Obligatory Control and Event Structure in Kavalan*

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1. Introduction

➢ The present paper investigates the control structure of Kavalan, a Formosan language (Austronesian language in Taiwan).

1.1 Theoretical Analyses of Obligatory Control

A. The standard account: PRO analysis

➢ The PRO Theorem (or Chomsky and Lasnik’s (1993) null Case approach)
➢ The Minimal Distance Principle (Rosenbaum 1967)

(1) a. Bill tried [PRO to leave].
   b. Michael persuaded Ryan [PRO to buy the car].

B. The Movement Theory of Control (Hornstein 1999; Boeckx, Hornstein, & Nunes 2010)

➢ Theta roles are features, which prompt DP movement to Θ-positions.
➢ The Minimal Distance Principle can be reduced to the Minimal Link Condition.

C. The scale of finiteness [T] and [Agr] (Landau 2004)

➢ R-assignment Rule (Landau 2004: 842)
For $X^0_{[\alpha T, \beta Agr]} \in \{I^0, C^0, \ldots \}$:
$\emptyset \rightarrow [+R/X^0_\alpha]$, if $\alpha = \beta = +$
$\emptyset \rightarrow [-R]/elsewhere

➢ Agree
❖ probe: matrix F licensing the controller DP
❖ goal: PRO or the embedded Agr

D. Finiteness as logophoric anchoring (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.
➢ A [-finite] Fin head linked to an internal LC can only license a referentially dependent [-R] person feature.
➢ iLC is anaphoric to E

(2) $\ldots V_\beta^0 [CP_{\text{FinP}} -\text{Fin} [TP_{\text{DP-R}} [T_{i\text{-T}} \ldots ]]]$
   $E_i \quad i\text{LC}_i$

E. Semantic analysis (Jackendoff and Culicover 2003; Sag and Pollard 1991)

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The controller of the implicit argument in the embedded clause of a control predicate is determined by the semantics of the control predicate. The syntactic position of the controller is irrelevant (3).

Technical details aside, semantically-based analyses of obligatory control hinge on the classification of control predicates, with each type exhibiting a unique control pattern.

- conceptual structures (Jackendoff and Culicover 2003)
- event structures (Rooryck 2008)
- semantic principles of controller assignment (Sag and Pollard 1991).

(3) Jackendoff and Culicover (2003: 520)

a. Bill ordered Fred, to leave immediately.
b. Fred’s order from Bill to leave immediately.
c. The order from Bill to Fred, to leave immediately.
d. Fred received Bill’s order to leave immediately.

1.2 Obligatory Control in Formosan Languages

- The verb in the subordinate clause of a persuade-type control sentence in some Formosan languages must take a causative marker, e.g., Budai Rukai, Kavalan, Puyuma, and Tsou (Chang and Tsai (2001) and Yeh (1997)).

(4) Kavalan

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pawRat-an-na ni buya aiku [pa-qibasi tu qudus] force-PV-3ERG.ERG Buya 1SG.ABS CAUS-wash OBL clothes
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‘Buya forces me to wash clothes.’ (Literally, ‘Buya forces me, causing (me) to wash clothes.)

- Actor-Sensitivity: Control operations are sensitive to the agent theta role of control predicates in Formosan languages. (Chang and Tsai 2001)

1.3 Goals and Outline of the Talk

★ The Actor-Sensitivity Constraint cannot account for all the obligatory control patterns in Kavalan.
★ The syntactic control configurations of Kavalan correspond to event structures of control predicates.
★ The event structure of control predicates is indirectly encoded in Syntax through the linking of embedded Fin(iteness) head to a Logophoric Center (LC).

Outline:
- Section 2: The empirical patterns of obligatory control sentences in Kavalan
- Section 3: Against syntactic treatments of Kavalan control structure
- Section 4: Towards a semantic analysis
- Section 5: Control and logophoricity
- Section 6: Conclusion

2. Obligatory Control in Kavalan
2.1 Controller of PRO
The controller of a PRO in Kavalan is not associated with a specific case marker or a particular grammatical role.

Try-type control:

(5) a. m-paska ya____sunis, [satzai PROi]
   AV-try ABS child sing
   ‘The child tries to sing.’

b. paska-an na____sunis, [satzai PROi]
   try-PV ERG child sing
   ‘The child tries to sing.’

