Subjunctive Conjectural Questions in Italian

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1 Introduction

In recent literature, questions have been split into two categories, i.e., 'canonical' questions and 'non-canonical' questions (Dayal 2019, Farkas 2020, 2022); the former are questions conveying a request for information whereby the four conditions in (1) hold (Farkas 2022):

(1) Default assumptions accompanying question acts:
   a. Speaker ignorance: The speaker's epistemic state is neutral relative to the possible resolutions of the issue she raises.
   b. Addressee competence: The speaker assumes that the addressee knows the information that settles the issue she raises.
   c. Addressee compliance: The speaker assumes that the addressee will provide this information in the immediate future of the conversation as a result of the speaker's speech act.
   d. Issue resolution goal: It is assumed that the main aim the speaker pursues when raising an issue is to have it resolved in the immediate future of the conversation.

Non-canonical questions are defined as interrogative acts where one or more of the above assumptions are not met (Farkas 2020, 2022). Among non-canonical questions, 'conjectural' questions (as dubbed in Eckardt, Beltrama 2019, Eckardt 2020) are defined as questions that "ask for answers that are defeasibly entailed by the pooled knowledge of speaker and addressee" (Eckardt 2020). Pragmatically, a conjectural question triggers the interlocutors to engage in speculative discourse, or it "is understood as a statement of curiosity that doesn't require a response" (ibid.).

The goal of this paper is to analyze the properties of specific type of conjectural questions in Italian, subjunctive conjectural questions (henceforth, SQ), which have not been previously discussed in the literature on non-canonical interrogatives:

(2) Che stia piovendo?
   That AUX-SUBJ.3S raining
   'Is it raining, I wonder?'

To do so I leverage the comparison with another type of conjectural questions in Italian that has been object of an extensive inquiry in recent years, namely 'presumptive' future questions (henceforth, FQs; see Ippolito, Farkas 2022; see also Frana, Menéndez-Benito 2023, who labelled the future in these questions 'evidential' or 'non-predictive', and Mari 2023, who dubs the future in these questions 'epistemic'), illustrated in (3):

(3) Starà piovendo?
   AUX-FUT-3S raining
   'Is it raining, I wonder?'

I first discuss how SQs and FQs behave w.r.t. relevant pragmatic parameters, showing that despite significant similarities, they differ in important respects. I then propose that SQs encode a doxastic modal base, while resorting to Giannakidou, Mari's (2023) proposal that FQs encode a modal base, Ideal$_s$, which includes words where common ground norms, subjective preferences, and convictions, expectations are met. I claim that this semantic split accounts very naturally for the empirical findings.

2 SQs and FQs: the data

4.1 SQs and FQs: similarities

SQs and FQs can both be considered as non-canonical questions in that uttering (2) and (3) is intuitively felicitous in contexts in which the speaker assumes that the addressee is not knowledgeable about the issue under discussion and that this issue cannot be settled. They both contrast with canonical questions such as (4), which satisfy the assumptions in (1).

(4) Sta piovendo?
AUX-PRES.3S raining
'Is it raining?'

Both SQs and FQs can be employed as self-addressed questions (Farkas 2020), that is, question acts where the speaker is assumed to be the responder. Moreover, they are typically uttered to invite speculation rather than to set an issue (which in fact can remain unsettled). Because of this, in scenarios where the addressee is assumed to have direct evidence to resolve the issue, neither SQs and FQs are acceptable:

(5) DIRECT EVIDENCE CONTEXT: Chiara is in front of the window. Anna sees that Chiara is in front of the window and asks her:

a. # Starà nevicando?
AUX-FUT-3S snowing
'Is it snowing, I wonder?'

b. # Che stia nevicando?
That AUX-SUBJ.3S snowing
'Is it snowing, I wonder?'

Similarly, when the issue under discussion involves the addressee's self-knowledge (Burge 1988, 1996, 2007 a.m.o.), uttering an FQ or an SQ is infelicitous:

(6) SELF-KNOWLEDGE CONTEXT

a. # Avrai fame?
Have-FUT-2S hunger
'Are you hungry, I wonder.'

b. # Che tu abbia fame?
That you have.SUBJ.2S hunger
'Are you hungry, I wonder.'

