行政院國家科學委員會專題研究計畫成果報告

從主觀性理論看若干鄒語及中文之語法現象 2/2
Subjectification and Its Linguistic Manifestation in Tsou and Mandarin

計畫類別：☑個別型計畫　　□整合型計畫

計畫編號：*NSC 91-2411-H-002-090*

執行日期：91 年 8 月 1 日至 93 年 7 月 31 日

個別型計畫：　計畫主持人：*蘇以文*

處理方式：□ 可立即對外提供參考
☑ 一年後可對外提供參考
□ 兩年後可對外提供參考

執行單位：台灣大學語言學研究所
中華民國　93 年 6 月 30 日

Subjectification and Its Linguistic Manifestation in Tsou and Mandarin

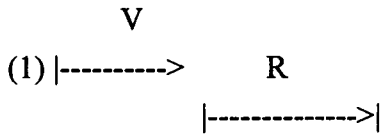
1. Iconicity as Evidenced in Saisiyat Linguistic Coding of Resultative Events

2. From Main Verb, Verbal Aspect to Current Relevant State: A Case Study on the Grammaticalization of Saisiyat Polysemous *ila*

Iconicity as Evidenced in Saisiyat Linguistic Coding of Resultative Events

1. Introduction

"Resultatives" is discussed under the field of "causatives" in Croft (1990) Comrie (1989) and Fillmore (1977). It is a form with a stative reference derived via action verbs, which "denotes not only the state but rather the action causing the respective state as well" (Jaxontov 1988: 101). Based on Goldberg (1992, cited in Liu 1996: 337), resultatives have the following inner structure that is constructed by an action (V) and the result of that action (R), as illustrated in (1).



Also included in "causatives" is the "manipulation" type. Though we will not discuss this causative subtype in this study, we consider it necessary to distinguish it from the "resultatives" before we start our analysis. For manipulation verbs, the subject-agent of the main clause manipulates the subject-agent in the subordinate clause, and a complementation codes the target event performed by the manipulee. The manipulee, though a subject in the subordinate clause, is the dative object of the matrix clause (Givon 1993: 3). The following English sentences (2a) and (2b) exemplify the two types of causatives.

(2a) The child killed a bug. (RESULTATIVE: cause to become a state)
(2b) Mary made the child to read. (MANIPULATION: cause to do an action)

Only the resultative constructions such as (2a) will be explored here. Based on the data collected, we identify the forms speakers resort to describe resultative events. According to an idealized model proposed by Croft (1990), we discuss the resultative event type at a discourse level. By analyzing the different ways of describing a resultative event, we aim to explore the underlying principles which determine the way an event is linguistically encoded.

The linguistic encoding of an entity might have been systematically corresponding to

the physical from of that entity in the real world (Langacker, 1983; Tai, 1983; Verspoor 2000; Johnson and Lakoff, 2002, to cite a few of them). As Kirsner (1983: 249) has suggested, "there is an appreciable iconic relationship between the physical form of grammatical structures and the content of the messages which these structures are used to communicate." We thus assume that language is not more arbitrary, not more purely-symbolic than any other human social behavior.

Based on this assumption, this paper aims to explore the cognitive mechanisms behind the syntactic representations of resultative constructions in Saisiyat[1]. According to ten pieces of narrations and fieldwork elicitations, the focus of this study will be placed on how the linguistic description of an event is related to the perception of that event. We attempt to elaborate this relation through syntactic cues as well as discourse-analytic evidences. By this study, we attempt to address the following research questions in this study:

i) How are resultative events encoded in Saisiyat?
ii) How does the linguistic form of a resultative event in Saisiyat iconically represent the perception of that event in the physical world? Could the iconicity of language observable in syntactic cues such as word order or integrity?

2. Literature review

Previous studies of resultatives could be roughly classified into three approaches, termed here as "morphological", "semantic" and "syntactic" in this study though they might be given other terms in different studies. The morphological approach could be further distinguished in terms of its emphasis. One of them focuses on the resultative reading of tense/aspect marking as in the studies of Carey (1996) and Jaxontov (1988). Jaxontov (1988: 103) claims that perfectives or past participles are "nearly always resultatives proper having the general resultative meaning." For example, "John is gone" employs past participle to denote a state directly derived through the action itself. The other morphological approach deals with the morphological structure of resultative verbs, i.e., the formation of resultatives verbs with relation to its cause or result through morphological devices such as affixation or compounding. It might be useful to identify the most prominent way of resultative

1 Saisiyat is an Austronesian language spoken primarily in Wufung of Xinchu and Nanzhuan of Miaoli with few population in Taiwan. In two the regions, two dialects of Saisiyat are spoken, but their syntax are roughly the same, only with some phonological differences.

lexicalization in different languages for typological studies. The second approach, the semantic approach, analyzes the semantic feature of the V verb (see (1)) and its effect on the resultative reading of the R verb. For example, Rapoport (1993) studies the characteristics of the V verbs and the corresponding syntactic structure of its resultative part. For them, the semantics of the V verb might have influenced the resultative reading as well as the syntactic structure of the R complement. The third approach is the syntactic approach, which centers on the sentential or constructional levels of resultative constructions. For example, Liu's study of Chinese *–de* reports one resultative structure as post-verbal complement (Liu 1996). Linguists of this approach seek to come up with a rule of resultatives from syntactic, cognitive and constructional dimensions.

In this study, we attempt to promote the definition of resultatives to a discourse level. It seems that no previous study readily has directly treated resultatives from discourse-analytic approach, whereas the cognitive model of simple event propose by Croft (1990) may be helpful in defining and classifying the so-called resultative events at a discourse level.

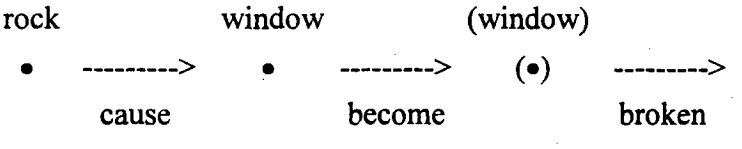
Adopting the 'causal-chain of event' proposed by Talmy (1975), Croft's model is primarily based on the concepts of ICM (Idealized Cognitive Model, Lakoff 1987). ICM applies the prototype theory of categorization in order to explain the core meanings and extensions of metaphor, lexicon, and syntax. An ICM represents a central facet of a category that is simplified for organization of human world knowledge. Though it is developed primarily for categorization of nouns (natural objects), subsequent experiments have found that human perception of 'event' could also be explained by this prototype effect. As a classical example, Coleman and Kay launched an experiment on the prototype of *lie* (Coleman and Kay 1881). They define *lie* according to the following criteria: a) falsity of the utterance, b) speaker's intention to deceive and c) the speaker's awareness of the falsity of the utterance. Items that do not fit perfectly into the ICMs could diverge from the central prototype, and Coleman and Kay (1981) have found that people would still call it a "lie" in situations when any one of the criteria is missing and sometimes event any two of them. People in the experiment have graded judgments on typical lie, social lie, white lie, fiction, fib, mistake, etc. As Lakoff (1987) have claimed, the ICM of lie allows non-prototypical derivations from an idealized model.

Based on Talmy (1975) and Lakoff (1987), Croft (1990: 66) established an idealized model for "single events" as the following:

(a) simple event are segments of causal network
(b) simple events involve individuals acting on other individuals
(c) transmission of force is asymmetric
(d) simple events are non-branching causal chains
(e) simple event structure consist of three-segment causal chain: cause-become-state
(f) simple events are endpoint-oriented: possible verbs consist of the last segments (stative), the second and last segments (inchoative), or the whole three segments (causative)
(g) simple events are autonomous, that is, they can be isolated from the rest of the causal network.

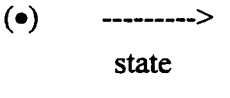
In Croft's view, a simple event "prototypically" involves asymmetric transmission of force from the source (agent) to the target (patient), which constitutes a cause-become-state causal chain, as illustrate below (Croft 1990: 49):

(3) The rock broke the window.

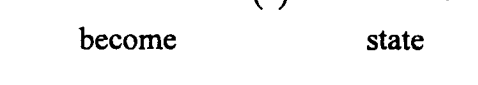


A simple event ICM is autonomous from other episodes of a discourse in that it starts at a definite point (the cause) and ends at another specific point (the result). Such endpoint-oriented simple event must include the result segment, which can be any of the following verb types (Croft 1990: 53-54):

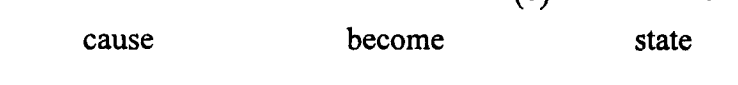
(4) **Stative**: The window is broken.



