## **Obligatory Control and Event Structure in Kavalan**

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### 1. Introduction

The present paper investigates the control structure of Kavalan, an Austronesian language in Taiwan. So-called object-control verbs in Kavalan utilize a distinct grammatical structure in which the embedded verb must take the causative marker *pa*-.

(1) pawRat-an-na <u>ni buya</u><sub>i</sub> <u>aiku</u><sub>k</sub> [pa-qibasi <u>\_\_i k</u> tu qudus] force-PV-3ERG ERG Buya 1SG.ABS CAU-wash OBL clothes 'Buya forces me to wash clothes.' (lit. 'Buya forces me, causing (me) to wash clothes.)

Chang and Tsai (2001) attribute this control configuration to a semantic constraint called the Actor-Sensitivity Constraint, which states that control operations are sensitive to the agent argument of a control predicate. The present paper provides and discusses new data that cannot be explained by the Actor-Sensitivity Constraint. It is argued that the syntactic structures of Kavalan control sentences reflect their event structures regarding the perspective from which the event is reported.

## 2. Empirical Patterns of Obligatory Control in Kavalan

The interpretation of the unexpressed argument in a control sentence in Kavalan is not associated with a DP that takes a specific case marker. As illustrated in (2), in a *try*-type control sentence in Kavalan, the unexpressed argument is always co-referential with the agent of the matrix verb, i.e., the only DP argument in the matrix clause, regardless of its grammatical role or case marking.

(2) a.	m-paska	ya	<u>sunis</u> i	[satzaii]					
	AV-try	ABS	child	sing					
	'The child tries to sing.'								
b.	paska-an	na	<u>sunis</u> i	[satzaii]					
	try-PV	ERG	child	sing					
'The child tries to sing.'									

A *persuade*-type control sentence in Kavalan, e.g., (1) and (3), is typologically unique in that the embedded verb must take an overt causative prefix pa-.

(3) m-linana <u>aizipnai</u> <u>tu</u> <u>sunisk</u> [\*(pa)-lusit\_\_i \_k] AV-persuade 3SG.ABS OBL child CAU-leave 'He persuades a child to leave.' (lit. 'He persuades a child, causing (him) to leave.')

The obligatory causativization of the embedded verb in a *persuade*-type control sentence can also be observed in other Austronesian languages in Taiwan, e.g., Budai Rukai, Puyuma, and Tsou (Chang and Tsai 2001). Chang and Tsai (2001) argue that this is because control verbs in these languages have to observe a constraint called Actor-Sensitivity, which stipulates that only an agent DP can control a PRO. Grammatical roles and case marking do not determine the interpretation of PRO in a *persuade*-type control sentence. In (3), it is the absolutive DP

that controls the unexpressed causer; in (1), the controller of the unexpressed causer is the ergative DP. In both cases, the controller is the agent argument of the matrix control verb.

However, the empirical facts that motivate Chang and Tsai's (2001) proposal of the Actor-Sensitivity Constraint are not entirely correct. Not all "object-control" verbs in Kavalan obey this constraint. Control verbs like *sulud* 'allow', *tabal* 'stop; prevent', *pangmu* 'help', and *tud* 'teach' do not require their embedded verbs to take the causative marker *pa*-.

(5) a. sulud-an-na ni abas sunis 'nay<sub>i</sub> [mawRat \_\_\_i] ya allow-PV-3ERG ERG Abas ABS child that AV.play 'Abas allows that child to play.' b. t<m>abal=iku <u>sunis</u>i [q<m>an tu Raq] i tu <AV>stop=1SG.ABS child <AV>drink alcohol OBL OBL 'I stop a child from drinking.' c. pangmu-an-na ni [m-kyala \_\_\_\_i tu byabas] abas aikui help-PV-3ERG ERG Abas AV-pick.up 1SG.ABS OBL guava 'Abas helps me pick up guavas.' d. tud-an-na=ikui tina-ku na [s<m>udad il teach-PV-3ERG=1SG.ABS ERG mother-1SG.GEN <AV>write 'My mother teaches me to write.'

In (5), the phonetically null argument in the embedded clause is controlled by the theme DP in the matrix clause. The verb in the subordinate clause does not take the causative marker and no argument is co-referential with the external argument of the matrix verb. If the embedded verb in this type of sentence takes the causative marker pa-, the matrix theme DP will still be construed as the controller, as illustrated in (6).

(6) sulud-an-ku <u>ya</u> <u>sunis-ku</u><sub>i</sub> [pa-qawRat \_\_i] allow-PV-1SG.ERG ABS child-1SG.GEN CAU-play 'I allow my child to let (someone) play.'

What underlies the obligatory control pattern in Kavalan is thus not the Actor-Sensitivity Constraint. Not all *persuade*-type control verbs, or the so-called object-control verbs, in Kavalan, take a morphologically causativized verb phrase as a complement. Whether the agent or the theme argument can serve as the controller varies from a control verb to another. The control verbs that require their embedded verbs to be affixed with the causative prefix all denote an event where the agent obligates the theme to perform some action. More examples are provided in (7).

