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# Embedded Speech Acts

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## 1. Illocutionary Force and Truth Conditions: The Classical View

The structure of speech acts (cf. Stenius (1967), Searle (1969)):

(1) Speech Act: Sentence Mood ( Sentence Radical)
Illocutionary Force Indicator (Truth-Conditional or Referential Expression)

(2) a. Al made pasta.
ASSERT[ Al made pasta] ASSERT({i | Al made pasta in i})
b. Make pasta!
COMM[ (you) make pasta ] COMM({i | Adressee makes pasta in i})
d. Who made pasta?
QUEST[ who made pasta] QUEST({{i | x made pasta in i} | x is a person})
e. Did Al make pasta?
QUEST[ Al made pasta ] QUEST({{i|Al made pasta in i}, ¬ {i|Al mad pasta in i}})

- The truth-conditional expression ("sentence radical") is a proposition or another truth-conditional or perhaps a referring expression (Searle: *Hurrah for Manchester United*).
- The Illocutionary Force Indicator ("sentence mood marker") specifies what is done with the truth-conditional expression in a communicative game.

Recursiveness of truth-conditional expressions

For truth-conditional expressions, compositional rules have been discovered that specify:

- how truth and referential conditions of complex expressions can be computed recursively,
- based on the truth and referential conditions of the immediate syntactic parts, given the truth and referential conditions of basic expressions and given certain principles of type adjustment, raising, coercion, and world knowledge.

The underlying algebraic structure is essentially **Boolean** (conjunction, disjunction, negation as basic operations, lifted from truth values to other domains – cf. Keenan and Faltz (1985)), plus a few other operations, like sum formation.

What about Speech Acts?

Illocutionary force indicators lead to (speech) acts. Acts (not to be confused with act *descriptions*) are not based on truth values, hence cannot take part in the Boolean recursion:

> Lewis (1970): (…) the entire apparatus of referential semantics pertains to sentence radicals and constituents thereof. The semantics of of mood is something entirely different. It consists of rules of language use such as (…): React to a sentence representing the mood *imperative* with an S-meaning *m* (…) by acting in such a way as to make *m* true (…)

If there is no other type of recursion than the Boolean one, then illocutionary force indicators are always peripheral, and speech acts never occur embedded in other expressions.

Goal of the talk

Show that there are limited operations on the level of speech acts. Recursive semantics does not stop at the level of the sentence radical.

# 2. Embedded Question Acts: A Case Study

Krifka (2001b): quantification into question speech acts (and others) is possible.

## 2.1 The Pair-List Reading of Quantifiers in Questions

(3) Which dish did every guest make?
   a. (Every guest made) pasta. (**narrow scope**)
   b. (Every guest made) his favorite dish. (**functional**)
   c. Al (made) the pasta; Bill, the salad; and Carl, the pudding. (**pair-list**)

No pair-list reading with non-universal quantifiers:

(4) Which dish did most/several/a few/no guests make?
   a. Pasta.
   b. Their favorite dish.
   c. #Al, the pasta, and Bill, the salad.

(5) Which dish did nearly every guest make?
   a. Pasta.
   b. His favorite dish.
   c. #Al, the pasta; Bill, the salad; … and Xavier, the pumpkin soup.

For previous discussion of pair-list readings and their problems, e.g. Karttunen (1977), Groenendijk & Stokhof (1984), Chierchia (1993) see Krifka (2001b).

## 2.2 Pair-List Readings as Conjoined Question Acts

### 2.2.1 Pair-List Questions as Conjoined Questions

(6) Which dish did every guest make?

(7) Which dish did Al make, which dish did Bill make, and which dish did Carl make?

The pragmatic effect is the same. The quantifier induces a conjoined question.

Criticism of this view: Ginzburg and Sag (1999).

(8) A: I've got a question to ask you.
   B: Shoot.
   A: Who is responsible for the fiasco and what will be their fate?
   B: That's two questions, not one.

(9) A: There is quite a big intake of graduate students this year. About ten, I think. I do have a question about them: Who did each student meet this afternoon?
   B: #That's ten questions, not one.

But this only shows that the syntactic form of a question is relevant when counting questions.

### 2.2.2 Disjoined questions?

(10) Which dish did Al make or which dish did Bill make?

Szabolcsi (1997) judges this ungrammatical, except in interpretation *or rather, …*:

(11) Which dish did Al make? Or (rather), which dish did Bill make?

Belnap and Steel (1976) mention the following example:

(12) Have you ever been to Sweden or have you ever been to Germany?