Inchoative: The window broke.



Causative: The rock broke the window.



This event structure could also be the expansion of Lakoff's 'metonymic model' of ICM[2]. The metonymic model of event structure states that a speaker could depict one single segment of an event to refer to the entire action-chain. Lakoff (1987) exemplifies this idea by an event in which a person arrives at the airport. The event could include the following episodes: precondition (having the vehicle), embarkation (enter and start the vehicle), center (drive to destination), finish (park and exit the vehicle), and endpoint (arrival). When a person is asked how he arrived at the airport, he could mention simply the precondition "I borrowed my brother's car" or the center "I rent a car" to stand for the entire process (Lakoff 1987: 79). In Coft's model, what is considered the crucial element of a simple event is generally the end point.

The last event type in (4), i.e., the three-segment combination, which contains the cause and the result of an event, is of interest to us in this study. Though this event type is termed as "causatives" by Croft and probably includes both "manipulation" and "resultative" constructions. We would simply focus on the resultatives structures that end up with a state derived through the verb.

3. Data and methodology

Examples of Saisiyat sentences are elicited from four informants[3]. All of them are native Saisiyat speakers who use Saisiyat in their daily life. Besides fieldwork elicitations, we also refer to narratives of five Pear stories and five Frog stories collected in the fieldwork. When necessary, examples from the narrations will be cited with text names and IU numbers.

Pear stories are developed by Wallace Chafe. The speaker is asked to watch a videotaped movie in which a boy stole the fruits picked by an old man. The speaker is asked to narrate the story after the movie ends. The frog story is developed by

[2] According to Lakoff, categorizations could be classified into propositional, image-schematic, metonymic and metaphorical models.

[3] Their linguistic backgrounds are listed in the table below. The order from up to down is according to their data contribution. Most of the fieldnotes come from the first informant.

Han name	Gender	Age	Language repertoire (in order of proficiency)
Feng De-huei	M	70	Saisiyat, Japanese, Hakka, Mandarin
Kao De-sheng	M	76	Saisiyat, Japanese, Mandarin, Hakka
Zhu A-liang	M	76	Saisiyat, Mandarin, Hakka, Japanese
Zhao Shan-ho	M	64	Mandarin, Hakka, Saisiyat

Dan Isaac Slobin. The speaker is asked to watch a cartoon book in which a frog is gone and a boy and his dog tried to look for the frog in a forest. The speaker must look at the cartoon book and meanwhile make an on-line narration. The frog story is found to be helpful for studies of motion events in a cross-linguistic aspect.

In those narratives and fieldnotes, we identify the linguistic devices employed for depiction of resultative events. The results will be presented in section 4. By doing so, we attempt to collect the rules behind the choice of the linguistic representations. In section 5, we will first find out how the perception of a resultative event is reflected in the word order. After that, we will also rule out the underlying principles which determine the grammatical integrity of a linguistic description.

4. Types of resultatives in Saisiyat

Comrie (1989) distinguishes three resultative forms. They are: analytic, morphological, and lexical types. The analytic type is expressed at the sentence level, usually by the "make to be" construction. The morphological type is encoded by morphological means, such as English "en-able." Lexical type, for example, English "kill" is morphologically unrelated to its unspecified cause and its result "die." It must be processed at the lexical level. In fact, Fillmore (1977) has already made more detailed classifications in terms of the linguistic forms of resultatives. He has presented resultative verbs Z as the possible combination of X (the cause) and Y (the result). The Z could be a) no encompassing verb and should be expresses by syntactic structure, b) unrelated to both X and Y, c) the same to Y, d) the same to X, e) the derivation of Y, or f) the combination of X and Y. The comparison in Table 1 would show that their ideas are basically the same.

Table 1. Comparison of Fillmore's and Comrie's resultative classifications

Level	Fillmore (1977)	Comrie (1989)
Syntactical	No encompassing verb Z	analytic
Morphological	same to the result same to the cause derivation of result combination of cause and result	morphological
Lexical	unrelated to cause and result	lexical

In Saisiyat, five kinds of linguistic repertoires are found. Based on the ICM of resultatives, we take into consideration all structures that fit the model, including

lexical, morphological, syntactic, and discourse constructions.

4.1. Single verb

While a resultative event is an autonomous single event with concrete start point and endpoint, it is easily conceived as an entity. It is thus not surprising that languages in all over the world code a resultatives event by a lexicalized single verb. In English, for example, "melt" means "to cause something to become liquid", denoting the cause and the result simultaneously within one lexical item. In Saisiyat, it is also found that cause-effect could be represented at the lexical level.

(5)

106. ..	komiim-komiim-komiim	..'okay	**tihoroe-i** o:
	look–for-Red	Neg	find-PF

"He looked for (the fruits), but did not find (them)." (Pear 1)

Compare *komiin* (to look for) and *tihoroe* (to find). The former codes only an event without any implicit or explicit endpoint; it is thus not a resultative. The latter expresses the cause and the result ("look for" and "find"), and is the resultative in the form of a single verb.

4.2. Affixation

Causatives in Saisiyat are found to be frequently expressed by prefix *pak-* or *pa-*. They are attached to the result verbs rather than the cause verbs to express both manipulation and resultative. As the examples below show, (6) is the manipulation type while (7) is the resultative type.

(6)

47.	...(1.8) nisia	ka=	...ka-papama'-an	...rima	isaa	
	3rdGen	Nom	vehicle–(<KA-ride-Loc)	go-AF	there	
48.	...(0.8)	**si-pa-tono'**	ila	ray=		
		bump-RF-Cau	Pfv	Loc		
49.	bato'					
	stone					

"He bumped his bike into a stone." (Pear5)

(7)

96. ...(4.7) hiza korkoring
that child

97. ... **pak-sahae'-en** ila hao ray ralom 'i'izo'
Cau-fall-PF Pfv thereLoc water inside
"The child fell into the water." (Frog 1)

Those *pak-* and *pa-* sentences necessarily involves two roles, the cause from the agent and the patient taking the result, whether implicitly or explicitly mentioned. Even for intransitive verbs like *ngizo'* (fall), the affixation of causative prefix certainly invites the interaction between two participant roles. This observation supports Croft's idea that the causal chain of a simple events involves asymmetric transmission of force from the source to the target.

(8) Obay t-om-isasapan **pak-ngizo'** yakin.
Obay on–purpose-AF cau-fall 1st-Acc
"Obay caused me to fall deliberately." (Fieldnotes)

According to Blust (1999), Pazeh is found to have two causative prefix *pa-* and *paka-*. The former forms causatives of dynamic verbs while the latter forms causatives of stative verbs. And Zeitoun and Huang (2000) claim that Saisiyat *pak-* is the blending form of *paka-*. Without probing into this issue, we would accept this stative/dynamic distinction[4] since a detailed morphological analysis is beyond the scope of this study.

4.3. Compound-like incorporation

Resultatives are commonly formed by incorporating the cause and result into a verb. In (9), for example, verbs encoding the same end result of breaking something share the same morpheme *–poteh*, prefixed by different elements to denote various means to achieve the result. The element *–poteh* is a morpheme meaning "break."

(9) paal-poteh " to pull to break something"
kin-poteh " to use a saw to break something"

[4] Huang (2000) in her study of Mayrinax Atayal takes into account the syntactic structure of negation, imperative and tense/aspect/modality system. Her study seems to come to another conclusion that *pa-* is probably the causative marker for both dynamic and stative verbs while *ka-* is the marker for statives. Of the two different assumptions, we could not determine which one is correct. Also, the syntactic study of this affix is beyond the scope of this study.

siin-poteh " to use an instrument to break something"
kal-poteh " to cut to break something" (Fieldnotes)

When we compare them with other verbs with the same cause, we find that the prefixed morphological elements are also semantically transparent morphemes. For example, compare *paalpoteh* in (9) with the following set of verbs in which the cause "pull" results into different consequences. In (10), we find paal- is attached toother morphemes to mean "to pull." We finally conclude that verbs like *paalpoteh* is in fact combined by two morphemes "to pull" and "to break".

(10) paal-ano' "to give a pull"
paal-boekoet "to pull to straighten"
paal-kazikal "to pull to spread"
paal-haehae "to pull down"
paal-sa:ah "to pull to let fall" (Fieldnotes)

An interesting point is that the cause elements of this kind of resultative construction almost never stand alone as independent verbs. They appear only by being attached before the result elements. The resultative part, however, are freer than the cause part. Many of them could stand alone as single verbs, as in (11) and (12).