Persuade-type control: The embedded verb must take an overt causative prefix pa-.

(6) a. m-linana aizipna tu sunis [*(pa-)lusit PROi]
    AV-persuade 3SG.ABS OBL child CAUS-leave
    ‘He persuades a child to leave.’ (lit. He persuades a child, causing (him/her) to leave.)

b. pawRat-an-na ni____buya, aiku [*(pa-)qibasi PROi tu qudus]
   force-PV-3ERG ERG Buya 1SG.ABS CAUS-wash OBL clothes
   ‘Buya forces me to wash clothes.’ (lit. Buya forces me, causing (me) to wash clothes.)

Actor-Sensitivity: Only an agent DP argument can control a PRO. (Chang and Tsai 2001)
Not all control verbs in Kavalan obey the Actor-Sensitivity constraint.

(7) a. sulud-an-na ni abas ya____sunis ‘nay, [mawRat PROi]
    allow-PV-3ERG ERG Abas ABS child that AV.play
    ‘Abas allows that child to play.’

b. t<m>abal=iku tu sunis [q<m>an PROi tu Raq]
   <AV>stop=1SG.ABS OBL child <AV>drink OBL alcohol
   ‘I stop a child from drinking.’

c. pangmu-an-na ni abas aiku, [m-kyala PROi tu byabas]
   help-PV-3ERG ERG Abas 1SG.ABS AV-pick.up OBL guava
   ‘Abas helps me pick up guavas.’

d. tud-an-na=iku, na tina-ku [s<m>udad PROi]
   teach-PV-3ERG=1SG.ABS ERG mother-1SG.GEN <AV>write
   ‘My mother teaches me to write.’

If the embedded verb in (7) is affixed with pa-, the matrix theme argument will still be construed as the controller.

(8) sulud-an-ku ya____sunis-ku, [pa-qawRat PROi]
   allow-PV-1SG.ERG ABS child-1SG.GEN CAUS-play
   ‘I allow my child to let (someone) play.’

The control verbs that require their embedded verb to be affixed with the causative prefix all denote an event where the agent obligates the theme to perform some action.

(9) a. tezung-an-na ni utay ti-abas *(pa-)qibasi tu qudus
   instruct-PV-3ERG ERG Utay NCM-PN CAUS-wash OBL clothes
   ‘Utai instructs Abas to do the laundry.’
b. tuluz-an-na ni buya aiku *(pa-)qapaR tu mutun
   send-PV-3ERG ERG Buya 1SG.ABS CAUS-catch OBL mouse
   ‘Buya sends me to catch a mouse.’

c. pupuk-an-ku ya sunis-ku *(pa-)taqsi
   ask-PV-1SG.ABS ABS child-1SG.GEN CAUS-study
   ‘I ask my child to study.’

d. qeRas-an-na ni imuy aiku *(pa-)tenun
   require-PV-3ERG ERG Imuy 1SG.ABS CAUS-weave
   ‘Imuy requires me to weave.’

2.2 The Causative Marker Pa-
    ➢ Lexical causative pa-: pa-N
      (10) a. pisa ‘a gun’    b. pa-pisa ‘to shoot’
        c. Ra’is ‘a rope’    d. pa-Ra’is ‘to tie with a rope’
        e. kunku ‘story’    f. pa-kunku ‘to tell a story’

    ➢ Syntactic/productive causative pa-: pa-V
      ❖ It can be attached to either an AV verb or a PV verb.
      (11) a. qibasi tu qudus ya ti-imuy
            wash ABS clothes ABS NCM-Imuy
            ‘Imuy does the laundry.’
          b. pa-qibasi tu qudus ya ti-abas ti-imuy-an
             CAUS-wash OBL clothes ABS NCM-Abas NCM-Imuy-OB
             ‘Abas makes Imuy do the laundry.’

    ➢ The causer argument introduced by pa- does not need to be an agentive DP. The causative marker pa- thematically introduces a generic causer, not an agent argument.
      (13) pa-Rubatang ya iyu tu tazungan
          CAU-be.beautiful ABS medicine OBL woman
          ‘The medicine makes women (become) beautiful.’