FQs and SQs are both infelicitous in 'quiz' scenarios and when stated as rhetorical questions (see Ippolito, Farkas 2022):

(7) TEST CONTEXT: Teacher to pupil:

a. # La capitale della Francia sarà Parigi?
The capital of France be.FUT-3S Paris
'Is the capital of France Paris, I wonder'

a. # La capitale della Francia, che sia Parigi?
The capital of France, that be.SUBJ.3S Paris
'Is the capital of France Paris, I wonder'

(8) RHETORICAL QUESTION: Carla and Livia are roommates; Carla asks Livia to make her a sandwich. Livia says to Carla:

a. # Sarò forse tua madre?
be.FUT-1S perhaps your mother
'Am I your mother?'

b. # Che io sia forse tua madre?
That I be.SUBJ.1S perhaps your mother
'Am I your mother?'

Finally, it can be noticed that in answering questions like (3) or (4), the addressee cannot simply utter 'yes' or 'no' without further elaboration:

(9) a. Starà / Che stia piovendo?
AUX-FUT-3S / That AUX-SUBJ.3S raining
'Is it raining, I wonder?'

b'. # Sì/No
'Yes, she did/No, she didn't'

b". Penso di sì/Non penso/Possibile/Forse sì
'I think so/I don't think so/Possible/Maybe'

Thus, in answering an FQ or an SQ, the addressee cannot simply commit herself to the truth or falsity of the prejacent (see (9)b'), unlike when answering a canonical question; an epistemic, doxastic, or evidential component must be expressed in answering both FQs and SQs (see (9)b").

To draw a provisional conclusion, intuitively both FQs and SQs express – to put it informally – the 'best guess' about an issue: in uttering both (2) and (3) the speaker assumes that the issue cannot be settled and because of this in scenarios where the speaker assumes that the addressee is knowledgeable ((5)-(8)), FQs and SQs are infelicitous.

Despite these similarities, FQs and SQs differ in a number of important respects, as is shown in the next section.

4.2 SQs and FQs: differences

Ippolito, Farkas (2022) discuss examples of FQs with respect to the so-called 'written communication' scenario; they show that FQs are felicitous in this context (see ex. (10)a). Unlike FQs, it can be shown that SQs are not felicitous in this same context (see (10)b; The status of sentence (10) – as well as the one of sentence (11) below – reflects the introspective judgments of fifteen Italian native speakers; although some variability in the judgment is present, the overall tendency is clear):

(10) CONTEXT: Chiara is writing a letter to a friend who lives far away and whom she hasn't seen for a long time. She writes:

a. Soffrirai ancora di quei fastidiosi mal di testa?
suffer-FUT-2S still of those annoying headaches
'Will you still suffer from those annoying headaches, I wonder.'

b. # Che tu soffra ancora di quei fastidiosi mal di testa?
That you suffer-SUBJ.2S still of those annoying headaches

In the context described in (10), the speaker must assume that the addressee is knowledgeable about the issue under discussion (which is an object of introspective knowledge); thus, assumptions (1)a and b above are met. However, the resolution of the issue must be postponed due to the time that elapses between the writing of the letter and the reception of the reply, and conditions (1)c and d are not satisfied. Interestingly, the FQ appears to be felicitous, while the SQ is infelicitous. Thus, FQs, though not SQs, are acceptable in scenarios where the 'Addressee competence' condition ((1)b) is met, as long as the 'Addressee compliance' ((1)c) and the 'Issue resolution goal' conditions ((1)d) are suspended.

Moreover, it can be notices that in a the so-called 'evidence-neutral context' (Frana, Menéndez-Benito 2023), i.e., a scenario where the addressee cannot provide "an informed hypothesis", but "at best put forward a conjecture"), FQs are acceptable, while SQs are not:

(11) CONTEXT: The speaker's husband is away at war. Nobody has heard from him in months. She knows that the addressee cannot possibly have any information about his whereabouts. However, seeking comfort, she asks:

a. Sarà sano e salvo?
be.FUT-3S safe and sound
'Is he safe and sound, I wonder?'

b. # Che sia sano e salvo?
That be.SUBJ.3S safe and sound
'Is he safe and sound, I wonder?'

In this context, the 'Addressee competence' condition ((1)b) must be suspended, as there is no way the speaker can assume that the addressee is knowledgeable about the issue under discussion. Yet, again, contrary to expectations, only the FQ is felicitous.