(11) (compare **paalsa:ah** in (10))
25. ... **si-sa:ah** ka boway
fall-RF Nom fruit
"The fruits spilled (all over the place)." (Pear 3)

(12) (compare (9))
onoka-awhas-'a kiko: **m-in-poteh** ila
rat-Poss tail divide–into–two-past-AF asp
"The tail of the rat was divided into two." (Fieldnotes)

Via morphological incorporation, resultative morphemes are more independent and transparent than causative morphemes. This syntactic asymmetry implies that the result part of the causal chain is in fact the center of focus which is profiled by Saisiyat speakers. A similar and parallel observation is made by Tai (2003) when he claims that the resultatives components in Mandarin resultatives might be "the center of prediction", and therefore can be treated as the main verb. Both Saisiyat and Mandarin directly support Crofts idea that simple events are oriented by the

resultative endpoint.

4.4. Serial verbs[5]

Saisiyat cause-effect could be serialized as a single constituent. As in (13), two verbs *rokrok-on* and *'askan-en* are dependent in the sense that their focus and tense have to agree with each other.

(13)

12.	...(1.5)	en=	**rokrok-on**	**'askan-en**	maihae'hae'	roSa'
			pick-PF	put-PF	full-AF	two

"Two baskets were filled." (Pear 4)

When the negation marker is place in front of the first verb, it simultaneously negates the two verbs, sometimes with an additional *i* or *ik* marker, as in (14) and (15). The *i* or *ik* marker are identified by Zeitoun (2001) respectively as stative and dynamic verbs for Saisiyat negation. (In the following examples, SVC is identified by bold-faced verbs)

(14) yao	oka	i	**tatoeroe'**	**h-om-iwa'**		ka	baboy
1st-Nom	neg		learn	cut-PF		Acc	pig
= yao	oka	i	**tatoeroe'**	i	**hiwa'**	ka	baboy
1st-Nom	neg		learn		cut	Acc	pig

"I did not learn to slice the pork." (Fieldnotes)

(15) ka	katin	oka	i	**hoehoe-i'**	i	**aras-i'**
Nom	bull	neg		pull-PF		take-PF

"The bull was not pulled away." (Fieldnotes)

4.5. Apposition of two or more verbs

In Saisiyat, cause-and-effect event may also be juxtaposed in temporal sequence, and they do not have to agree with each other in terms of focus and aspect marking, as the following example shows. Compared with (13), the same two verbs *rokrok-on* and *'askan-en* are apposed to express the action sequence.

(16)

5.	...(1.7)	**r-om-okrok-**	**r-om-okrok**	...**'askanen**	ray	kala'

[5] There are two criteria of SVC. First, the verbs have to agree with each other in terms of focus marking. Second, a negation marker could simultaneously negate all verbs in the construction. Whether the verbal elements are placed within the same IU is not one of our criteria.

pick-AF pick-AF put-PF Loc basket
"(He) picked... put (them) in a basket." (Pear 2)

Sometimes the verb string is placed within an IU or a sentence with a conjunctive reading[6], as in (16), or the verbs could be placed in separate IUs, as in (17).

(17)

19	..	**s-om-isil**	ka	boway	
		lift-AF	Acc	fruit	
20.	...(1.3)	**mari-in**	'in'alay	ra:i'	ka-papama-an
		take-PF	from	ground	KA-ride-Loc
21.	..	sik-ra:iw	ila		
		leave-RF	Pfv		

"(The boy) lifted (the basket of fruits, put them) on his bike and left." (Pear 3)

When a negation marker is placed in front of the sentence, it could only negated the first verb, which shows that the two verbs are loosely combined. They are syntactically conceived as two separate segments though they are semantically aggregated by causal relations.

(18a) ka papamaan oka i **-tatono'** *i/*ik **rakrakai** ila
Nom vehicle neg hit break asp
"The vehicle did not bump into anything, yet it broke." (Fieldnotes)

(18b)*ka papamaan oka i **tatono'** i **rakrakai** ila
Nom vehicle neg hit break asp
"The vehicle did not bump into anything, yet it broke." (Fieldnotes)

(18c)*ka papamaan oka i **tatono'** ik **rakrakai** ila
Nom vehicle neg hit break asp
"The vehicle did not bump into anything, yet it broke." (Fieldnotes)

5. Language and iconicity

When analyzing the linguistic structure of resultatives in Saisiyat, we find that there are several constraints that make Saisiyat resultatives predictable in terms of syntactic constructions. First, the word order unexceptionally regularly follows the cause-result order (in 5.1.). Second, as five linguistic repertoires co-exist in Saisiyat, there might be semantic or functional division that contributes to distinction in form.

[6] Saisiyat does not have a full-fledged clause conjunctions. We determine that the clauses are conjunctive within a sentence according to pause and intonation.

While purely linguistic theories fail to explain those constraints, we appeal to discourse and cognitive basis in search of the answer (as in 5.2.).

5.1. Word order constraints

It has been found that for serial verbs (19) and juxtaposed verbs (20), the exchange of verb order may cause anomaly.

(19a) ka boway **awpoe'-oen** **aras-en**
Nom fruit hold–PF take-PF
"The fruits are taken away."
(19b) *ka boway **aras-en** **awpoe'-oen**
Nom fruit take-PF hold–PF
"The fruits are taken away."

(20a) obay **kakoring** **'om-obaz**
obay fight win-AF
"Obay argued and wan."
(20b)*obay **'om-obaz** **kakoring**
obay win-AF fight
"Obay argued and wan."

The same phenomenon occurs in other resultative constructions. Though the first kind of resultative structure does not show cue of cause-effect boundary, the other four structures strictly follow the cause-effect order. For affixation, the cause morpheme always occur at the initial, denoting that the cause initiates the result proceeding it. For compound-like lexicalization, the first component is always the cause or the means and is followed by the effect.

Purely syntactic theories may fail to explain why (19b) and (20b) are unacceptable, but we find that the cause and the result in Saisiyat seem to be ordered according to temporal sequence. In (19), the fruits have to be held before being taken away, and in (20), it is not possible for one to win a debate when the debate has not yet begun.

Cognitive Grammar views grammar as inherently meaningful (Langacker 1983, 2003), word order might therefore be a good reflection for discovery of the mapping between human conception of everyday experience and the linguistic form.

Language is a linear presentation of sound strings, it is hence a task to transform our conceptualization of a three-dimensional event into a two-dimensional linear order. One common phenomena is that verb sequencing is often arranged in an 'iconic' order with accordance to the real world experience (Durie 1997, Tai 1983). For Durie, verbs are "ordered according to the direction of causation in the conceptual structure of the verb complex. The direction of causation will conform to temporal sequence." Though the iconic principle does not necessarily determine all verb sequencing, the "cause-effect serializing" is, according to Durie, iconic across various kinds of verb combinations.

5.2.Grammatical integrity: Mapping of cognition and syntactic structure

Although Saisiyat speakers employ five linguistic devices to depict a resultative event, different informants may employ different strategies to describe the same events. Example (21)~(25) illustrate how five speakers narrate the same episode in the Pear story in which a boy lifted and carried away a basket of fruits (expressed by the bold-faced verbs).

(21) Pear 1

61.	...(2.1)	inak'ino	isaa	korkoring		
		how–come	that	child		
62.	...(1.5)	**m-arma'**				
		take-AF				
63.	...(1.5)	'aehae'	kala'			
		one	basket			
64.	...	niya	**aras-en**	papama'	ka	ka-papama-an.\
		3rd	bring-PF	ride-AF	Acc	KA-ride-Loc

"The child (suddenly/unexpectedly) took one basket and rode on his bike."

(22) Pear 2

10.	...(0.8)	nisia	'aehae'	kala'	**sisil-in**
		3rdGen	one	basket	lift-PF
	'askan-en	ray	ka-papama-an		
	put-PF	Loc	KA-ride-Loc		

"He lifted one basket and placed (it) on (his) bicycle."

(23) Pear 3

19	..	**s-om-isil**	ka	boway

		lift-AF		Acc	fruit	
20.	...(1.3)	**mari-in**	'in'alay	ra:i'	ka-papama-an	
		take-PF	from	ground	KA-ride-Loc	
21.	..	sik-ra:iw	ila			
		leave-RF	Pfv			

"(The boy) lifted (the basket of fruits, put them) on his bike and left."