    ➢ Assuming a syntactic approach to causative affixes (Baker 1988; Harley 2008), I analyze the productive pa- in Kavalan as the lexical realization of \( v_{\text{cause}} \), which assigns a generic causer role to the DP in its specifier position.
      (14) \[ [v_{\text{cause}} \text{CAUSER} [v_{\text{cause}} v_{\text{CAUSE}} (pa-)] [vP DP [v' V [VP V DP ]]]]]

    ➢ recursion of pa- affixation in qeRas ‘require’-type control predicates
Workshop on Understudied Languages and Syntactic Theory

(15) a. `qeRas-an-na ni Utay aiku pa-pa-qila ti-imuy-an
    require-PV-3ERG ERG Utay Isg.ABS CAUS-CAUS-scold NCM-Imuy-LOC
    tu sunis
    OBL child
    ‘Utay requires me to make Imuy scold children.’

b. pawRat-an-na ni abas aiku pa-pa-qibasi tu sunis tu
    force-PV-3ERG ERG Abas Isg.ABS CAUS-CAUS-wash OBL child OBL
    qudus
    clothes
    ‘Abas forces me to make children do the laundry.’

3. Against Syntactic Treatments of Kavalan Obligatory Control
   - The Minimal Distance Principle
   - The Movement Theory of Control
   - See Appendix for arguments against the analysis of pa-affixed verb phrase as a purpose adjunct.

3.1 The Minimal Distance Principle
   - Rosenbaum (1967): A PRO is controlled by the closest c-commanding DP.
   - Two control relations in a persuade-type control structure in Kavalan

(16) a. `qeRas-an-na ni imuy aiku pa-tenun
    require-PV-3ERG ERG Imuy Isg.ABS CAUS-weave
    ‘Imuy requires me to weave.’

b.

3.2 The Movement Theory of Control
Neither can the MTC provide a satisfactory account for the Kavalan control predicates that are required to take a causativized verb phrase as their complement.

Violation of the Minimal Link Condition (17)


- A DP, X, can move across a higher c-commanding DP, Y, if X is first raised to the (outer) specifier of the phrase that immediately dominates Y. The movement is motivated by the EPP feature of a phase. (18)

- Problem: What phase-related feature drives the leap-frog movement in a Kavalan control sentence? While vP is usually assumed to be a phase, VP is not.

### (17)

```
\begin{center}
\begin{tikzpicture}
  \node (vP) {vP} ;
  \node (DPi) [below left = of vP] {\text{ni imuy}} ;
  \node (v) [right = of DPi, below = of vP] {\text{-an}} ;
  \node (VP) [right = of v] {\text{VP}} ;
  \node (DPk) [above = of vP] {\text{DP}_k} ;
  \node (V') [above = of VP] {\text{V'}} ;
  \node (v') [above = of vP] {\text{v'}} ;
  \node (aiiku) [above = of vP] {\text{aiiku}} ;
  \node (qeRas) [right = of aiiku, above = of vP] {\text{qeRas}} ;
  \node (vP\text{\_CAUSE}) [right = of qeRas, above = of vP] {\text{vP\_CAUSE}} ;
  \node (v'\text{\_CAUSE}) [right = of aiiku, above = of vP] {\text{v'\_CAUSE}} ;
  \node (DP_i) [below = of aiiku, left = of vP] {\text{\text{ni imuy}}} ;
  \node (pa-4) [below = of aiiku, right = of vP] {\text{pa-}} ;
  \node (DP_k) [below = of aiiku, right = of vP] {\text{DP}_k} ;
  \node (v\text{\_CAUSE}) [below = of aiiku, below = of vP] {\text{v\_CAUSE}} ;
  \node (tenun) [below = of aiiku, right = of vP] {\text{tenun}} ;
  \node (ZP) [above = of ZP] {\text{ZP}} ;
  \node (DP(X)) [below = of ZP] {\text{DP(X)}} ;
  \node (DP(Y)) [below = of ZP] {\text{DP(Y)}} ;
  \node (Z') [above = of WP] {\text{Z'}} ;
  \node (WP) [below = of Z'] {\text{WP}} ;
  \node (W) [below = of WP] {\text{W}} ;
\end{tikzpicture}
\end{center}
```