(7) a.	tezung-an-na instruct-PV-3ERG	ERG	Utay	NCM-A		u / i		tu OBL	qudus clothes
	'Utay instructs Abas to do the laundry.'								
b.	tuluz-an-na ni	bu	ya aik	u	*(pa-)	)kapaR	tu	1	nutun
	send-PV-3ERG ER	G Bu	iya 1se	G.ABS	CAU-0	catch	OB	L I	nouse
	'Buya sends me to catch a mouse.'								
c.	qeRas-an-na	ni	imuy	aiku	*(	(pa-)tenu	n		
	require-PV-3ERG	ERG	Imuy	1SG.AB	S CA	AU-weav	e		
	'Imuy requires me	e to wea	ave.'						

The attempt to compel someone to do something constitutes an indispensable part of the semantics of these verbs: *linana* 'persuade', *pawRat* 'force', *tezung* 'instruct', *tuluz* 'send', *pupuk* 'ask', and *qeRas* 'require'. They only differ in the degree of coercion and the way how the agent places the theme under an obligation to perform a task. Control verbs that do not take a causativized verb phrase as a complement do not encode an attempt to compel someone to do something.

To summarize, contrary to what Chang and Tsai (2001) claim, the theme argument of some control verbs in Kavalan can control the unexpressed argument in the subordinate clause. The Actor-Sensitivity Constraint cannot account for the interpretation of PRO in Kavalan. Whether a PRO is controlled by the agent or the theme argument of the matrix control verb is contingent on the semantics of the control verb.

## 3. Theoretical Discussion

# 3.1. Syntactic Accounts of Obligatory Control

The causativization of the embedded verb in Kavalan control sentences presents a problem for analyses that attribute the distribution and interpretation of the phonetically null argument in a control complement to purely syntactic principles and operations, e.g., the standard PRO theory of obligatory control and the Movement Theory of Control (MTC) (Hornstein 1999). A purely syntactic analysis cannot explain why some "object-control" verbs take a causativized verbal complement but others don't. On the standard PRO analysis, the embedded verb in a Kavalan *persuade*-type sentence is causativized and thus there should be a causer PRO and a causee PRO in accordance with the Theta-Criterion. The fact that there are two PROs that need to be bound by two different DPs creates a problem for the Minimal Distance Principle (Rosenbaum 1967). The structurally closest DP that c-commands the two PROs is the theme DP in the matrix clause, but only the causee PRO is actually controlled by it.

Neither can the MTC provide a satisfactory account for the control patterns in Kavalan. On the MTC analysis, the unexpressed arguments in (1), (3), and (7) would be analyzed as the traces or copies of the two DPs in the matrix clause. To move both the causer DP and the causee DP to the matrix clause would incur a violation of the Minimal Link Condition regardless of the order of their movement. As the movement of both DPs is motivated by theta-feature checking on this analysis, the higher causer DP will always block the movement of the lower causee DP. Note that the MTC allows a DP to acquire more than one theta role, so there is no limit on the number of theta roles the causer DP can receive.

### **3.2.** Semantic Accounts of Obligatory Control

On the semantic approach to obligatory control, the controller of the unexpressed argument in the control complement is determined by the semantics of the control predicate, e.g., conceptual structures (Jackendoff and Culicover 2003), event structures (Rooryck 2008), or semantic principles of controller assignment (Sag and Pollard 1991). Technical details aside, semantically-based analyses of obligatory control hinge on the classification of control predicates, with each type exhibiting a unique control pattern and associated with a distinct conceptual structure or controller assignment rule regardless of syntactic environments, e.g., *intend*, *obligation*, and *force dynamics* (Jackendoff and Culicover 2003), or *influence*, *commitment*, and *orientation* (Sag and Pollard 1991).

The distinction between the two types of "object-control" verbs in Kavalan, e.g., *pawRat* 'force' vs. *tud* 'teach', suggests that the classification of control predicates must be refined. As exemplified in Section 2, Kavalan control verbs that exhibit the Actor-Sensitivity phenomenon all depict a scenario where the agent attempts to bring about an event by imposing an obligation on someone else to execute the action or simply by forcing someone

else to carry out the action. The event described by such control verbs actually consists of two sub-events. The first sub-event involves the agent's act and the second sub-event is the execution of an action by someone else. Moreover, the two sub-events are connected by a cause-result relation, or a CAUSE/BRING ABOUT operator, which is syntactically realized as  $v_{CAUSE}$ , or *pa*-.

However, on this semantic analysis of Kavalan control predicates, it is not clear how the event structure of a control predicate is mapped to its syntactic structure. In other words, how is the event structure of a control predicate linked to Syntax? To complement the semantic analysis, Section 3.3 will argue that the event structure of control predicates is encoded in Syntax through the linking of embedded Fin(iteness) head to a Logophoric Center (LC).

## **3.3.** Control Predicates and Logophoricity

According to Bianchi (2003), the Fin head in a complement clause can be linked to either an external LC, i.e., speech participants, or an internal LC, i.e., the participants of the matrix clause event. She proposes that a Fin head linked to an internal LC can only license a referentially dependent [-R] person feature and argues that obligatory control is a concomitant consequence of this structural licensing.

