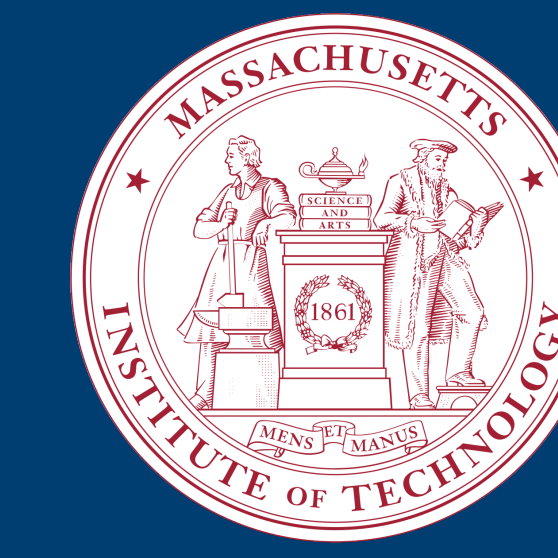




# Tough in Thai

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## The problem

Thai has a construction that displays most hallmarks of a *tough*-construction but allows an **unconstrained** antecedent-gap dependency.

### The *tough*-construction in Thai

1. **Expletive/Subject alternation:** an alternation between an expletive subject (*man*) and a "thematically displaced" subject.

(1) *man* *yâak* [thîi cà? khăay rôt khan nîi]  
EXPL difficult COMP IRR sell car CLF this  
'It is difficult to sell this car.'

(2) [rôt khan nîi]<sub>i</sub> *yâak* \*([thîi cà? khăay   ]<sub>i</sub>)  
car CLF this difficult COMP IRR sell *ec*  
'This car is difficult to sell.'

2. **Tough-Predicates:** observed with the usual class of predicates (Gluckman, 2021).

(3) *năy*sūu lēm nîi *ṽâay/yâak/sămkhan* [thîi cà? ṽaan   <sub>i</sub> kòon sòp]  
book CLF this easy/difficult/important COMP IRR read *ec* before exam  
'This book is easy/difficult/important to read    before the exam.'

3. **Nonfinite clauses:** restricted to nonfinite clauses (cf. Hoonchamlong 1991).

(4) \*tôn máy-tôn-níi *yâak* ([thîi (Sam) khəəy tăt]   <sub>i</sub>)  
tree-CLF-this difficult COMP Sam PREF cut *ec*  
Intended: '\*This tree is difficult that Sam cut.'

4. **Lack of reconstruction:** ToughSubjects do not reconstruct (Fleisher 2013).

(5) *krà?*păw khəəy khăw<sub>1/\*2</sub> *yâak* thîi *nákrian* thúk khon<sub>2</sub> cà? chəəp   <sub>i</sub>  
backpack of 3SG difficult COMP student every CLF IRR like *ec*  
'Her<sub>1/\*2</sub> backpack is difficult for every student<sub>2</sub> to like   .'

(6) [năy sūu sànyáy]<sub>i</sub> *yâak* thîi *Sam* cá? ṽaan   <sub>i</sub>  
book most difficult COMP Sam IRR read *ec*  
'Most books are difficult for Sam to read   .'

(7) ≠ *man* *yâak* thîi *Sam* cá? ṽaan *năy*sūu sànyáy  
EXPL difficult COMP Sam IRR read book most  
'It is difficult for Sam to read most books.'

### Exceptional *tough*-properties

The antecedent-gap chain **does not respect islands** (Hattori, 2023):

(8) [rôt khan nîi]<sub>i</sub> *yâak* thîi cá? sĭacay [phrə? Sam khăay   <sub>i</sub>]  
car CLF this difficult COMP IRR upset because Sam sell *ec*  
'\*This car is difficult to be upset because Sam sold   .'

(Adjunct island)

(9) [rôt khan nîi]<sub>i</sub> *yâak* thîi cá? dăy yin [kháaw lueu thîi Sam khăay   <sub>i</sub>]  
car CLF this difficult COMP IRR hear rumor COMP Sam sell *ec*  
'\*This car is difficult to hear a rumor that Sam sold   .'

(Complex NP)

...and the gap can be the subject of the lower clause (cf. Stowell 1985)

(10) [tôn máy tôn nîi]<sub>i</sub> *yâak* [thîi   <sub>i</sub> cá? thùuk tăt]  
tree CLF this difficult COMP *ec* IRR PASS cut  
'\*This tree is difficult to be cut.'

(Subject gap)

## Our proposal

(2) is ambiguous between a "true" *tough*-construction and a **Major/Broad Subject** construction.

## Major Subjects in Thai

### Thai Left Periphery

Thai has an articulated left-periphery consisting of (at least) Topic, Major Subject, and (Narrow) Subject positions

(11) [<sub>TopP</sub> Topic ... [<sub>MajSubP</sub> Major Subject ... [<sub>TP</sub> Narrow Subject ... ]]]

(12) [<sub>TopP</sub> *phū*chaay khon nán nà [<sub>MajSubP</sub> *rót khăw* [<sub>TP</sub> *prà?*tuu phay ]]]  
*man* CLF that TOP *car* 3SG *door* break  
'As for that man, his car, the door broke.'

In general, Major subjects (i) form an aboutness relationship, (ii) unselectively bind, (iii) do not have topic/focus properties (Kuno, 1973); (Heycock and Doron, 2003); amo

1. **Major Subjects ≠ Narrow Subjects:** Major Subjects appear to the left of Narrow Subjects, and can bind null resumptive pronouns, (13) and (14).

(13) *phū*chaay khon nán *rót* *pro* hăy (14) *Sam* khăw sūu rôt khan nîi  
*man* CLF that car 3SG disappear *Sam* RSM buy car CLF this  
'That man, his car disappeared.' 'Sam, he bought this car.'