### (18)

```
\begin{center}
\begin{tikzpicture}
  \node (ZP) {ZP} ;
  \node (DP(X)) [below = of ZP] {\text{DP(X)}} ;
  \node (DP(Y)) [below = of ZP] {\text{DP(Y)}} ;
  \node (Z') [below = of WP] {\text{Z'}} ;
  \node (WP) [below = of Z'] {\text{WP}} ;
  \node (W) [below = of WP] {\text{W}} ;
\end{tikzpicture}
\end{center}
```

4. Semantic Analysis

4.1 Types of Control Verbs and Their Conceptual Structures

- Controller selection is determined by the semantics of control predicates.
- Jackendoff and Culicover (2003) argue that the obligatory control relation should be encoded in the conceptual structure (CS) of a verb instead of its syntactic structure.
- Conceptual structure: the level that structurally represents thematic roles and their relationships.
A. **INTEND**: intend, decide

(19) \[ X^a \text{INTEND} [α \text{ACT}] \]  
    (Jackendoff and Culicover 2003: 537)

B. **OBLIGATION**: order, instruct, promise.

(20) a. \[ X^a \text{OBLIGATED} [α \text{ACT}] \text{TO Y} \]  
    b. \[ X^a \text{OBLIGATED} [α \text{ACT}]^β \text{BENEF Y} \]  
    (Jackendoff and Culicover 2003: 537)

C. **FORCE DYNAMICS**: cause, force, prevent, enable, help.

- They all describe a scenario where one character attempts to influence another character’s execution of an action and exhibit the following generic conceptual structure.

(21) \[ X \text{CS Y}^a [α \text{ACT}] \]  
    (Jackendoff and Culicover 2003: 538)

4.2 Types of Control Verbs in Kavalan

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 by forcing someone else to carry out the action.

- The first sub-event involves the agent’s act and the second sub-event is the execution of an action by someone else.
- The two sub-events are connected by a cause-result relation, or a CAUSE/BRING ABOUT operator. (22c)

(22) a. \[ X^a \text{INTEND} [α \text{ACT}] \]  
    \[ (paska \text{ ‘try’, ngid \text{ ‘want’})} \]  
    b. \[ X \text{CS Y}^a [α \text{ACT}] \]  
    \[ (sulud \text{ ‘allow’, tabal \text{ ‘prevent’, pangmu \text{ ‘help’, tud \text{ ‘help’}}}) \]  
    c. \[ [X^a \text{ACT(ON Y}^β)]^a \text{BRING ABOUT} [Y^β \text{ACT}] \]  
    \[ (pawRat \text{ ‘force’, qeRas \text{ ‘require’, etc.})} \]

4.3 Syntax and Event Structure

- The \( v \) head, \( v_{\text{CAUSE}} \), or \( pa- \), is the syntactic realization of the semantic CAUSE/BRING ABOUT operator.
- The addition of the causative marker is tied to the event structure in (22c). Control predicates that do not exhibit the conceptual structure in (22c) will not take \( vP_{\text{CAUSE}} \) as the complement.
- The syntactic control configurations of different Kavalan control predicates constitute the grammatical encoding of different control event structures. The analysis lends support to theories that incorporate event structure into the construction of syntactic structure (Rosen 2003; Travis 2000).
- Syntactic realizations of (22c) across languages
  - Only a small number of languages have an overt morpheme for the BRING ABOUT operator in (22c).
Why does the persuade-type control predicate in Kavalan and other Formosan languages differ from most of the world’s languages? What contributes to such a difference?

Other problems of the semantic analysis:
- tabal ‘prevent’: CAUSE NOT TO DO?
- How is event structure encoded in Syntax?

5. Control and Logophoricity

- The antecedent of a logophoric pronoun refers to someone “whose speech, thoughts, feelings, or general state of consciousness are reported” (Clements 1975: 141).
- Event structure or conceptual structure is not directly mapped onto Syntax. The event structure of control predicates is indirectly encoded in Syntax through the linking of embedded Fin(iteness) head to a Logophoric Center (LC).
- controller = the internal Speaker from whose point of view the event is reported

Bianchi (2003): logophoricity in (partial) control structure
- 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.
- A [-finite] Fin head linked to an internal LC can only license a referentially dependent [-R] person feature.