Adopting Bianchi's (2003) conception of logophoricity, the present paper argues that a *pawRat* ('force')-type control predicate in Kavalan features an internal LC in its complement clause and this property of logophoricity is absent in other control predicates. Firstly, when the complement of *pawRat* 'force' is negated, the imperative negator *naRin*, instead of the indicative negator *mai*, is used.

(8) a.	pawRat-an-na=iku	ni	utay	naRin	m-qila		tu	sunis
	force-PV-3ERG=1SG.ABS	ERG	Utay	NEG.IM	IP AV-SCO	old	OBL	child
	'Utay forces me to not scold children.'							
b.	*pawRat-an-an=iku	ni	utay	mai	m-qila	tu	sur	nis
	force-PV-3ERG=1SG.ABS	ERG	Utay	NEG	AV-scold	OB	L chi	ild

Secondly, the complement of *pawRat* 'force' can be a direct quotation of imperative, as illustrated in (9).

(9) pawRat-an-na ni utay ci-imuy, qibasi-ka tu qudus force-PV-3ERG ERG Utay NCM-Imuy wash-IMP OBL clothes 'Utay forced Imuy, "Do the laundry!""

Thirdly, the interpretation of a deictic in the complement of *pawRat* 'force' is ambiguous. The deictic center can be either the external LC or the internal LC. In (10), *tazian* 'here' can refer to a place near the speaker (the external LC) or near Utay (the internal LC).

(10) pawRat-an-na ni utay ci-imuy pa-qawtu tazian sasakay force-PV-3ERG ERG Utay NCM-Imuy CAU-come here play 'Utay forces Imuy to come here to play.' ('come here': near speaker or near Utay)

None of these syntactic and semantic properties are observed on other types of control predicates.

As the Fin head of the complement clause of a *pawRat* ('force')-type control predicate is linked to an internal LC, specifically the initiator whose point of view is reported, the [-R] person feature it licenses must be identified with the [+R] person feature of this initiator. This perspective shift from an external LC to an internal LC is the underlying reason why the

complement of *pawRat* 'force' and other similar control predicates must be morphologically causativized.

The analysis that attributes the causativization of the embedded verb to the internal LC on Fin can also explain why pa- affixation is absent when the embedded verb is a collective predicate, as illustrated in (11). (11) is an example of partial control where both the agent and the theme are the arguments of the embedded verb. The [-R] person feature in the complement can be partially identified with the [+R] person feature of the internal Logophoric Center and thus no causativization is necessary.

(11) pawRat-an-na ni utay ci-imuy masulun matiw sa taipaq force-PV-3ERG ERG Utay NCM-Imuy AV.together AV.go to Taipei 'Utay forces Imuy to go to Taipei together (with him, Utay).'

To corroborate the proposed analysis, it will be shown that control predicates that do not take a causativized verb complement like *paska* 'try' and *tud* 'teach' are restructuring predicates and are thus devoid of a Fin head in their complement that can be linked to an internal LC. A *pawRat* ('force')-type control predicate, on the other hand, does not involve restructuring in that the functional heads of its non-finite complement clause are still projected and active.

## 4. Conclusion

The research findings on Kavalan obligatory control make significant contributions to the study of control both empirically and theoretically. It is shown that some control predicates like *pawRat* 'force' in Kavalan utilize a distinct grammatical structure in which the embedded verb must take the causative marker *pa*-. The control verbs that require their embedded verbs to be affixed with the causative prefix all denote an event where the agent obligates the theme to execute some action. It is argued that the causativization of the embedded verb in a control sentence cannot be explained by a purely syntactic or semantic account of obligatory control. Instead, a comprehensive and satisfactory explanation for Kavalan obligatory control must take into account how event structure and Logophoric Center are encoded in Syntax.

#### References

- Bianchi, Valentina. 2003. On finiteness as logophoric anchoring. In *Temps et point de vue/Tense and Point of View*, eds. by Jacqueline Guéron and Liliane Tasmowski, p. 213-246. Nanterre: Université Paris X.
- Chang, Yung-li, and Wei-tien Dylan Tsai. 2001. Actor-sensitivity and obligatory control in Kavalan and some other Formosan languages. *Language and Linguistics* 2.1-20.

Hornstein, Norbert. 1999. Movement and control. Linguistic Inquiry 30.69-96.

Jackendoff, Ray, and Peter W. Culicover. 2003. The semantic basis of control in English. *Language* 79.517-556.

Rooryck, Johan. 2008. Control via selection. *New horizons in the analysis of control and raising*, eds. William D. Davies and Stanley Dubinsky, 281–292. Dordrecht: Springer.

- Rosenbaum, Peter. 1967. *The grammar of English predicate complement constructions*. Cambridge, MA: MIT Press.
- Sag, Ivan A. and Carl Pollard. 1991. An integrated theory of complement control. *Language* 67.63-113.