2. **Major Subjects ≠ Topics** True topics are overtly marked with one of five topic markers, (15). Major Subjects can be quantificational, (16).

(15) *rót* nà, *Sam* cà? kháp (16) *kray* *rót* *pro* hăy mūawaan  
*car* TOP *Sam* IRR drive *who* car 3SG disappear yesterday?  
'This car, Sam will drive.' '\*Who, his car disappeared yesterday?'

3. **Narrow Subjects ≠ Major Subjects/Topics:** Some environments restrict anything higher than Spec-TP, (17) and (18).

(17) \*chăn chĕa [<sub>CP</sub> thîi *Sam* khăw sūu rôt khan nîi ]  
I believe COMP *Sam* RSM buy bar CLF this  
'I believe that Sam bought this car.'

(18) \*chăn chĕa [<sub>CP</sub> thîi *rót* nà, *Sam* cà? kháp ]  
I believe COMP *car* TOP *Sam* IRR drive  
Intended: 'I believe that this car, Sam will drive.'

## Major vs. Narrow Subjects in the *tough*-construction

Controlling for the availability of the Major Subject (and a Topic), we find that Thai's *tough*-construction is (i) island-sensitive and (ii) restricted to non-subject positions.

1. Island-effects and subject restriction reappear with **multiple subjects**.

(19) \*[rôt khan nîi] *yaay*<sub>i</sub> *yâak* thîi cà? dăy yin [kháaw lueu thîi Sam khăay   <sub>i</sub>]  
*car* CLF this tire difficult COMP IRR hear rumor COMP Sam sell *ec*  
'\*This car, the tires are difficult to hear a rumor that Sam sold   .'

(Complex NP)

(20) \*[rôt khan nîi] *yaay*<sub>i</sub> *yâak* thîi   <sub>i</sub> cà? thùuk khăay  
*car* CLF this tire difficult COMP *ec* IRR PASS sell  
'This car, its tires are difficult    to be sold.'

(Subject gap)

2. Island effects and subject restriction reappear in **embedded clauses**.

(21) \*chăn chĕa thîi [rôt khan nîi]<sub>i</sub> *yâak* thîi cá? dăy yin [kháaw lueu thîi S. khăay   <sub>i</sub>]  
I believe COMP *car* CLF this difficult COMP IRR hear rumor COMP S. sell *ec*  
'\*I believe that this car is difficult to hear a rumor that Sam sold'

(Complex NP)

(22) \*chăn chĕa thîi *yaay*<sub>i</sub> *yâak* thîi   <sub>i</sub> cà? thùuk khăay  
I believe COMP *tire* difficult COMP *ec* IRR PASS sell  
'\*I believe that the tires are difficult    to be sold.'

(Subject gap)

## Syntacticizing the difference

Major Subjects are introduced above spec-TP via predicate abstraction and unselective binding

(23) [<sub>MSP</sub> *rót* *khan* *nîi* [ Op<sub>1</sub> [<sub>TP</sub> (*man*) [<sub>VP</sub> Cop [<sub>AP</sub> *yâak* [<sub>CP</sub> thîi cà? khăay *pro*<sub>1</sub> ]]]]]]  
*car* CLF this EXPL difficult COMP IRR sell  
≈ 'This car, it is difficult to sell it.'

↪ assumes availability of null (expletive) pronouns in Thai (Hoonchamlong, 1991)

↪ assumes that null operator binding exists (Heycock, 1991; Landau, 2011).

▪ This isn't strictly necessary as long as an aboutness relationship can be formed. (See Cardinaletti 2004; Den Dikken 2006 for alternatives.)

▪ ToughSubjects are introduced as arguments of the tough-predicate (Gluckman, 2021), and enter into a predication relationship with the embedded clause via (local) operator movement (Browning, 1987).

(24) [<sub>TP</sub> *rót* *khan* *nîi* [<sub>VP</sub> Cop [<sub>AP</sub>    *yâak* [<sub>CP</sub> Op<sub>1</sub> thîi cà? khăay    ]]]]  
*car* CLF this difficult COMP IRR sell  
'This car is difficult to sell   .'

↪ assumes that there is operator movement in embedded clause.

▪ The complementizer *thîi* is argued in Jenks (2014) to inherently involve local operator binding: it is the complementizer that appears in relative clauses.

▪ In either case, the Major/Narrow Subject cannot reconstruct into the embedded clause.

## Do *tough*-constructions ever have an unconstrained dependency?

Japanese has **island-violating CP-tough constructions** (Takita et al., 2022) but these pattern like Major Subjects as well.

(25) *konna ronbun-ga*<sub>i</sub> kyoosi-nitotte [<sub>VP</sub> [[<sub>itumo</sub>   <sub>i</sub> kaku] gakusei]-o hyookasi-niku-i]  
*this.kind paper-NOM* teacher-for always *ec* write student-ACC evaluate-tough-is  
'\*This kind of paper is tough for teachers to evaluate a student who always writes   .'  
(Takita et al., 2022, 258)

▪ Tayalati and Danckaert (2020) argue that island-insensitive **resumptive tough-constructions** in Modern Standard Arabic also involve a Major Subject (Alexopoulou et al, 2004).

(26) *hādā l-kitāb-u*<sub>i</sub> mumti=un qirā'at-u=hu<sub>i</sub>  
*this the-book(M)SG.-NOM* pleasant.M.SG-NOM read(F).SG-NOM=**RP.M.SG**  
'This book is pleasant to read.'  
(Tayalati and Danckaert, 2020, 199)

As a rule, the *tough*-construction *never* permits an unconstrained antecedent-gap dependency, suggesting a universal strategy for forming *tough*-constructions.

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