Presumably interpreted as *Have you ever been to /Sweden or to /Germany*? A congruent answer is *yes* or *no*, answers like *I have been to Germany* are over-informative.

(13) a. QUEST [ you have been to Sweden or you have been to Germany ],
polarity question form distributes down to individual disjuncts.
b. QUEST ( BEEN-TO-SWEDEN(YOU) BEEN-TO-GERMANY(YOU) )

2.2.3 Restriction for Quantifiers in Questions Explained

**Universal quantifiers** are **generalized conjunctions** (cf. Keenan and Faltz (1985)):

(14) a. Every guest came. ⇔ Al came **and** Bill came **and** Carl came.
b. A guest came. ⇔ Al came **or** Bill came **or** Carl came.
c. No guest came. ⇔ **Not**: Al came **or** Bill came **or** Carl came.
d. Most guests came. ⇔ Al came and Bill came, **or**
Al came and Carl came, **or**
Bill came and Carl came.

We find robust pair-list interpretations only with universal quantifiers.

(15) Which dish did every guest make?
⇔ For every guest x: Which dish did x make?
⇔ Which dish did Al make, which dish did Bill make, and which dish did Carl make?

(16) #Which dish did most guests make?
⇔ For most guests x: Which dish did x make?
⇔ Which dish did Al make and which dish did Bill make, **or**
which dish did Al make and which dish did Carl make, **or**
which dish did Bill make and which dish did Carl make?

Assume & to be the operation of speech act conjunction.

(17) a. Which dish did Al make and which dish did Billmake?
QUEST(

2.2.4 Distributive quantification

(18) Which dish did the guests make?

This has a pair-list reading similar to *Which dish did every guest make?* Presumably by distributive quantification, which implies universal quantification.

(19) a. The guests (each) brought a dish.
The guests DIST [brought a dish]
$x \leq_a$ THE GUESTS [ y[DISH(y) BROUGHT(y)(x) ]
b. Which dish did the guests make?
The guests DIST λ1 [QUEST [ which dish did $x_1$ make]]
$x \leq_a$ THE GUESTS [ QUEST (

2.2.5 Choice readings

Groenendijk and Stokhof (1984): choice readings:

(20) a. Which dish did Al or Bill make?
b. Which dish did two of the guests make?

Presumably two independent acts: (a): (i) Pick out x = Al or x = Bill. (ii) Answer question: Which dish did x make? (b): (i) Pick out two guests x. (ii) Answer question: Which dish did everyone of x make?

Two independent acts: (i) Pick out two guests, (ii) answer for every one of these guests.

(21) a. Here is a list of 20 African countries.
Choose at least 11 of them and write down their capitals.
b. Here is a list of 20 African countries. *Which capital do most of them have?

Ginzburg & Sag (1999):

(22) A: Most people here have submitted a paper to a journal.
B: Which journal?
A: Alexis to *Psychic Review*, Pat to *Post-Modern Letters*, …

But (B) does not have to be spelled out as *Which journal have most people submitted a paper to* – rather, the first sentence makes available a discourse referent for the people that have submitted a paper to a journal (cf. *Most people wanted to see the soccer match. They therefore turned on their TVs*). (B) spells out as: *Which journal have these people submitted a paper to?*

### 2.3 Some Residual Questions

Why do speech acts conjoin?

Speech acts are moves in conversational games (Wittgenstein (1958)), leading from one set of social commitments to another (e.g., commitments may be added, as with questions and commands, or removed, as when a question is answered or a command is carried out). They are **commitment change potentials**. (Cf. Merin (1994) for an automata-theoretic reconstruction of claims, concessions, denials, retractions).

Let s be a state that characterizes social commitments, let A stand for acts. Then:

(23) $A(s) = s'$, if A is appropriate for s; else A(s) is undefined.

Conjunction of speech acts:

(24) $[A \,\&\, A'](s) = A'(A(s))$

Cf. treatment of conjunction in dynamic semantics, e.g. Heim (1982).

Interpretation: If A changes the commitments of a discourse state and A′ changes the commitments of a discourse state, then [A & A′] is the combination of the changes of the commitments induced by A and by A′.

Sometimes there are **initiating** and **responding** acts (e.g., question-answer, command-act that carries out the command). Initiating acts lead to non-neutral conversational states that expect a certain type of speech act:

(25) $A(Q(s)) = Q(s') = s''$,
where Q is appropriate for s, and A is appropriate for s′.