5.1 qeRas ‘require’-type control predicates and logophoricity

★ qeRas ‘require’-type control predicates as a logophoric verb
★ perspective shift from an external LC to an internal LC, specifically the event initiator whose point of view is reported

Negation in the complement clause of qeRas ‘require’-type control predicates:
- no pa-
- naRin: imperative negator

(25) a. qeRas-an-na=iku ni utay naRin m-qila tu sunis
require-PV-3ERG=1SG.ABSERG Utay NEG.IMP AV-scold OBL child
‘Utay requires me to not scold children.’
b. *qeR-as-an-na=iku ni utay mai m-qila tu sunis
require-PV-3ERG=1SG.ABSERG Utay NEG AV-scold OBL child
Direct quote and imperative as the complement

- *paska=pa=iku mai/naRin m-qila tu sunis try=FUT=1SG.ABS NEG/NEG.IMP AV-scold OBL child

b. *tud-an-na ni utay ya sunis-na mai/naRin m-tebu tu qudus teach-PV-3ERG.ERG Utay ABS child-3GENNEG/NEG.IMP AV-patch OBL clothes

- qeRas ‘require’-type control predicates denote a speech event, a potential internal LC
- predicates that can license a logophoric clause: speech, thought, knowledge, direct perception (Culy 1994)
- controller = the internal Speaker of the internal LC

(27) pawRat-an-na ni utay ti-imuy, gibasi-ka tu qudus
force-PV-3ERG.ERG Utay NCM-Imuy wash-IMP OBL clothes
‘Utay forced Imuy, “Do the laundry!”’

(28) a. *pangmu-an-na ni utay ti-imuy, qibasi-ka tu qudus
help-PV-3ERG.ERG Utay NCM-Imuy wash-IMP OBL clothes
b. *tud-an-na ni utay ti-imuy, satzai-ka
teach-PV-3ERG.ERG Utay NCM-Imuy sing-IMP

- shift of deictic center
- ambiguous interpretation of deictics in the complement of qeRas ‘require’-type predicates

(29) a. pawRat-an-na ni utay ti-imuy pa-qawtu tazian sasaqay
force-PV-3ERG.ERG Utay NCM-Imuy CAUS-come here play
‘Utay forces Imuy to come here to play.’ (‘come here’: near speaker or near Utay)
b. siRab qeRas-an-na=iku ni utay temawaR pa-qibasi tu
yesterday require-PV-3ERG=1SG.ABSERG Utay tomorrow CAU-wash OBL qudus
clothes
‘Yesterday, Utay required me to do the laundry today/tomorrow.’

(30) t<m>abal ti-buya tu sunis mawtu tazian sasaqay
<AV>stop NCM-Buya OBL child AV.come here play
‘Buya stops children from coming here to play.’

- The complement clause of a qeRas (‘require’)-type control predicate is reported from the perspective of the initiator in the matrix clause.
- As the Fin head of the complement clause of a qeRas (‘require’)-type control predicate is linked to an internal LC, specifically the internal Speaker, the [-R] person feature it licenses must be identified with the [+R] person feature of the internal Speaker.

5.2 More evidence for the logophoric nature of qeRas (‘require’)-type control predicates
- partial control: 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.

- Collective predicate

(31) a. masulun=ita matiw sa taypak
    AV.together=1PL.ABS AV.go to Taipei
    ‘We go to Taipei together.’

b. masulun=iku tu sunis-ku matiw sa taypak
    AV.together=1SG.ABS OBL child-1SG.GEN AV.go to Taipei
    ‘I go to Taipei with my children.’

- Reciprocal

(32) a. pawRat-an-na ni utay ti-imuy masulun matiw sa taypak
    force-PV-3ERG ERG Utay NCM-Imuy AV.together AV.go to Taipei
    ‘Utay forces Imuy to go to Taipei together. (Utay and Imuy together)’

b. pawRat-an-na ni utay ti-imuy pa-gasulun matiw sa taipaq tu sunis
    force-PV-3ERG ERG Utay NCM-Imuy CAUS-together AV.go to Taipei OBL child
    ‘Utay forced Imuy to go to Taipei with children. (Imuy and children together)’

- Reflexives

(34) a. pawRat-an-na ni Utay ya izip-na g\,<m\,>an tu mutun
    force-PV-3ERG ERG Utay ABS body-3ERG<AV>eat OBL mouse
    ‘Utay forced himself to eat a mouse.’

b. *pawRat-an-na ni Utay ya izip-na pa-qan tu mutun
    force-PV-3ERG ERG Utay ABS body-3ERG CAUS-eat OBL mouse

5.3 Functional projections of control complements

5.3.1 Finiteness

- The complement of a control predicate is non-finite.

