1. **Questions and Modals in Navajo**

• Polar questions are normally formed with second position clitics –ísh or –šaq (Schauber 1979, Young and Morgan 1987).

(1) a. Deigo  sī’ą́

   upright  it-sits

   ‘It is upright.’

b. Deigo-óśh  sī’ą́

   upright-Q  it-sits

   ‘Is it upright?’

• Navajo also has several modal adverbs, including šįį (Willie 1996).

• Šįį appears where English epistemic modals *probably, must,* and *possibly* could go (2a,b) and can’t be used if direct evidence is available (2c) (English: von Fintel and Gillies 2010).

(2) a. **Context:** You work indoors in a windowless office. You see people walking in with wet clothing and dripping umbrellas. You say:

   Tł’oodi  šįį  nahaltin

   outside  MODAL  it.is.raining

   ‘It must be raining.’

b. **Context:** You look at tomorrow’s forecast. There is a 30% chance of rain. You say:

   Nahoodootįįl  šįį

   it.will.rain  MODAL

   ‘There’s a possibility it’s going to rain tomorrow.’

c. **Context:** You look outside and see that it’s raining. You say:

   # Tł’oodi   šįį  nahaltin

   outside  MODAL  it.is.raining

   **Comment:** “You see that it’s raining? That’s not right.”

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2. **Overview of Daats’í**

• The adverb *daats’í* is identified by Willie (1996) as a modal similar to *shįį*.  

(3) a. Naanish-góó *daats’í* deesháát job-to DAATS’í I.will.go  
‘Maybe I will go to work.’ (Willie 1996)

b. Ashkii *daats’í* bich’ah hodooshké-go yiniíná t’áadoo ’iits’a’í sidá boy DAATS’í he.was.scolded-SUB because none is.heard he.sits  
‘The boy has been scolded, for that reason he’s sitting quietly.’ (Willie 1996)

• But in cases not discussed by Willie, sentences with *daats’í* are translated as polar questions, ‘I wonder if...’ statements, and ‘maybe *p* or maybe not *p*’ disjunctions.

(4) a. Deigo *daats’í* si’á upright DAATS’í it-sits  
‘Is it upright?’  
‘I wonder if it’s upright.’  
‘Maybe it’s upright, or maybe not.’

b. Dichin *daats’í* ninizín hunger DAATS’í you.feel  
‘Are you hungry?’  
‘I’m wondering if you’re hungry.’  
‘You’re asking politely.’

• *Daats’í* also forms embedded questions with particular matrix verbs (e.g., *nisin* ‘I think’).

(5) a. [Łéécháá yázhí na’ałkóó’ yééhósín ] *nisin* go taah yilt’e’ puppy it.swims it.knows.how I.think-SUB water.into I.threw.it  
‘Thinking the puppy knew how to swim, I threw it in the water.’

b. [Łéécháá yázhí na’ałkóó’ *daats’í* yééhósín ] *nisin* go taah yilt’e’ puppy it.swims DAATS’í it.knows.how I.think-SUB water.into I.threw.it  
‘Wondering if the puppy knew how to swim, I threw it in the water.’ (YM 1987)

3. **Daats’í vs. Modals**

• **Similarities:**

  • Both *daats’í* and *shįį* can be syntactically or semantically embedded. For example, *daats’í* is embedded in a subordinate clause in (3b). *Shįį* can also go in this position.

  • Both *daats’í* and *shįį* can be embedded under verbs of saying and thinking (e.g., *nisin*): \(^2\)

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\(^2\) Example based on Peterson 2010: 139.
(7) a. Mary řéécháq’i shidoolhash daats’í nizin
Mary dog it.will.bite.me DAATS’í she.thinks
‘Mary thinks that the dogs might bite her.’

b. Mary řéécháq’i shidoolhash řii nizin
Mary dog it.will.bite.me MODAL she.thinks
‘Mary thinks that the dogs will probably bite her.’

• Differences:

• Shii cannot give rise to embedded questions (cf. (5b)).

• Daats’i can be used when the context biases ¬p as the most probable outcome (8a). Shii cannot be (8b).

(8) **Context:** You went to school before your sister Mary. You know she had a stomachache this morning.

a. Mary bibid diniih. ‘Ólta’góó daats’í doogáát.
Mary her.stomach it.hurts school-to DAATS’í she.will.go
‘Mary has a stomachache. I wonder if she’ll go to school / maybe she will go to school, or not.’

b. ?? Mary bibid diniih. ‘Ólta’góó shii doogáát.
Mary her.stomach it.hurts school-to MODAL she.will.go
**Comment:** “Sounds more positive that Mary will go to school. Sounds weird unless you have ’áko ndi (‘but’) before the second sentence.”