(24) Pear4

43.	...(1.6)	nia	ka-papama'-an		pa-kalbon-en	k-om-ita'
		3rdGen	KA-ride-Loc		PA-fall–down-PF	see-AF
	sisil-in	'aehae'	kala'	**'askan-en**	ray=	
	lift-PF	one	basket	put-PF	Loc	
44.	...(0.9)	ka-papama'-an		nisia	**karma'-en**	**'aras-en** ila
		KA-ride-Loc		3rdGen	steal-PF	take-PF Pfv

"(I) saw (him) lift one basket on (his) bike. (And then) he (rode) his bike and left."

(25) Pear 5

23.	...(1.8)	a:	noka=	..a	korkoring			
			Gen		child			
24.	...(1.0)	**si-karma'**	'aehae'		kosa-en	kala'	ka=	...'a boway
		steal-RF	one		PF	basket	Nom	fruit
25.	...(1.4)	**pama'-en**	ila					
		ride-PF	Pfv					

"The child took away one basket and rode off."

Speaker 1, 3, and 5 place the two actions in separate sentences via different focus-markings. Speaker 2 and 4 resort to serial verb constructions to associate the cause (*take*) and the result (*away*) of a single event.

Givon (1990) in his study of complementation states that the more two events share the same referents, the more they are semantically integrated, and the more likely the two events will be coded dependently. Horie (1993: 216, cited from Verspoor 2000) also claims that "the linguistic distance between expressions correspond to the conceptual distance between them." Their ideas are in the same spirit as the Cognitive Grammar, which states that the language is a symbolic structure which iconically links meaning and form.

Resultatives is the combination of two verbs denoting "cause-result." In this combination, the result part serves as the verbal complement with respect to the cause verb that precedes it. We might expect that the informants' linguistic choices might also reflect their conceptualization of event integration as sentential complements. The evidence of cognitive integration could be found in two aspects. First, three serial verb constructions (one in (22) and two in (24)) seem to show strong tendency of argument sharing. All of them share the same agent and patient, and is thus more integrated.

The second evidence comes from the discourse cues. In (22) and (24), verbal elements are placed within the same IU, and there is no pause in between. Givon (1991: 142) states that "the temporal-physical distance between chunks of linguistically-coded information correlates directly to the conceptual distance between them." The speakers' capability of packaging them within a constituent more or less reflects the low processing effort in conceptualizing the causal chain as a "single event."

We therefore propose that the grammatical integration may systematically correspond to the conceptual integration. As the following illustration shows, resultative events that are closely integrated may be code by a strongly incorporated single verb, while the less integrated events may be coded as separate verbs.

(26)

syntactic structure	single verb	affixation	compound-like lexicalization	serial verb	separate verbs
	|----------	----------	----------	----------	----------|
event integration	high				low

One of our informants confirms through elicitation that a speaker could use two different ways to depict the same event. For example, a speaker could use (27) or (28) to describe an accident in which a chicken is bumped by a vehicle and dies.

(27) ka tataa **taropasay** noka kapapamaan
Nom chicken bump-die Gen vehicle
"The chicken was bumped to death by a car." (Fieldnotes)

(28) ka tataa **tono-on** noka kapapamaan **masay** ila
Nom chicken bump-PF Gen vehicle die-AF asp

"The chicken was bumped by a car and died. (Fieldnotes)

In (27), a single lexicalized form expresses both the cause (bump) and the effect (die) simultaneously. In (28), however, the speaker depicts the same scene by two separate verbs. There is, however, subtle difference between the two in terms of the cause-effect relation. In (27), the speaker uses one lexical item because the chicken died as soon as it was hit by the car. In (28), the chicken was bumped by the car, and it may or may not die immediately. In other words, a lexicalized form is employed when the cause and the effect are temporally more integrated. The two event segments are therefore more likely to be conceived as one constituent. On the other hand, separate verbs may be employed for a longer temporal distance. The grammatical distance in fact resonates with the conceptual distance.

6. Concluding remarks

In this study, we argue that resultatives should be treated at a discourse-analytic level. Based on the ICM of event, we are able to discuss resultatives in a larger perspective, including lexical, morphological, syntactic, and discourse level. In Saisiyst, there are five different resultatives constructions: single verb, affixation, compound-like lexicalization, serial verb, and separate verbs.

The syntactic structure shows that Saisiyat resultatives systematically follow an iconic temporal sequence to arrange the cause-effect order. This is not particular to Saisiyat but is common in languages all over the world. The cause-result apposition iconically corresponds to the temporal sequence in the real world, which directly supports the Iconicity Principle of language (Tai 1988) and Cognitive Grammar (Langacker 1983). The word faithfully reflects the speaker's conceptualization in a systematical way.

Similarly, while the speakers could choose among the constructions to express the same resultative event, their choice may reflect their conceptual integration between the cause and the result. We propose that the conception congruity is iconically represented by grammatical integration. While two actions are conceived more as an entity, they are more likely to be coded in a single or dependent form, e.g., a lexical word. On the contrary, when the speaker conceives a remote connection between two actions, they are more likely to be realized as separate events. The evidences come from syntactic as well as discourse cues.

The cognitive-based linguistic approach holds that language is the conceptualization of human perception. Linguistic structures, therefore, are not arbitrary symbols as Chomsky and Saussure have claimed, but are icons which correspond systematically to neural-psychology and the real world. Both the word order and the integrity of Saisiyat resultative show the iconic aspect of language in reflecting the real world experience. The ordering of event episodes faithfully follow the temporal sequence perceived by the speaker, which correspond to Tai's study of Mandarin word order in Chinese. The integrity of language systematically represents the speaker's conceptualization of event integrity, also supporting the parallel relationship between grammar and cognition.

To sum up, this study not only points out the linguistic principles of resultative constructions in Saisiyat, but suggests that grammar is inherently cognitively-based, supporting that language is not least arbitrary than any other human social behavior.

References

Blust, Robert. 1999. Notes on Pazeh phonology and morphology. *Oceanic Linguistic* 38: 321-365.

Carey, Kathleen. 1996. From resultativity to current relevance: Evidence from the history of English and modern Catalian Spanish. In A. E. Goldberg (ed.), *Conceptual Structure, Discourse, and Language*, 31-48. Stanford: CSLI.

Coleman, Linda and Paul Kay. 1981. Prototype semantics: The English verb *lie*. *Language* 57(1): 26-44.

Comrie, Bernard. 1989. *Language Universals and Linguistic Typology*. 2nd ed. Chiacago: The University of Chicago Press.

Croft, William. 1990. Possible verbs and the structure of events. In Tsohatsidis (ed.), *Meanings and Prototypes*, 48-73. NY: Routledge.

Durie, Mark. 1997. Grammatical structures in verb serialization. In Alsina, Alex, John Bresan and Peter Sells (eds.), *Complex Predicate*, 289-354. Stanford: CSLI.

Fillmore, Charles J. 1977. On the organization of semantic information in lexicon. In CLS parasession on the lexicon.

Givon, Talmy. 1990. *Syntax*, Vol. 2. Amsterdam: John Benjamins.

Givon, Talmy. 1991. Some substantive issues concerning verbs serialization: Grammatical vs. cognitive packaging. In Lefebvre, Claire (ed.). *Serial Verbs: Grammatical, comparative and cognitive approaches.* 137-184 Philadelphia: John Benjamins.

Horie, Kaoru. 1993. A *Cross-linguistic Study of Perception and Cognition Verb Complements: A cognitive perspective*. Unpublished dissertation. University of Southern California.

Huang, M. Lillian. 2000. Verb classification in Mayrinax Atayal. *Oceanic Linguistics* 39 (2): 364-390.

Jaxontov, JE. Sergej. 1988. Resultatives: Classification and calculus. In Nedjalkov, V. P. (ed.), *Typology of Resultative Constructions*. 101-106. NY: John Benjamins.

Johnson, Mark and Georgr Lakoff. 2002. Why cognitive linguistics requires emboded realism? *Cognitive Linguistics* 13 (3): 245-263.

Kirsner, Robert S. 1983. Iconicity and grammatical meaning. In Heiman, John (ed.), *Iconicity in Syntax*, 249-270. Amsterdam: John Benjamins.

Lakoff, George. 1987. *Women, Fire, and Dangerous Things: What categories reveal about the mind.* Chicago: The University of Chicago Press.

Langacker, Ronald. 1983. Observations and speculations on subjectivity. In

Heiman, John (ed.), *Iconicity in Syntax*, 109-150. Amsterdam: John Benjamins.