The complement clause of a control verb in Kavalan is not introduced by any overt complementizer, coordinating conjunction, or linker.

(35) a. *m-paska ya sunis [tu/sRi/a satzai]
    AV-try ABS child COMP/CONJ/LNK sing
b. *pawRat-an-na ni buya aiku [tu/sRi/a pa-qibasi tu qudus] force-PV-3ERG ERG PN 1SG.ABS COMP/CONJ/LNK CAUS-washOBL clothes

- Tense and aspect markers, if any, must be attached to the matrix control predicate.

(36) a. paska=pa=iku s<m>alaw tu babuy na na’ung try=FUT=1SG.ABS <AV>hunt OBL pig GEN mountain ‘I will try to hunt boars.’
b. *paska=iku salaw=pa tu babuy na na’ung try=1SG.ABS hunt=FUT OBL pig GEN mountain
c. tezung-an-na=ti ni utay ti-abas pa-qibasi tu qudus instruct-PV-3ERG=PFV ERG Utay NCM-Abas CAUS-washOBL clothes ‘Utai instructed Abas to do the laundry.’
d. *tezung-an-na ni utay ti-abas pa-qibasi=ti tu qudus instruct-PV-3ERG ERG Utay NCM-Abas CAUS-wash=PFV OBL clothes

- AV-restriction: The embedded verb in a control sentence is not allowed to take the patient voice suffix, but must occur as an agent voice verb.
  - a unique morphosyntactic property of the verb in a non-finite subordinate clause
  - the lack of a structural Case assigner in the embedded clause


5.3.2 Structural differences between *paska ‘try’-type control and qeRas ‘require’-type control

★ complement of *paska ‘try’ and tud ‘teach’: fully reduced, restructuring (Wurmbrand 2001) ➔ no Fin head in the complement that can be linked to an internal LC
★ complement of qeRas ‘require’: TP and CP of its complement clause are still projected and active.

- Temporal adverbs in the complement clause
  - *paska ‘try’ and tud ‘teach’: no temporal adverbs in the complement clause
    - anaphoric tense (untensed)
  - qeRas ‘require’: yes
    - a tense operator in the complement clause distinct from, but constrained by, the matrix tense operator (dependent tense, not anaphoric tense)

(38) a. *siRab paska=ti=iku [temawaR q<m>apaR tu mutun] yesterday try=PFV=1SG.ABS tomorrow <AV>catch OBL mouse
b. *siRab tud-an-na=iku na tina-ku [temawaR m-tebu yesterday teach-PV-3ERG=1SG.ABS ERG mother-1SG.GEN tomorrow AV-patch tu qudus] OBL clothes
Yesterday, Utay required me to do the laundry tomorrow/today.’

- Question particle *ni* in the embedded clause, with matrix clause interpretation
  - *paska* ‘try’ and *tud* ‘teach’: yes
    - mono-clusal, no CP in the complement
  - *qeRas* ‘require’: no
    - CP in the complement

(40) a. *paska* [q<m>a<pa><R tu mutun] ti-buya *ni*?
   try \( \langle \text{AV}\rangle \text{catch} \) OBL mouse NCM-Buya Q
b. = *paska* *ni* [q<m>a<pa><R tu mutun] ti-buya?
c. = *paska* [q<m>a<pa>R ni tu mutun] ti-buya?
   ‘Does Buya try to catch mice?’

(41) a. *tud-an-na=isu* na tina-su [m-tebu tu qudus] *ni*?
   teach-PV-3\text{ERG}=2\text{SG}\text{ABS} ERG mother-2\text{SG}\text{GEN} \text{AV-patch} OBL clothes Q
b. = *tud-an-na=isu* na tina-su *ni* [m-tebu tu qudus]?
c. = *tud-an-na=isu* na tina-su [m-tebu *ni* tu qudus]?
   ‘Does your mother teach you to patch clothes?’