Furthermore, it can also be noticed that SQs and FQs differ with respect to their syntactic properties. SQs can only be polar questions (see examples above); FQs can be both polar (see examples so far) or *wh*-questions:

(12) a. Dove sarà andata?
Where AUX.FUT-3S gone
'Where has she gone, I wonder.'

b. * Dove che sia andata?
Where that AUX.SUBJ.3S gone

Finally, one can also remark that the presumptive future can occur in declaratives; subjunctive declaratives are instead agrammatical:

(13) a. Starà piovendo.
AUX-FUT-3S raining
'It is raining, perhaps.'

b. * Che stia piovendo.
That AUX-SUBJ.3S raining

3 Analysis

A theory capturing the facts discussed so far should address the following points:

(i) SQs and FQs behave similarly in some respects: they are both non canonical questions; they are infelicitous in scenarios where the speaker can assume that the conditions in (1) are all satisfied (see exx. (5)-(8)); they are felicitous in contexts where it is assumed that the issue under discussion cannot to be settled in the immediate future;

(ii) SQs and FQs behave differently in some other respects:
   (a) FQs but not SQs are acceptable in contexts where the 'Addressee competence' condition is satisfied, but the issue under discussion cannot be solved in the immediate future (see exx. in (10));
   (b) FQs but not SQs are felicitous to express a pure conjecture (see exx. in (11)).

Generalizations (i) and (ii) are summarized in the following table:

				SQ	FQ	Exx.
Addressee competence	+	Addressee compliance	+	#	#	(5)-(8)
			–	#	ok	(10)
	–	'Neutral evidence'	+	#	ok	(11)
			–	ok	ok	(3), (2)

(iii) The following syntactic facts should be accounted for, too:

	SQ	FQ	Exx.
Y/N answer	–	–	(9)
wh- interrogatives	–	+	(12)
Main clause	–	+	(13)

To implement the analysis I first capitalize on previous work by Giannakidou and Mari (2018a, b, 2021, 2023) and Mari (2023, 2024) on FQs. Giannakidou, Mari (2023) and Mari (2023, 2024) derive the pragmatic properties of FQs ((i) and (ii)) from the semantics of 'epistemic future' (for different approaches to the nontemporal future, see Frana, Menéndez-Benito 2023, Ippolito, Farkas 2019, 2022); in their view the epistemic future encodes an epistemic modal base, M(*i*), i.e., a set of worlds associated with an epistemic individual anchor *i* including worlds that are compatible with what *i* believes in the context of utterance; M(*i*) is non veridical: it conveys epistemic uncertainty and is partitioned into *p* and ¬*p* worlds. In their view the epistemic future encodes a secondary modal base, 'Ideal$_S$', which includes the worlds in M(*i*) in which all the propositions in $\boldsymbol{S}$ are true, where $\boldsymbol{S}$ is a set of propositions that correspond to common ground norms, expectations, convictions, or subjective preferences, etc. This provides the following semantics for epistemic future (adapted from Mari 2023, 2024):

(14) $[\![\text{FUT (PRES } (p))]\!]^{M,i,s,t}$ is defined only if (i) M(i) is nonveridical, (ii) M(i) is partitioned into Ideal_s and $\neg\text{Ideal}_s$ worlds and (iii) i has potentially no clues;
If defined, $[\![\text{FUT (PRES } (p))]\!]^{M,i,s,t} = 1$ iff $\forall w' \in \text{Ideal}_s : p(w',t)$

To paraphrase, by uttering an epistemic future assertive sentence (like (13)a), the speaker commits to a set of propositions that correspond to her norms, expectations, etc. Turning to FQs, based on (14), the following Hamblin-style interpretation can be assumed (see Mari 2023):

(15) $\{\{\forall w' \in \text{Ideal}_s : p(w',t)\}, \{\neg\forall w' \in \text{Ideal}_s : p(w',t)\}\}$

To paraphrase, an FQ (i) expresses the speaker's unsettlement as to whether p is the case or not, and (ii) targets the addressee's norms, expectations, etc.; by doing so, it expresses the speaker's assumption that the addressee is not knowledgeable as to whether p is the case or not.