Langacker, Ronald. 1999. *Grammar and Conceptualization.* NY: Mounton de Gruyter.

Langacker, Ronald. 2003. Constructional integration, grammaticalization, and serial verbs constructions. *Language and Linguistics* 4 (2): 251-278.

Liu, Mei-chun. 1996. Conceptual manipulation and semantic distinction: The case of Mandarin post-verbal 'de'- complement. In A. E. Goldberg (ed.), *Conceptual Structure, Discourse, and Language*, 333-346. Stanford: CSLI.

Rapoport, T. R. 1993. Verbs in depictives and resultatives. In J. Pustejovsky (ed.), *Semantics and Lexicon*, 163-184. Dordrecht: Kluwer Academic.

Tai, J. H-Y. 1983. Temporal sequence and Chinese word order. In Heiman, John (ed.), *Iconicity in Syntax*, 49-72. Amsterdam: John Benjamins.

Tai, J. H-Y. 2003. Cognitive relativism: Resultative construction in Chinese. *Language and Linguistics* 4 (2): 301-316.

Talmy, Leonard. 1975. Semantic and syntax of motion. In Kimbal, J. (ed.), *Syntax and Semantics*. NY: Academic.

Verspoor, Marjolijn. 2000. Iconicity in English complement constructions. In Horie, Kaoru (ed.), *Complementation*, 199-225. Amsterdam: John Benjamins.

Yeh, Meili. 2000. *The Functional Reference Grammar of Saisiyat.* Taipei: Yuenliu.

Zeitoun, Elizabeth. 2001. Negation in Saisiyat: Another perspective. *Oceanic Linguistic* 40 (1) : 125-134.

Zitoun, Elizabeth and Lillian M. Huang. 2000. Concerning ka-, an overlooked marker of verbal derivation in Formosan languages. *Oceanic Linguistics* 39 (2): 391-414.

From Main Verb, Verbal Aspect to Current Relevant State:
A Case Study on the Grammaticalization of Saisiyat Polysemous *ila*

1 INTRODUCTION

This paper aims to study the grammaticalization of *ila* in Saisiyat. We classify the synchronic usage of *ila* as falling into three categories: main verb, perfective aspect, and current relevant state. Also, considerable efforts are attempted to reconstruct the path of grammaticalization of *ila*. We argue that, pragmatic force toward communicative economy allows the attenuation of its locative sense, which collaborates with the principle of informativeness to give rise to the implicature of perfective usage. A final step of subjectification, involving a shift from objective motion to subjective motion, further renders a conceptualizer-based current relevance interpretation. Finally, in section 4.3 we shall try to offer a unified account of such marker of new mental state (current relevance).

2 DATA AND METHODOLOGY

Grammaticalization is best studied from a diachronic perspective. However,

due to an unfortunate lack of historical data in Formosan languages, this paper resorts to a synchronic approach. Our data contains nineteen spoken texts, including narratives (*Frog* and *Pear* stories) and daily conversational exchanges. The data includes 2580 intonation units in total, and the transcription convention is based on Du Bois et al. (1993). Where necessary, references are made also to the fieldnotes obtained from interviewing with some native informants[4].

3 THE POLYSEMOUS *ila*

The use of *ìla* falls into the following three categories: main verb, perfective aspect, and marker of the speaker's new mental state. The usages will be introduced in the sections to follow. Section 3.4 concerns some cases where occurrences of *ila* falls on the gray area between perfective aspect and speaker's new mental state.

3.1 MAIN VERB (*ila*1)

In our classification, the most concrete and basic usage of *ila* is that of a main verb denoting "arrive," as in *ila-hini* "get here," *ila-hiza* "get to somewhere near," *ila-hao* "get there," and so on. Much to our interest, *ila* used as a main verb appears only in restricted contexts. Specifically, they occur only before demonstrative

[4] Our informants are: 趙山河先生, 男, 63 歲, 新竹縣五峰鄉大隘村人，另通日語，客語，閩南語，泰雅語。風德輝先生, 男, 70 歲, 苗栗縣南庄鄉東河村人，另通日語，客語。

pronouns *hini* "here," *hao* "there," *hiza* "somewhere near," and so on. Consider the following frozen and prefabricated forms in (1) and (2):

(1) ...(1.3) sakosizaen kita-en korkoring
look_around-PF see-PF child
may isaza to:o' sahpi:h
from that_place three pass_by-AF
...(0.8) ilahiza ila kabih nahan manra:an
go_there Pfv side still walk-AF
"(He) saw three children pass by and walk toward that direction." (Pear 3:48-9)

(2) obay 'anaray taw'an m-wai' okay ilahini
Obay from home come-AF Neg get here
"Obay came from home but did not get here." (Fieldnotes: Feng)

Also, the evidence of *ila* as a main verb can be attested by its co-occurrence with aspect markers. Such usages of *ila* may take future marker *'am*, perfective aspect *ila*, and can also be reduplicated, as in the following examples (3), (4), and (1) again:

(3) So'o 'am ila 'ino
you Fut go to where
"Where are you going to?" (Yeh 2000:129)

(1) ...(1.3) sakosiza-en kita-en korkoring
look_around-PF see-PF child
may isaza to:o' sahpi:h
from that_place three pass_by-AF
...(0.8) ilahiza ila kabih nahan manra:an
go_there Pfv side still walk-AF
"(He) saw three children pass by and walk toward that direction." (Pear 3:48-9)

(4) obay il-ila hao walo'
Obay Red-go to there Walo

"Obay often goes to Walo." (Fieldnotes: Feng)

3.2 PERFECTIVE ASPECT (*ila2*)

Another function of *ila* is perfective aspect (Huang 2003). Perfective *ila* occurs after main verbs, indicating event boundary, as in the following two excerpts:

(5) ... ta-tono' ila ray= komlobikol ila
Ca-bump Pfv Loc kick-AF Pfv
ray bato' babaw bato' a-
Loc stone above stone
... m-alben ila ngizo' ila
fall_down-AF Pfv fall_down-AF Pfv
... nisia ka boway ray kala' am losaah ila saboeh
3rdGen Nom fruit Loc basket Fut spill-AF Pfv all
"(The boy) fell down, and all the fruits in his basket were about to spill over the place." (Pear 4:52-4)

(6) ...(1.3) na= mari'-in ...kopiyak-en ila
take-PF press-PF Pfv
...(1.4) k-in-opiyak-en sizaeh
press-PF-Pfv finish
...(1.1) in-timo'-en
salten_(<Pfv-salt-PF)
...(1.3) isa=
DM
...(1.5) mari'-in
take-PF
...(0.9) tabe-en ila ray= ...'a taboway
put-PF Pfv Loc jar
"One presses the bamboo, saltens it, and puts it in a jar." ('anhi 2:9-14)

The perfective function of *ila* is rather common in narratives. One must note

that, however, without native-speaker intuition, it is sometimes difficult to distinguish the perfective function from the next function of *ila*, i.e., current relevant state. A tentative solution to this problem will be addressed in 3.3.

3.3 CURRENT RELEVANT STATE (*ila*3)

This function of *ila* has been mentioned throughout literatures. (Yeh 1995, 2000; Huang 2003; Huang, Su, and Sung (In progress)) It is argued to be similar to the final particle *le* in Chinese (Yeh 2000) and change of state marker (Huang 2003), as in:

(7) ...(0.9) s-om-isil ma=
lift-AF
.. pa-kalben ka ka-papama-an
PA-lay_down Acc KA-ride-Loc
.. s-om-isil ka boway
lift-AF Acc fruit
...(1.3) mari-in 'in'alay ra:i' ka-papama-an
take-PF from ground KA-ride-Loc
.. sik-ra:iw ila
leave-RF Pfv
"(The boy) laid down his bike, lifted (the basket of fruits, put them) on his bike and left." (Pear 3:17-21)

But we note that, the syntactic distribution of *ila* functioning as a state change marker differs radically from *le* in Mandarin. It does not exclusively occur sentence-finally, as Mandarin sentence-final *le* does, nor does it appear after main verbs only, as does *ila*2. Rather, it can mark any subjectively chosen new

information in the predicate, occurring right after the new information, as long as discourse context allows. Consider the following instances where occurrences of *ila* precedes a numeral, wh-word, and a nominal:

(8) ...(1.6) isaa ...roSa' ila nao kala' ri'saza
PF two Pfv only basket there
"There were only two baskets there." (Pear 2:44)

