

# Aspectual composition in the Arabic imperfective

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## In Standard Arabic

- Subjunctive VPs are stative or eventive depending on whether the underlying verb is stative or eventive. That is, the subjunctive is aspectually transparent.
- Indicative VPs are always stative. Eventive VPs must be made progressive or habitual (thus stative) in order to occur in the indicative.

Vendler 1957, Leech 1971, Vlach 1981, Dry 1983, Partee 1984, Löbner 1989, Condoravdi 2002, Kamp and Reyle 1993, Stowell 2007, Altshuler 2016, etc.:

- Eventive predicates occur in a different repertoire of contexts than stative predicates.
- Progressive and habitual predicates pattern together with stative predicates.

\*Mary waters the plants.

Mary knows the answer.

Mary is watering the plants.

Mary waters the plants every weekend.

## Be likely (Condoravdi 2002)

Mary is likely to know the answer.

[simultaneous/epistemic or future shifted/metaphysical]

Mary is likely to water the plants.

[future shifted/metaphysical only]

Mary is likely to be watering her plants.

[simultaneous/epistemic or future shifted/metaphysical]

Mary is likely to water her plants every weekend.

[simultaneous/epistemic or future shifted/metaphysical]

# The Arabic moods

For the imperfective stem *ktub* ‘write’

	<b>Indicative</b>	<b>Subjunctive</b>	<b>Jussive</b>
3MS	jaktubu	jaktuba	jaktub
3FS	taktubu	taktuba	taktub
3MPL	jaktubūna	jaktubū	jaktubū
3FPL	jaktubna	jaktubna	jaktubna
2MS	taktubu	taktuba	taktub
2FS	taktubīna	taktubī	taktubī
2MPL	taktubūna	taktubū	taktubū
2FPL	taktubna	taktubna	taktubna
1S	?aktubu	?aktuba	?aktub
1PL	naktubu	naktuba	naktub

- The indicative occurs in matrix environments, marking the present tense of:
  - stative verbs
  - the progressive or habitual reading of eventive verbs
- The subjunctive and jussive occur in certain dependent environments.
- The main environment for the subjunctive is following the particle *?an* ‘that’ (or ‘to’; Habibi 2009).

munā taʿrifu l-zawāb-a.

Muna know.IND the-answer  
'Muna knows the answer.'

munā tasqī nabātāt-i-hā l-ʔāna.

Maria water.IND plants-ACC-her the-now  
'Maria is watering her plants now.'

munā tasqī nabātāt-i-hā kull-a nihājat-i ʔusbūʔ-in.

Muna water.IND plants-ACC-her every-ACC end-GEN week-GEN  
'Maria waters her plants every weekend.'



min l-muhtamal-i ?an ...  
of the-likely-GEN that/to ...  
‘[be] likely to’

ʔaʕtaqidu      ʔanna min l-muhtamal-i    ʔan yakūna ḏalika  
believe.IND [I] that    of    the-likely-GEN that be.SUB that  
ʕalāmat-an ʕalā stiʕdād-i-himā                      li-t-taʕāwun-i                      fī  
sign-ACC    of    readiness-GEN-their.DUAL to-the-cooperation-GEN in  
zadwal-i    ʔiʕmāl-in    sijāsijj-in.  
agenda-GEN actions-GEN political-GEN  
'I believe that this is likely to be a sign of their readiness to cooperate  
on a political agenda.'

# *be likely* + stative = future-shifted/metaphysical

fī xilāl-i      l-ḡām-i      wa-niṣf-i      l-ḡām-i      ʔaw  
in during-GEN the-year-GEN and-half-GEN the-year-GEN or  
l-ḡām-ajni      l-muqbil-ajni      min l-muḥtamal-i      ʔan jakūna  
the-year-DUAL the-coming-DUAL of the-likely-GEN that be.SUB  
t-taḍaxxum-u      ʔadnā bi-kaθīr-in      min hāḏihi n-nisbat-i  
the-inflation-NOM lower by-much-GEN than this the-rate-GEN  
bi-sabab-i      tarāzuḡ-i      ʔasḡār-i      l-mustawradāt-i.  
by-reason-GEN reduction-GEN prices-GEN the-imports-GEN.  
'During the next year and a half or two years inflation is likely to be  
much lower than this rate because of a decrease in the price of  
imports.'

wa-ʔawḍaha      d-duktūr-u      l-ʔibrāhīm ʔanna-hu min  
and-clarify.PERF the-doctor-NOM alibrahim that-it      of  
l-muḥtamal-i ʔan tunāqiṣa      l-qimmat-u      mawḍūʔ-a  
the-likely-GEN that debate.SUB the-summit-NOM topic-ACC  
ʔiʔādat-i      ʔiʔmār-i      ʔafyānistān.  
redoing-GEN construction-GEN afganistan

