Arabic grammatical treatment of ʾ*in* conditional systems: traces of an external influence?

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Background

Manuela has published a number of papers on traditional treatment of conditional sentences, for example:

Manuela E. B. Giolfo, 'A modal interpretation of the Arabic apocopate: morpho-syntax and semantics', in *Arab and Arabic Linguistics: Traditional and New Theoretical Approaches*, ed. Giolfo, *Journal of Semitic Studies* Supplement 34 (2014) 119–143.

Manuela E. B. Giolfo, 'Real and irreal conditionals in Arabic Grammar: from al-ʾAstarābāḏī to Sībawayhi', in *The Foundations of Arabic Linguistics II*, ed. Marogy and Versteegh, Brill, Leiden 2015, pp. 100-119.

More recently Manuela and Wilfrid have published joint papers on semantic aspects of traditional Arabic grammar, including one on conditionals:

Manuela E. B. Giolfo and Wilfrid Hodges, 'Conditionality: Syntax and meaning in al-Sīrāfī and Ibn Sīnā', in *The Foundations of Arabic Linguistics IV*, ed. Giolfo and Versteegh, Brill, Leiden 2019, pp. 157–181.

Manuela suggested that the Henry Sweet meeting would be an opportunity to integrate the ideas in these papers. Unfortunately the timing was wrong and they are not yet integrated. But we can lay out some of the main issues.

The major divide

Manuela's papers address a difference between Sībawayhi (8th century) and Zamaḫšarī (c. 1100) about what particles count as 'conditional' (*šarṭī*).

For Sībawayhi a conditional particle must involve uncertainty (*mubham*) and it must put the verb of the consequent clause into the apocopate; the apocopate represents the uncertainty.
Hence *law*, which normally doesn't take the apocopate, is not a conditional particle.

Sībawayhi counts *ʾin* as the major conditional particle, but in his main treatment of *ʾin* he mentions only the construction

(i) *ʾin yaqum yaqum* (i.e. *ʾin* + apocopate + apocopate).

By contrast Zamaḫšarī (in his *Mufaṣṣal* and his *Unmūḏağ*) considered both *ʾin* and *law* as conditional particles, and he mentioned four constructions with *ʾin*.

To (i) above Zamaḫšarī added

(ii) *ʾin qāma yaqum* (i.e. *ʾin* +*māḍī* + apocopate).

(iii) *ʾin yaqum qāma* (i.e. *ʾin* + apocopate + *māḍī*)

(iv) *ʾin qāma qāma* (i.e. *ʾin* + *māḍī* + *māḍī*)

His successors (Ibn al-Ḥāğib, Astarābāḏī, Ibn Yaʿīš) followed and elaborated this new account.

In her papers Manuela suggested the following interpretation of these facts.

- ▶ 'Uncertain' means: could be true and could be false, i.e. contingent.
- ▶ Aristotle uses his words for 'contingent', i.e. *dunatón* and *endekhómenon*, also for 'possible' (i.e. not impossible).
- ▶ Zamaḫšarī switched to regarding the characteristic of *ʾin* as 'not impossible' rather than 'contingent'.
- ▶ Knowledge of Aristotle's double usage could have inspired or encouraged this change.

The question of Greek influence on Arabic linguistics is famously difficult.
There is very little direct evidence.

But Zamaḫšarī with his Muʿtazilite connections was perhaps more open to influence from Greek logic than other more orthodox Muslims.

It is also plausible that in the 11th century any influence from Greek logic would have come from Arabic Peripatetics (al-Fārābī, Ibn Sīnā) rather than direct from Aristotle.

We propose to look closer at the differences between the
Sībawayhi view and the Zamaḫšarī view,
to understand better what influences would have been
relevant to them.

Past and future as modes

Zamaḫšarī in *Mufaṣṣal* iii introduces *ʾin* and *law* with no
direct reference to either uncertainty or possibility.
Instead his first paragraph distinguishes between *ʾin* and
law in terms of their relationship to past and future.
His later commentators dwell on this point.

Thus he says:
wa-law tağʿalu-hu li-l-māḍī wa-ʾin kāna mustaqbalan
ka-qawli-hi taʿālā: wa-law yuṭīʿu-kum fī kaṯīrin min al-ʾamri
la-ʿanittum.
"And you take *law* with the past even if it is future, as in
the Almighty's statement: 'And if [the Prophet] will
follow you in many things, it will hurt you'."