(9) ...(2.3) k-om-osa
DM
...(0.9) hayno ila hini ma'an r-in-okrok ka
where Pfv this 1st Gen pick-Pfv Acc
... 'aehae' kala' ka boway hini.\
one basket Acc fruits this
"And he said, where has one basket (of fruit) I picked gone?" (Pear 1:68-70)

(10) obay ila malahaeng hini ka kakiSkaatan
PN Pfv manage this Acc school
"Now, Obay has become the school principal." (Fieldnotes: Chao)

The above analysis suggests that *ila*3 conforms to the description of "Currently Relevant State" marker (CRS) proposed by Li and Thompson (1981:240) and Li, Thompson and Thompson (1982). Yeh (2000) and Huang (2003) also place *ila* into this category. However, as shown in the following excerpts (11)-(12), we note that *ila* further appears in protases, which does not limit the use of *ila* to a "now" situation:

(11) ...(0.9) 'oka' ila o:=
Neg CRS

... inak hini'an ma' nakhara=

like this like_that

...(1.1) ma'iaeh ...am=
person

s-om-i'ael ka ima=manta' saboeh
eat-AF Acc Asp-raw all
"Otherwise... some people like them raw." (Life:130-3)

(12) 'inak isaza ila o: izik wai'
like that CRS Neg come
"If (things are) like that, don't come." (Fieldnotes: Chao)

In these examples, the information marked by *ila*3 is new to discourse and the communicative context. They provide a new condition to the discourse participant. Focusing on the established condition, the speaker proceeds to give some other pieces of information.

By and large, *ila*3 and sentential *le* are similar in the way that they are both relevant to a situation which is determined by the speaker's mental sphere, as Li and Thompson (1981:290) puts it:

> In each case *le* says that the state of affairs represented by the sentence to which it is attached is currently relevant, the exact ways in which it is relevant being a matter for the hearer to decide on the basis of his/her knowledge of the relationship between him/her and speaker, of the situation in which they are interacting, and of the world at large.

Though we are not happy with the term "currently," we agree with their analysis concerning speaker-hearer communication and contextual knowledge. Namely, we

tend not to associate *ila*3 with a situation relevant to *now*. Rather, we claim that, following our study on Mandarin *le* (Su 2002), uses of *ila*3 or sentence-final *le* pertains to speaker's subjectively determined new focus of information. This foregoing definition will be relevant to our discussion on subjectification in section 4.

3.4 A FURTHER ISSUE: SEPARATING *ila*2 and *ila*3

In section 3.2 we mentioned that it is sometimes difficult to separate *ila*2 from *ila*3. Huang (2003:99) also indicates the same problem: "When *ila* occurs after a telic verb, it can be interpreted as either denoting change of state or perfective." To distinguish *ila*2 and *ila*3, we have to rely on contextual information to determine how "currently relevant" it is. If the occurrence of *ila* follows the main verb, see if context allows us to interpret the information marked by *ila* as a new resultant state (compared to an old situation). If the new resultant interpretation is attested by the consultant's intuition, we mark the occurrence as *ila*3. Otherwise such occurrences are categorized as *ila*2.

If the behavior of *ila* deviates from that of a perfective aspect, i.e., if it marks the negatives, wh-words, or nominals as exemplified in (8)-(10), syntax alone suffices to draw a very clear line. This is because the canonical usage of *ila* as an aspect marker will follow main verbs. As it proceeds in the path of subjectification (to be tackled

in section 5), syntactic constraints are lifted. It no longer has to stay after a main verb, but is allowed to mark any subjectively chosen new information, including all those numerals and nominals mentioned in the preceding instances.

4 FROM PROPOSITIONAL TO TEXTUAL LEVEL

In this section, we will try to reconstruct the path of grammaticalization of *ila*. An unfortunate lack of diachronic data may impede us from giving a developmental order of its semantic chain. However, under a conceptual framework, we believe that paths of grammaticalization can also be at least partly retrieved by examining synchronic phenomena. The use of *ila* as a main verb is a propositional one (Traugott 1989), while its later development into a perfective marker is a textual one. We will try to look into what happened in the process where *ila* acquires a function of perfectivity.

4.1 COMMUNICATIVE ECONOMY AND SEQUENCE TRUNCATION

Hopper and Traugott (1993:64) considers economy and simplicity to be a motivation for grammaticalization in the following excerpt:

> Rather, we will put forward arguments for the view that there are a number of competing motivations which can all in some sense said to be examples of maximization of economy or "simplicity": basically they can be summarized as maximization of efficiency via minimal differentiation on the one hand, and maximization of informativeness (Langacker: 1977:101-6) on the other.

Based on Grice's (1975) two maxims of Quantity, Levinson (2000:113) also argues for economy as an ingrained force behind grammar and meaning:

> The evidence for such a tendency towards economy is overwhelming. As Haiman (1985:150) puts it, "there is a powerful tendency in languages... to give reduced expression to the familiar and the predictable."... Reseachers have noted that there is a decided preference for reference to persons to be achieved by the shortest expression, with the least descriptive content, that will do the job."

In this subsection, we will argue that the evolution of *ila1* into *ila2* arises from a serial verb construction "Motion Verb + *ilahao/ilahini* + Locative Noun Phrase." Loss of demonstrative pronoun and the locative noun phrase from the construction co-occurred with an attenuation of potency in *ila1*, which gradually deprives *ila* of its verbal status. Now consider the serialized verbal construction (13) and its equivalent (14):

(13) hini kinaat satelen ila-hao kala obay
this book send-PF arrive there Loc PN
"This book was sent to obay's place." (Fieldnotes: Chao)

(14) hini kinaat satelen ila kala obay
this book send-PF to Loc PN
"This book was sent to Obay's place (home)." (Fieldnotes: Chao)

What is crucial to the sequence truncation is the optional collocation of *ila* and demonstrative pronouns *hini, hao*, and etc. Our informant points out that demonstratives such as *hao, hini, hiza* in constructions such as "*ila* (MV) + demonstratives + locative NP" can be omitted, and this does not change what is coded

by the sentence, as is shown in (13) and (14).

4.1.1 LOSS OF DEMONSTRATIVE PRONOUNS

One might wonder why speakers get rid of the demonstrative pronouns. This sequence truncation pertains to communicative economy. In the case of Saisiyat *ila*, if information of the goal has been explicitly mentioned in context, or can be directly obtained in the local noun phrase which follows, speakers are free to choose to omit them to arrive at communicative economy. Indeed, in natural conversation, one would not bother to mention the information easily accessible from context, unless an emphasis is intended. Given the factor of communicative economy, an omission of demonstratives from the serial verb construction is thus not surprising.

Apart from a change in word class and syntactic behaviour, the shift from *ila*1 to *ila*2 involves a drastic change in function and domain. Namely, the use of *ila*1 represents a spatial meaning, while the aspectual use of *ila*2 represents a textual, or temporal involvement. Now the question boils down to: How did the perfective use arise from local meaning? How did language users make the first step?

4.1.2 LOCATIVE NP REMOVAL

In the previous section, we argue that communicative economy allows the

speaker omission of demonstrative pronoun. We will argue again, following a similar path, communicative economy allows the speaker omission of full local noun phrases, which fosters later development of *ila*. Levinson (2000:270) discusses such anaphoric situations as follows:

> In perhaps the majority of languages (including the Australian ones again) NP-anaphora is also expressed through an NP-gap—by dropping the NP altogether.

Here, we would like to place an emphasis on the anaphoric situation involved--the deletion of full NP. The reason is: the transfer from spatial domain to textual/temporal domain has to be completed without any residual involvement of spatial meaning at all. As long as the locative expression exists in form, the spatial interpretation will hinder such conversational implicature from semanticization, i.e., becoming an integral part of the semantics of *ila*.

So far, the "economy" factor has allowed the optional removal of demonstrative pronouns and spatial noun phrases from the entire construction. That is, the original serialized verbal construction now becomes: a motion verb followed by *ila*, with an unspecified but recoverable locative noun phrase. This has paved the way for further syntactic and conceptual change, i.e., the transfer from a main verb to a verbal aspect.

4.2 FURTHER DEVELOPMENT: FORM AND FUCTION

A further development from *ila*1 to *ila*2 involves a change in form: syntactic

analysis. There is also a deeper explanation, i.e., an explanation at the conceptual level, for the change in form and function. The following subsections will be devoted to theses issues.