(42) a. *pawRat-an-na=isu* na tina-su [pa-qibasi tu qudus] *ni*?
   force-PV-3\text{ERG}=2\text{SG}\text{ABS} ERG mother-2\text{SG}\text{GEN} CAUS-wash OBL clothes Q
b. = *pawRat-an-na=isu* na tina-su *ni* [pa-qibasi ni tu qudus]?
c. *pawRat-an-na=isu* na tina-su [pa-qibasi *ni* tu qudus]?
   ‘Does your mother force you to do the laundry?’

- Negation in the embedded clause
  - See Section 5.1.
  - *paska* ‘try’ and *tud* ‘teach’: no negation in the complement clause (26)
  - *qeRas* ‘require’: *naRin* as the negator in the complement clause (25)
### Table 1. Structural properties of different control predicates

<table>
<thead>
<tr>
<th></th>
<th><em>paska</em> ‘try’</th>
<th><em>tud</em> ‘teach’</th>
<th><em>qeRas</em> ‘require’</th>
</tr>
</thead>
<tbody>
<tr>
<td>subordinator</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>tense/aspect affix on the embedded verb</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>AV-restriction</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>temporal adverb in the embedded clause</td>
<td>x</td>
<td>x</td>
<td>√</td>
</tr>
<tr>
<td><em>ni</em> in embedded clause, with matrix interpretation</td>
<td>√</td>
<td>√</td>
<td>x</td>
</tr>
<tr>
<td>negation in the embedded clause</td>
<td>x</td>
<td>x</td>
<td>√</td>
</tr>
<tr>
<td>imperative/direct quote as complement</td>
<td>x</td>
<td>x</td>
<td>√</td>
</tr>
<tr>
<td>shift of deictic center</td>
<td>x</td>
<td>x</td>
<td>√ (optional)</td>
</tr>
</tbody>
</table>

- 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.
- *qeRas* ‘require’: The functional heads of its complement clause (extended projections of IP and CP) are still projected and active.

### 6. Conclusion

- **Empirical findings:**
  - Control predicates like *pawRat* ‘force’ in Kavalan take an embedded verb affixed with the causative marker *pa*-.  
  - The control verbs that require their embedded verb to be affixed with the causative prefix all denote an event where the agent obligates the theme to execute some action.
- **Theoretical findings:**
  - The causativization of the embedded verb in a control sentence cannot be explained by a purely syntactic or semantic account of obligatory control.
  - A comprehensive and satisfactory explanation for Kavalan obligatory control must take into account how event structure and Logophoric Center are encoded in Syntax.

### Appendix: Against the analysis of *pa*-affixed verb phrase as a purpose adjunct

1. Properties of a purpose adjunct in Kavalan
   - An argument in a purpose adjunct that is co-referential with a matrix argument can be phonetically overt or null.

   \[
   \text{m-lawut=iku tu baqian m-lingi (timaizipna)} \\
   AV-visit=1SG.ABS OBL elder AV-take.care.of 3SG.OBL
   \]
   ‘I visit an elder to take care of him.’
no AV-restriction

(44) a. matiw=iku ti-abas-an m-lawut timaizipna
   AV.go=1SG.ABS NCM-Abas-LOC AV-visit 3SG.OBL
   ‘I go to Abas’s place to visit her.’

b. matiw=iku ti-abas-an lawut-an-ku aizipna
   AV.go=1SG.ABS NCM-Abas-LOC visit-PV-1SG.ERG 3SG.ABS
   ‘I go to Abas’s place to visit her.’

2. Properties of a pa-affixed verb phrase that differ from a purpose adjunct
   An embedded argument that is co-referential with a matrix argument must be phonetically null.

(45) a. pawRat ti-utay timaiku pa-qila (*timaiku) tu sunis
   force NCM-Utay 1SG.OBL CAUS-scold 1SG.OBL OBL child
   ‘Utay forces me to scold children.’

b. pawRat-an-na=iku ni utay pa-qila (*timaiku) tu sunis
   force-PV-3ERG=1SG.ABS ERG Utay CAUS-scold 1SG.OBL OBL child
   ‘Utay forces me to scold children.’

AV-restriction

(46) *tezung-an-na ni utay ti-abas pa-qibasi-an tu/ya qudus
   instruct-PV-3ERG ERG Utay NCM-Abas CAUS-wash-PV OBL/ABS clothes

References