What does he mean by 'you take *law* with the past'?
Syntactically the verbs are both *muḍāriʿ marfūʿ*,
suggesting future reference.
Semantically, the sentence is not only about the past.

Following Astarābāḏī, Manuela (2015) has suggested that
'future' and 'past' should be read here modally rather
than temporally.
The suggestion is that there is a kind of 'past' that consists
in being definitely the case or definitely not the case.

In this sense, taking the Qurʾān verbs as past means
reading the quotation as implying that the Prophet would
never simply follow people's wishes without regard for
their welfare.
Zamaḫšarī's comment implies that we read the verse as
past in this sense, regardless of the form of the verb.
Ibn Yaʿīš says almost exactly this.

Aristotle in *De Interpretatione* ix mentions problems about
future contingents; there is little here to suggest
identifying future with possible.
In classical Greek philosophy the identification was more
often associated with the freelance thinker Diodorus
Cronus, a little later than Aristotle.
Zamaḫšarī had probably never heard of him.

But Zamaḫšarī could have read one of al-Fārābī's
commentaries on the *De Interpretatione*.
He would have read:

"Pairs of contradictory statements about matters of necessity are one true and the other false, intrinsically and specifically. ... By contrast, future matters of possibility—like 'Zayd will go to the market tomorrow' and 'Zayd will not go to the market tomorrow'—are one true and the other false, but not specifically this one true and that one false. For it is not possible that truth should definitely attach to this particular one of them and falsity to this particular other one in such a way as to make it impossible for the true one to be false and the false one to be true."
(tr. based on Zimmermann *Al-Fārābī's Commentary* p. 244f.)

Conditionals and classes of events

There is another difference between Sībawayhi's treatment of conditionals and that in Zamaḫšarī, which relates to logic in a more complicated way.

Zamaḫšarī describes a conditional particle as relating *ǧumlatayni*, i.e. two clauses.
By contrast Sībawayhi, both when he is giving his own views and when he is reporting discussions with al-Ḫalīl, tends to regard a conditional particle as relating *two classes of events*.

Thus al-Ḫalīl contrasts the two sentences
  ▸ I will come to you if the dates turn red.
  ▸ I will come to you when the dates turn red.
Both sentences correlate the events A of the form 'the dates turn red' and B of the form 'I will come to you'.
Both state a temporal connection: the first occurrence of A will be followed by an occurrence of B.
The difference is that the second sentence implies that an event A will occur, whereas the first leaves this 'uncertain' (*mubham*).

With this analysis al-Ḫalīl has opened up rich possibilities for analysing different kinds of conditional, in terms of how the class A is described, what is assumed about it, and so on.
In Giolfo and Hodges (2019) we discussed this in detail, pointing out the resemblance to the Lewis-Kratzer theory of conditionals, according to which the main role of 'If' and 'When' is to allow us to refer to a class of events.

Al-Sīrāfī developed this approach to conditionals, and similar ideas are found (probably independently) in Ibn Sīnā.

But see the effect of Zamaḫšarī's introduction of future and past as modalities.

This approach blocks discussion of the temporal relationships between antecedent and consequent, and hence suggests an abandonment of the Ḫalīl-Sībawayhi analysis.

An obvious question is whether the earlier work was really abandoned, or whether the successors of Zamaḫšarī found some other way of expressing it. We have not yet found time to investigate this.

But it may be relevant to note that Ibn ᶜAqīl (in his *Šarḥ ʾalfiyya*) adds to the conditional forms

> *ʾin qāma yaqūmu*

which suggests an interest in comparing the conditional and temporal aspects.

Returning to possible influences on Zamaḫšarī from Greek philosophy:

If (and we say no more than if) Zamaḫšarī was influenced by al-Fārābī's modal view of past and future, then this caused Zamaḫšarī and his successors to turn away from the kind of analysis of conditionals that we find in al-Fārābī's illustrious successor Ibn Sīnā.

At present we have no information at all about whether Zamaḫšarī etc. were aware of Ibn Sīnā's contributions.