one form and multiple meanings or several homonyms with related meanings. A cross linguistic comparison of other Karen languages may help clarify this situation.