Conjunction for initiating and responding acts:

(26) If A(Q(s)) is an appropriate conversational move,
and if A′(Q′(s′)) is an appropriate conversational move, where s′ = A(Q(s)),
then [A & A′]([Q & Q′](s)) is an appropriate conversational move;
it is equivalent to A′(Q′(s′)), i.e. A′(Q′(A(Q(s)))).

(27) a. A: Which dish did Al make?
B: The pasta.
A: Which dish did Bill make?
B: The salad.

b. A: Which dish did Al make?
And which dish did Bill make?
B: Al (made) the pasta, and Bill the salad.

Why don't speech acts disjoin?

Commitment states: Sets of commitments, interpreted conjunctively.

(28) [A&A′](s) = A(s) A(s′) (union of commitments)

Speech act disjunction would lead to disjunctive sets of commitments (sets of sets of sets…):

(29) a. [A A′](s) = {A(s), A′(s)}, = S
b. [A″ A‴](S) = {{A″(A(s)), A‴(A(s))}, {{A″(A′(s)), A‴(A′(s))}}, = 𝕊, etc.

Lack of disjunction: Acts do not form a Boolean algebra. (There is no negation either).

Why "Conjunction"?

We call the speech act conjunction "&" **conjunction** because we can express it by *and.* But why is this so?

When we **describe** conjoined speech acts, which yields truth-functional expressions, we use Boolean conjunction:

(30) a. A, to B: Which dish did Al make? And, which dish did Bill make?
b. A asked B which dish Al made, and A asked B which dish Bill made.

The same holds true for the use of universal quantifiers.

(31) a. A: Which dish did every guest make?
b. For every guest x, A asked which dish x made.

We can use *and* and *every* N to conjoin the **execution** of speech acts because we can use *and* and *every* to **describe** the conjoined execution of such speech acts. In general, expressions that relate to the type of speech act or to properties of its execution are the same as expressions that describe such speech acts:

♦ Performative speech acts (Bierwisch (1980):

(32) a. A: I baptize you *John.*
b: A baptized him *John.*

♦ Speech act adverbials:

(33) a. A, to B: Quite frankly, John is unable to do the job.
b. A told B quite frankly that John is unable to do the job.

The Performative Hypothesis all over again?

Performative hypothesis, cf. Katz and Postal (1964), Ross (1970), Lewis (1970):

(34) a. A, to B: Is it raining?
b. Deep Structure: [A asked B [whether it is raining]].

Problems:

- Every speech act is reduced to a declarative that is true by default. The intended point of a speech act comes about as a side effect only (cf. Lewis (1970)).
- No explanation why disjunction and quantifiers involving disjunction are out.

Current proposal:

- Speech acts are acts, not descriptions of acts.
- But the language resources can be shared: similar expressions for description and execution.

Notice that not every expression can have such shared uses:

(35) a. John insulted Mary.
b. *I hereby insult you.
c. Alas, I have to leave.
d. *He mentioned that alas, he had to leave.

### 2.4 Quantification into Other Speech Acts?

(36) a. Confiscate every bottle of alcohol you can find!
b. #Confiscate most bottles of alcohol you can find!
(37) a. I hereby baptize everyone of you John. (quick mass baptism)
b. #I hereby baptize most of you John.
(38) a. Everyone of you should go to hell!
b. #Most of you should go to hell!

## 3. Embedded Questions

### 3.1 Basic observations

Different types of question-embedding verbs, cf. Karttunen (1977):

(39) a. Doris knows / found out / remembered which dish Al made.
b. Doris knows / found out / remembered that Al made pasta.

(40) a. Doris wondered / asked / investigated / is interested in which dish Al made.
b. *Doris wondered / asked / investigated / is interested in that Al made pasta.

Quantification into embedded questions (cf. Szabolcsi (1993, Szabolcsi (1997), Moltmann and Szabolcsi (1994)):

(41) a. Doris knows / found out / remembered which dish every guest made.
‘For every guest x, Doris knows / found out / remembered which dish x made.’
b. Doris know / found out / remembered which dish most (of the) guests made.
‘For most guests x, Doris knows / found out / remembered which dish x made.’

(42) a. Doris wondered / asked / investigated / is interested in which dish every guest made.
‘For every guest x, Doris wondered / asked / investigated / ... which dish x made.’
b. Doris wondered / asked / investigated / ... which dish most (of the) guests made.
*****‘For most guests x, Doris wondered / asked / investigated … which dish x made.’

(43) a. Some librarian or other found out which book every student needs.
‘For every student x there is a librarian who found out which book x needs.
b. Some librarian or other found out that every student needs help.
*‘For every student x there is a librarian who found out that x needs help.’