4.2.1 FORM: SYNTACTIC ANALYSIS

The change from main verb (*ila*1) to perfective aspect (*ila*2) involves a further development of syntactic reanalysis in the abovementioned serialized verbal construction. Langacker (1977:58) defined reanalysis as: "change in the structure of an expression or class of expressions that does not involve any immediate or intrinsic modification of its surface manisfestation." It concerns "change in the assignment of boundaries (i.e., rebracketing)." (Hopper and Traugott 1993:41) For the case of *ila*, syntactically, it was originally followed by a locative noun phrase. Due to discourse and communicative factors, the full noun phrase gets optionally deleted. It follows that the binding force between *ila* and its following noun phrase is bleached. The syntactic boundary bracketing *ila* and the noun phrase can thus be lifted. This further grants a precondition for the emergence of a new syntactic unit, i.e., motion verb followed by *ila*.

4.2.2 FUNCTION: PRAGMATIC INFERENCING

Now that the form is well-prepared for the change, other factors should be ready to account for the functional shift. Pragmatic inferencing (Traugott and Konig 1991; Hopper and Traugott 1993; Bybee, Perkins, and Pagliuca 1994) has been argued to be a major factor concerning grammaticalization. Hopper and Traugott (1993:75) remarks on inference and grammaticalization as follows:

> Below we will show that in early stages of grammaticalization conversational implicatures frequently become "semanticized," that is, become part of the semantic polysemies of a form... for inferences to play a significant role in grammaticalization, they must be frequently occurring, since only standard inferences can plausibly be assumed to have a lasting impact on the meaning of an expression or function cross-linguistically.

In this section, we will demonstrate, how "standard" and "frequent" the inference triggered by *ila* is, by offering a solid experiential basis for its evolution. The central notion involved is actually the connection between "arrival" and "end point".

The experiential basis for the inference is clear: In our real world experience, if people make any attempts at physical movement from one place to another, the speaker must have a goal in mind. Arrival at the spatial goal equals to reaching the end point of movement, or, at a less concrete level, to reaching the end point of attempt. Hence, arrival at somewhere implies the end point of some unspecified process. Such experiences are so basic that we stop thinking about them even though usages involving them abounds in our language use.

Up to this point, we have related the sense of "arrival" and "end point" from an

experiential perspective. Namely, physical arrival necessarily represents an end point. This further provides the conceptual basis for the syntactic reanalysis. The speaker can thus relate physical arrival to the end point of the process specified in the predicate, so that it becomes natural for *ila* to be attached to the main verb and modify the predicated process.

4.3 FROM A CROSS-LINGUISTIC PERSPECTIVE

The evolution of motion verbs into grammatical markers has been reported throughout literatures (Bybee, Perkins, and Pagliuca 1994; Langacker 1990, 1998). In 4.3.1 we will introduce a parallel case involving pragmatic inferencing, and in 4.3.2 we will introduce another perfective marker similarly coming from the notion "arrive".

4.3.1 A PARALLEL CASE: ENGLISH *BE GOING TO*

An often-cited case of grammaticalization from motion to temporal domain is the English *be going to*. Now consider the following set of examples from Ungerer and Schmid (1996:255), which demonstrates the path of grammaticalization of English *be going to:*

(a) Susan's going to London next month.
(b) Susan's going to London to work at our office.

(c) Susan's going to work at our office.
(d) You're going to like her.

Let us start from sentence (a). The sense of *be going to* in (a) and (b) is the most concrete one, with the spatial interpretation only. The difference between (a) and (b) is the addition of the infinitival phrase in the construction. As we proceed to (c), a crucial step, the omission of locative noun phrase, allows a temporal implicature. The semantic change of *ila* from spatial to aspectual usage takes this path as well. A final step is completed as the infinitival following *be going to* spreads to some predicates which can never have a locative meaning. The temporal implicature can thus stand alone and becomes a fixed part of the semantics of *be going to* construction.

We claim that such is evidently the case with *ila*. Originally *ila* occurs as main verbs. Later in a serialized verbal construction, with loss of locative pronouns and full noun phrases, a perfective reading emerges.

So far, we hypothesize that the syntactic and conceptual phenomena involved in the evolution of *ila* from main verb to aspect marker can be schematized as (15):

(15) (a) Main Verb: [Motion Verb] + [(*ila-hao/hini* + Place)]
(1) Removal of demonstrative pronoun for economy
(b) Intermediate Stage: [Motion Verb + (*ila* + Place)]
(2) Attenuation of potency in *ila*
(c) Intermediate Stage: [(Motion Verb) + (*ila* + Place omitted)]
(3) Removal of full locative noun phrase for economy
(d) Intermediate Stage: [(Motion Verb) + (*ila*)]
(4) syntactic reanalysis (form) and pragmatic inference (function)

(e) Aspect Marker: [(Motion Verb + *ila*)]

4.3.2 ANOTHER CASE OF "ARRIVAL": MANDARIN *dao4*

We argued in section 4.2.2 that, the grammaticalization of *ila* largely concerns the implicature from "arrive" to "end point". The development from "end point" to perfective use has been evidenced from a cross-linguistic perspective. Bybee, Perkins, and Pagliuca (1994:52) reports in their study on the TAM system in languages of the world about the conceptual link:

> The meaning labels we consider in this chapter—completive, anterior, resultative, perfective, and simple past—are similar conceptually in that they all describe a situation that is completed prior to some temporal reference point, but they differ in what other implications they carry.

We argue for the experiential basis of the inferencing process in 4.2.2. The passage here provides a cross-linguistic support at the conceptual level. Indeed, the senses ranging from "arrival" to implicated "end point" are closely related to the "completion" proposed here. Furthermore, concerning the sense of "arrival", Poteet (1987) similarly argues that Mandarin main verb *dao4* "arrive" renders the prototypical sense for one of its variants, the perfective achievement suffix V-*dao4*, which also supports our claim for Saisiyat *ila* to evolve into a perfective marker. For further details, please confer Poteet (1987).

5 FROM TEXTUAL TO EXPRESSIVE LEVEL

As we have argued in section 3, it is difficult to distinguish *ila*2 from *ila*3 if occurrences of *ila* follow main verbs. We have to rely on context to draw the line. But for those following negatives, numerals, nominals, and etc., an easier distinction can be made. These occurrences are all interpreted as *ila*3. The semantic change from *ila*2 to *ila*3 thus clearly occurred in the environment Verb + *ila*, because only occurrences of *ila* in such constructions serves as a double reading. Otherwise, such polysemy can never occur exclusively in such constructions.

A later spread allows *ila*3 to mark any new information which is subjectively chosen by the speaker. Syntactically, what may precede *ila* no longer has to be main verbs. These include nominals, wh-words, and numerals. Speakers employ *ila* as a communicative strategy to mark the information which is most relevant to the communicative context. In the following sections, we are going to illustrate how this sense of current relevance arises.

5.1 SUBJECTIVITY AND SUBJECTIFICATION

Subjectivity did not receive enough attention in linguistic tradition until Benveniste (1971) raised the question whether language could still function and be called language had it been not marked by the expression of subjectivity. In language use, subjectivity "involves the expression of self and the representation of a

speaker's... perspective or point of view in discourse – what has been called a speaker's imprint" (Finegan 1995:1). Langacker (1990, 1998) also points out the crucial status of conceptualizer (speaking subject) in grammar and discourse. In a similar case involving both spatial motion and a shift in speaker's viewpoint, Langacker (1998:75-7) comments on the evolution of English *be going to*, which we argue to be parallel to the semantic change involved in *ila*:

> The steps involve such factors as loss of profiling (a kind of attentional focus), changes in who does the moving (the grammatical subject, the addressee, or some generalized or unspecified individual), and shifts in its status (actual, potential, generic, or absent)..... What remains is something which has been there all along, namely subjective motion by the conceptualizer, who mentally traces along a path in order to specify the subject's location.

From the above passage, we can see a clear pattern in the evolution of objective motion to subjective motion. The most basic, concrete sense (arrival; go) is gradually lost in the process of development, accompanied by a domain shift in motion, from the domain of objective syntactic subject, to the domain of speaker (conceptualizer). The conceptualizer's realm of knowledge has to come in to derive the speaker-based interpretation (new mental experience; prediction of future events). Therefore, solution to the sense of "endpoint", in cases of *ila*3, has to resort to the conceptualizer's mental experience and the communicative context.

The transfer from *ila*2 to *ila*3 involves a construal from the speaker's part, as Lyons (1977:638) suggested:

> The canonical situation-of-utterance is egocentric in the sense that the speaker, by virtue of being the speaker, casts himself in the role of ego and relates everything to his viewpoint.