The different behavior of FQs and SQs does not allow for a straightforward extension of the semantics proposed for FQs to SQs. Specifically, I suggest that these questions are in fact embedded clauses introduced by a covert doxastic attitude predicate, as in (16) (for simplicity's sake, I will label this predicate as THINK, without committing myself to any specific lexical option; see, however, Simons 2007 for 'to think' as an epistemic/doxastic marker):

(16) [Q [THINK [$_{CP}$ *che* [$_{IP}$ *stia piovendo*]]]] (= ex. (2))

I claim that this hypothesis accounts for the syntactic properties of SQs:

- The presence of the complementizer *che* and of the verb in the subjunctive mood follows straightforwardly, as doxastic predicates select for subjunctive clauses in Italian, whose complementizer is *che*.
- The epistemic/doxastic/evidential component that is needed in answering an SQ (see (9)) is also expected, as the question includes such a component.
- SQs can only be polar qua argument clauses of a (covert) doxastic attitude predicate, and not indirect questions.
- SQs lack a declarative counterpart because illocutionary force is associated with main clauses (but see Krifka 2014), which SQs are not, according to the hypothesis explored here.

We argue that the pragmatic properties illustrated above are also accounted for. Predicates expressing a belief encode a nonveridical doxastic modal base, as shown in (17) (adapted from Mari 2016, Giannakidou, Mari 2021).

(17) $[\![i \text{ think } p]\!]^{M,Dox,i,t}$ is defined iff M(i) is nonveridical (partitioned epistemic modal base);
If defined, $[\![i \text{ think } p]\!]^{M,Dox,i,t} = 1$ iff $\forall w' \in \text{DOX}_{i,w,t,c} : p(w',t)$

The denotation of an SQ can be represented as follows, assuming a Hamblin semantics for questions:

(18) $\{\{\forall w' \in \text{DOX}_{i,w,t,c} : p(w',t_i)\}, \{\neg\forall w' \in \text{DOX}_{i,w,t,c} : p(w',t_i)\}\}$

Since in interrogatives the epistemic anchor is the addressee, SQs cannot be uttered in contexts where the speaker assumes that the addressee is knowledgeable (exx. (5)-(8), (10)) and in contexts where the speaker assumes that the addressee cannot formulate an 'informed hypothesis' (see (11)), because the doxastic modal base includes the worlds compatible with what the epistemic anchor knows in the context of utterance, so conjectures independent from any kind of evidence cannot be encoded through and SQ.

4 Discussion and further refinements

The hypothesis that SQs involve a covert doxastic predicate allows one to formulate some predictions. First, it predicts that only languages where this type of predicate selects for a subjunctive clause can have SQs. Among Romance languages, in Spanish, Catalan, and French,

doxastic predicates do not select for a subjunctive clause, and if the hypothesis is correct, SQs should not be there. This prediction appears to be correct. Spanish, Catalan, and French native speakers questioned in this regard confirmed that SQs are not available in their language (see also Dendale 2010 for French). Notice that in Portuguese, where doxastic predicates can select for a subjunctive argument clause depending on how strong the commitment to the embedded propositional content is (see Marques 2016), SQs are possible, although only as echo questions. This does not invalidate the stated hypothesis, according to which in languages where doxastic predicates select for the indicative SQs are unavailable; the hypothesis does not state that in languages where doxastic predicates select for the subjunctive SQs must be available.

The proposal discussed here also predicts that if SQs encode a covert doxastic predicate, they should share some properties with sentences having an overt doxastic predicate embedding a subjunctive clause. One such property is obviation (and obviation weakening), that is, the unavailability of coreferential reading of matrix and embedded subjects of a subjunctive argument clause (see (19)) (and the amelioration of coreferentiality of matrix and embedded subjects, under specific conditions like, for instance, the presence of a subjunctive modal verb; see (20) as opposed to (19)) (for an overview of cases triggering amelioration, see Ruwet 1991 a.m.o.).

(19) * Penso che io parta domani.
Think-1S that I leave-SUBJ.1S tomorrow

(20) Penso che io possa partire domani.
Think-1S that I can-SUBJ.1S leave-INF tomorrow
'I think I can leave tomorrow.'

SQs appear to behave in line with the basic data on obviation in (19) and (20): (21), where the main verb bears subjunctive morphology (as the embedded verb in (19)) is obviative, while (22), where a modal verb bears subjunctive morphology (as the embedded verb in (20)) displays amelioration.

(21) * Che io parta?
That I leave-SUBJ.1S

(22) Che io possa partire?
That I can-SUBJ.1S leave-INF
'Can I leave tomorrow, I wonder.'

This is expected under the hypothesis proposed here. Notice, however, that the fact that the embedded subject in examples (21), (22) is the first person requires a refinement of the hypothesis w.r.t. the epistemic anchor in SQs: these examples suggest that the epistemic anchor must include the speaker. This integration is fully consistent with independent facts discussed in Farkas (2022), who claims that the anchor in conjectural questions is the group of participants in the conversation.

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