‘And Dr. Ibrahim clarified that the summit is likely to debate the issue of the reconstruction of Afghanistan.’

min l-muḥtamal-i ʔan jaqūma l-ʔamīr-u nājif bin  
of the-likely-GEN that undertake.SUB the-prince-NOM nayif bin  
ʕabdu l-ʕazīz bi-zijārat-in qarībat-in li-l-jaman.  
abul aziz in-visit-GEN soon-GEN to-the-yemen  
'Prince Nayif bin Abdulaziz is likely to undertake a visit to Yemen  
soon.'

How do you express the progressive or habitual under *be likely* in Arabic?

Use the indicative verb, supported by a subjunctive copula.

*be likely* + *be.SUB* + *eventive.IND*  
= simultaneous/epistemic

min l-muhtamal-i ʔan jakūna l-ʕāmilūna fī ʕ-ʕarikat-i  
of the-likely-GEN that be.SUB the-workers.NOM in the-company-GEN  
jamurrūna bi-waqt-in ʕaṣīb-in ḥaliġj-an.  
pass.IND in-time-GEN critical-GEN current-ACC  
‘The workers of the company are likely to be going through a critical  
time right now.’

*be likely* + *be.SUB* + *eventive.IND*  
= simultaneous/epistemic

min l-muḥtamal-i ʔan takūna ʔasliḥat-un taṣilu min  
of the-likely-GEN that be.SUB weapons-NOM arrive-IND from  
s-sūdān ʔilā qiṭāf-i ʔazza.  
the-sudan to strip-GEN Gaza  
'Weapons are likely to be arriving from Sudan to the Gaza Strip.'



- In the indicative:
  - a stative verb patterns like a stative verb.
  - an eventive verb patterns like a stative verb (= progressive or habitual).
- In the subjunctive:
  - A stative verb patterns like a stative verb.
  - An eventive verb patterns like an eventive verb.

The subjunctive morphology does not contribute anything to the aspectual profile of the underlying verb

$$\llbracket \text{SUB} \rrbracket = \lambda P . P$$

## What does the indicative morphology do, exactly?

Saying that the indicative stativizes is problematic in two ways:

- stative verbs occur in the indicative. If the indicative maps an eventive verb to stative, why does it apply to stative verbs?
- the stativizing effect is not semantically uniform; it may be either progressive or habitual.

There are two covert stativizing operators

$\llbracket \text{PROG} \rrbracket = \lambda P : P \text{ is eventive} . \lambda s \exists e P(e) \ \& \ s \leq e.$

$\llbracket \text{HAB} \rrbracket = \lambda P : P \text{ is eventive} . \lambda s \exists e P(e) \text{ on a regular basis in } s.$

The indicative morphology simply requires the predicate it applies to be stative. If that predicate is eventive, it must therefore first be stativized by one of the stativizing operators.

$$\llbracket \text{IND} \rrbracket = \lambda P : P \text{ is stative} . P$$

This captures the distribution of the indicative

\*[IND [VP<sub>[+EVENT]</sub> ]]  
[IND [VP<sub>[+STATE]</sub> ]]  
[IND [AspP<sub>[+STATE]</sub> PROG [VP<sub>[+EVENT]</sub> ]]  
[IND [AspP<sub>[+STATE]</sub> HAB [VP<sub>[+EVENT]</sub> ]]

But we still need to restrict the subjunctive to VP

[SUB [VP<sub>[+EVENT]</sub> ]]  
[SUB [VP<sub>[+STATE]</sub> ]]  
\*[SUB [AspP<sub>[+STATE]</sub> PROG [VP<sub>[+EVENT]</sub> ]]  
\*[SUB [AspP<sub>[+STATE]</sub> HAB [VP<sub>[+EVENT]</sub> ]]

- $\llbracket \text{IND} \rrbracket = \lambda P : P \text{ is stative} . P$
- $\llbracket \text{SUB} \rrbracket = \lambda P : \text{CAT}(P) = \text{VP} . P$
- $\llbracket \text{PROG} \rrbracket = \lambda P : P \text{ is eventive} . \lambda s \exists e P(e) \ \& \ s \leq e$
- $\llbracket \text{HAB} \rrbracket = \lambda P : P \text{ is eventive} . \lambda s \text{ s consists in the regular or predictable recurrence of a } P \text{ event}$

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