This corresponds to Traugott's (1989:31) remark on the essence of subjectification: "meanings tend to become increasingly situated in the speaker's subjective belief state or attitude toward the proposition." She also proposes an outline of three stages of semantic development: propositional > textual > expressive, which we will later argue to be the case of *ila*.

Recent studies on grammaticalization have pointed out that grammaticalization often involves subjectivity and subjectification. We find that this process is edivent in the development of *ila*, especially in the shift from *ila*2 to *ila*3.

5.2 SUBJECTIFICATION IN GRAMMATICALIZATION OF *ila*

The change from *ila*2 to *ila*3 involves a semantic attenuation. The way how the meaning attenuates is: *ila*2 modifies a predicate and its end point. The trajector which arrives at the end point is the syntactic subject. Now consider example (6) again:

(6)	...(1.3)	na= mari'-in	...kopiyak-en	ila
		take-PF	press-PF	Pfv
	...(1.4)	k-in-opiyak-en	sizaeh	
		press-PF-Pfv	finish	
	...(1.1)	in-timo'-en		
		salten_(<Pfv-salt-PF)		
	...(1.3)	isa=		

	DM				
...(1.5)	mari'-in				
	take-PF				
...(0.9)	tabe-en	ila	ray=	...'a	taboway
	put-PF	Pfv	Loc		jar

"One presses the bamboo, saltens it, and puts it in a jar." ('anhi 2:9-14)

In (6), the actions which arrive at a conceptual end point are "take", "press", and "put". The potency here comes from the syntactic subject. Now try example (7) and see if a perfective interpretation of *ila* can be attained:

(7)	...(0.9)	s-om-isil	ma=		
		lift-AF			
	..	pa-kalben	ka	ka-papama-an	
		PA-lay_down	Acc	KA-ride-Loc	
	..	s-om-isil	ka	boway	
		lift-AF	Acc	fruit	
	...(1.3)	mari-in	'in'alay	ra:i'	ka-papama-an
		take-PF	from	ground	KA-ride-Loc
	..	sik-ra:iw	ila		
		leave-RF	Pfv		

"(The boy) lay down his bike, lifted (the basket of fruits, put them) on his bike and left." (Pear 3:17-21)

The verb preceding *ila* here can certainly have a perfective interpretation, i.e., denoting completion of the subject's departure. One must note that, however, a current relevance meaning can also be inferred. That is, the *ila* can implicate that the situation is different. The end point resides in the old situation before the boy's leaving. The entire focus of the sentence, or the way one views the situation, is no longer the completion of the boy's leaving. Rather, the speaker focuses on the situation (the boy's leaving) being different. Interpretation of the sentence is based

on the speaker and hearer's knowledge of the boy's leaving *with respect to* the original situation, and its relevance to the ongoing communication.

The focus of attention shifts from the end point of the *action* (perfective) to the end point of the *speaker's mental experience* (communicative context). The change simply embodies Traugott's tendency of change. In natural communication, speakers have to recruit certain strategies to indicate his viewpoint and belief toward the proposition. In the case of *ila*, speakers attach this gram to the information they wish to highlight themselves. The usage of *ila* thus proceeds from a verbal aspect signaling end point of the predicated process (textual level), to the speaker's strategy to direct the hearer's attention (expressive).

6 CONCLUDING REMARKS

In this paper, we have outlined the path of grammaticalization of *ila*, describing in detail how perfective comes from locative arrival, taking into account of pragmatic force for communicative economy, experiential basis for pragmatic inference, and cognitive viewpoint transfer from objective motion to subjective motion. We have also indicated that, the use of marker for the speaker's mental state (end point) is a strategy by the speaker showing his viewpoint and belief.

There are, of course, a lot of things that could have been explored in more details, yet were not. The metaphorical relation between motion (both objective and

subjective) and grammar , for instance, deserves in-depth study to find out if any image-schemas or more basic principles are at work in grammaticalization. A contrastive study concerning the notion "arrive" across languages can also be another direction of future research. We also note a discrepancy between the direction of development of perfective grams in Bybee et. al (1994:105) and subjectification. It is argued in Bybee et. al that, perfectives and simple past are the last stages in grammaticalization. However, perfective is not any more subjective than CRS ("anterior" in Bybee's sense). The same fundamental difference is found in our study on Mandarin *le*. To solve this discrepancy, more cross-linguistic studies on grammaticalization of CRS marker are called for. It is hoped that, this preliminary study can reach an understanding of this particle *ila*, and further shed some light on the interaction between communication, pragmatics, and grammar.

REFERENCES

Benveniste, Emile. 1971. Subjectivity in Language. In *Problems in General Linguistics*, 223-230. Trans. by Mary Elizabeth Meek. Coral Gables, FL: University of Miami Press.

Bybee, Joan L., Revere Perkins, and William Pagliuca. 1994. *The Evolution of Grammar: Tense, Aspect, and Modality in the Languages of the World.* Chicago: The University of Chicago Press.

Du Bois, John W., Stephan Schuetze-Cobum, Susanna Cumming, and Danae Paolino. 1993. Outline of Discourse Transcription. in J. A. Edwards and M. S. Lampert (eds). *Talking Data: Transcription and Coding for Language Research.* Hillsdale, N.J.: Lawrence Erlbaum Associates.

Haiman, John. 1985. *Natural Syntax.* Cambridge: Cambridge University Press.

Harkins, Jean. 1995. Desire in Language and Thought: A Study in Crosscultural Semantics. PhD dissertation, Australian National University.

Hopper, Paul and Elizabeth Traugott. 1993. *Grammaticalization.* Cambridge: Cambridge University Press.

Huang, Huei-ju. 2003. *The Tense, Aspect, and Reality in Tsou and Saisiyat.* MA Thesis. Taipei: National Taiwan University.

Huang, Shuan-fan, Lily I-wen Su, and Li-may Sung. In progress. *A Functional Reference Grammar of Saisiyat.* National Taiwan University.

Lakoff, George. 1990. The Invariance Hypothesis: Is Abstract Reason Based on Image-Schemas? *Cognitive Linguistics* 1:39-74.

Langacker, Ronald. 1977. Syntactic Reanalysis. In Charles Li, ed., *Mechanisms of Syntactic Change*. Austin: University of Texas Press.

Langacker, Ronald W. 1990. Subjectification. *Cognitive Linguistics* 1:5-38.

Langacker, Ronald W. 1998. On Subjectification and Grammaticization. In

Discourse and Cognition: Bridging the Gap, ed. by Jean-Pierre Koenig, 71-89. Stanford: CSLI Publications.

Levinson, Stephen C. 1983. *Pragmatics*. Cambridge: Cambridge University Press.

Levinson, Stephen C. 2000. *Presumptive Meanings: The Theory of Generalized Conversational Implicature*. MIT Press.

Li, Charles, and Sandra Thompson. 1981. *Mandarin Chinese: A Functional Reference Grammar*. Los Angeles: University of California Press.

Li, Charles, Sandra Thompson, and R. Thompson. 1982. The Discourse Motivation for the Perfect Aspect: The Mandarin Particle *Le*. *Tense-Aspect: Between Semantics and Pragmatics*, ed. by Paul Hopper. Amsterdam: Benjamins.

Lyons, John. 1977. *Semantics, I-II*. Cambridge: Cambridge University Press.

Poteet, Stephen. 1987. Paths Through Different Domains: A Cognitive Grammar Analysis of Mandarin *Dao*. *Proceedings of the Annual Meeting of the Berkley Linguistics Society* 13:408-21.

Su, Lily-I-wen. 2002. Mandarin *Le* in Procedural Discourse: A Case of Subjectification. NSC progress report.

Traugott, Elizabeth Closs. 1989. On the Rise of Epistemic Meanings in English: An Example of Subjectification in Semantic Change. *Language* 65:31-55.

Traugott, Elizabeth Closs. 1995. Subjectification in Grammaticalisation. *Subjectivity and Subjectivisation*, eds. by Dieter Stein and Susan Wright, 31-55. Cambridge: Cambridge University Press.

Traugott, Elizabeth Closs and E. Konig. 1991. The Semantics-pragmatics of grammaticalization revisited. *Approaches to Grammaticalization*, ed. by Traugott and Heine, 189-218. Amsterdam: Benjamins.

Traugott, Elizabeth Closs, and Richard B. Dasher. 2002. *Regularity in Semantic Change*. Cambridge: Cambridge University Press.

葉美利. 1995. 賽夏語的時制與動貌初探。 摘自李壬癸，林英津編，台灣南島民族母語研究論文集。 pp.369-84. 台北：教育部。

葉美利. 2000. 賽夏語參考語法。 台北：遠流。