• Daats’i also seems to be interpreted higher than shii relative to adverb t’áá ‘aanii ‘really’ (Willie 1996).

(9) a. Ashkii daats’í t’áá ’aanii lii’ taah yiyiilóoz
boy DAATS’í really horse water he.led.it
‘I wonder if the boy really took the horse to the well.’
‘Did the boy really take the horse down to the well?’

b. Ashkii shii t’áá ’aanii lii’ taah yiyiilóoz
boy MODAL really horse water he.led.it
‘The boy must have taken the horse to the well.’
‘The boy really took the horse down to the well.’
4. **Daats’i vs. Questions**

- **Similarities:**
  - Sentences with *daats’i* can be translated as polar questions (4) and can be responded to by the Addressee.

- **Differences:**
  - However, *daats’i* “questions” can also occur in contexts where the Addressee is not expected to be able to answer.

(10) **Context:** You don’t know if it is raining or not. Your coworker has just come in from the outside so she knows if it is raining.

a. Nahaltin  *daats’i*  
it.is.raining  DAATS’I  
‘I wonder if it’s raining.’

b. Nahaltin-*ish*  
it.is.raining-Q  
‘Is it raining?’

*Comment:* “(10b) is a better way to say it if she knows, but (10a) is okay.”

(11) **Context:** You don’t know if it is raining or not. Your coworker has been inside your windowless office with you all morning so you know she doesn’t know.

a. Nahaltin  *daats’i*  
it.is.raining  DAATS’I  
‘I wonder if it’s raining.’

b. # Nahaltin-*ish*  
it.is.raining-Q  
‘Is it raining?’

*Comment:* “You can’t say (11b) if you know she doesn’t know. You can say (11a).”

5. **Deliberative Questions**

- A cross-linguistically recurrent family of constructions is the DELIBERATIVE QUESTION (DQ). DQS have been characterized as “questions that are posed rather than asked of someone” (Rouchota 1993). Also called conjectural questions (Littell et al. 2009).

*Daats’i* “questions” strongly resemble DQS.

<table>
<thead>
<tr>
<th>Characteristics of Deliberative Questions:</th>
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<tr>
<td>• Can (perhaps must) be used in situations where the Addressee does not know the answer.</td>
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<tr>
<td>• Can (perhaps must) be used in situations where <em>p</em> and not-<em>p</em> are equally good possibilities.</td>
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<tr>
<td>• Often translated into English with the frame ‘I wonder if <em>p</em>’, ‘maybe <em>p</em>, maybe not <em>p</em>’, and ‘<em>p</em>?’.</td>
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</table>
• Constructions classified as, or resembling, DQs are found in German (Truckenbrodt 2006), Greek (Rouchota 1993), Tseltal (Shklovsky, to appear), Imbabura Quechua (Fasola 2007), Gitksan, St’át’imcets (Littell et al. 2009), and Cheyenne (Murray 2010).

• Different languages use different morphological means to express deliberative questions.

(12) **German:** Verb-final questions and initial wh-complementizer

*Context:* Mary hasn’t seen Peter in years and neither has the Addressee.

Mary: Ob er immer noch kubanische Zigarren mag?

‘whether he always still Cuban cigars likes’

‘I wonder whether he still likes Cuban cigars?’

(Truckenbrodt 2006)

(13) **Tseltal:** Falling intonation (↓) and (optional) negation.

*Context:* The speaker believes it is as likely to be raining as it is not to be raining.

Ma yakal ja’al ↓

NEG PROG rain

‘It might be raining.’

(Shklovsky, to appear)

(14) **St’át’imcets:** Question morpheme (yes/no marker YNQ) and inferential modal (INFER).

lan=as=há=k’a kwán-ens-as ni=n-s-mets-cál=a already=3.SBJN=YNQ=INFER take-DIR-3.ERG DET.ABS=1SG.POSS-NOM=write-ACT=EXIS

‘I wonder if she’s already got my letter,’ ‘I don’t know if she got my letter or not.’

(Littell et al. 2009)

6. Towards an Account of Daats’í

• DQs are requests that whether p be added to the common ground (Truckenbrodt 2006). The extension of whether p is the same as the extension of a polar question.

(15) \[[\text{whether it is raining}]\] = \{it is raining, it is not raining\}

(Hamblin 1973)

• Unlike polar questions, there is no requirement that the Addressee resolve whether p (11a).
  • Unlike in Littell et al. (2009), Truckenbrodt’s semantics includes no presupposition ‘ that the Addressee cannot answer. This seems correct for daats’í (4b).

• Does daats’í have both a question and modal semantics? Or only a question semantics?

• A puzzle: How do we account for sentences where daats’í only has a modal meaning (3b)?
7. References


Rouchota, V. 1993. Relevance theory and na-interrogatives in Modern Greek. In UCLWPL.