(44) Some librarian or other wondered which book every student needs.
*****‘For every student x there is some librarian who wondered which book x needs.’

## 3.2 *Wonder*-Type Verbs

Krifka (2001b): "Intensional" question-embedding verbs embed question acts.

(45) Doris wondered which dish Al made.
WONDERED($i_0$)(QUEST(λp x[DISH(x) p = MADE(x)(AL)]))(DORIS)

This is an assertion that is true iff Doris is interested in the true answers if the speech act *Which dish did Al make?* were uttered.

Apparent wide-scope quantification into this assertion (cf. (42.a)) is just quantification into the embedded speech act:

(46) Doris wondered which dish every guest made.
WONDERED($i_0$)(EVERY GUEST(y)(QUEST(λp x[DISH(x) p = MADE(x)(y)]))(DORIS)
'Doris is interested in the true answers if the speech act *Which dish did every guest make?* were uttered.'

This explains why non-universal quantifiers are barred (cf. (42.b)): They are not defined for the embedded speech act and cannot scope out of it either.

This also explains why there is no scope interaction with scope bearers in the main clause (cf. (cf. (44): The universal quantifier is not moved out of the embedded clause in the first place.

The *Wonder*-Type and Root Clause Phenomena

The idea that *wonder*-type verbs embed speech acts is supported by the fact that we find certain root clause phenomena with the embedded questions.

♦ German: Distribution of particle *denn.*

(47) a. Welches Gericht hat denn Al gemacht?
'Which dish did DENN Al make?'
b. Al hat *denn Pasta gemacht. (o.k. in another reading of *denn*)

(48) a. Doris fragt sich / will wissen / wundert sich, welches Gericht denn Al gemacht hat.
'Doris asks herself / wants to know / wonders which dish DENN Al made.'
b. Doris weiß / fand heraus / teilte uns mit, welches Gericht *denn Al gemacht hat.
'Doris knows / found out / told us, which dish DENN Al made.'

♦ English: V2 in embedded questions (cf. McCloskey (1999)):

(49) a. What should we do?
b. *What we should do?

(50) a. I wonder what should we do. / I wonder what we should do.
b. *I found out what should we do. / *I found out what we should do.

♦ German: V2 in embedded questions, especially when preposed.

(51) a. Welches Gericht hat Al gemacht?
b. *Welches Gericht Al gemacht hat?

(52) a. Welches Gericht hat Al gemacht, will Doris wissen / fragt Doris sich.
b. *Welches Gericht hat Al gemacht, weiß Doris / fand Doris heraus / teilte Doris mit.
c. Welches Gericht Al gemacht hat, weiß Doris / fand Doris heraus / teilte Doris mit.

V2 order is not direct speech:

(53) a. Welches Gericht soll $sie_1$ machen, fragt sich $Doris_1$.
b. "Welches Gericht soll ich machen?", fragt sich Doris.

♦ Spanish: Complementizer *que*, cf. Suñer (1991, Suñer (1993):

(54) a. Sue preguntó / se preguntó **que** cuántas charlas planeaban los estudiantes.
'Sue asked / wondered how many talks the students were planning.'
b. Sue sabía / nos dijo / explicó cuántas charlas planeaban los estudiantes.
'Sue knew / told us / explained how many talks the students were planning.'

Verbs of communication like *decir* 'say', *repetir* 'repeat' and manner of speech like *susurrir* 'whisper', *tartamudear* 'stutter' allow for *que* as an option.

Generalization (Plann (1982)): Only those verbs that allow for the introduction of direct speech allow for *que*.

(55) Sue preguntó / dijó / tartamudeó / *explicó / *sabía: "¿Quien vá al partido?"
Sue asked / said / stuttered / *explained / *knew: "Who is coming to the game?"

Direct speech are root clauses, hence *que* marks embedded root clauses. That *que* is obligatory with *preguntó / se preguntó* can be seen as evidence that it embeds a root question, hence presumably a question act.

Conclusion: Root clause phenomena indicate presence of separate speech act with *wonder*-type verbs.

### 3.3 *Know*-Type Verbs

Krifka (2001b): "Extensional" question-embedding verbs coerce the embedded question act into the sum of its true answers (cf. Lahiri 2000 for proposition sums).

(56) Doris knows which dish Al made.
$\text{KNOW}(i_0)(\text{TrAnsw}(\text{QUEST}(\lambda p\ x[\text{DISH}(x) \wedge p = \text{MADE}(x)(\text{AL})])))(\text{DORIS})$

The sum of the true answers to a question act is itself a proposition, a Boolean category; hence non-universal quantifiers can scope out of it:

(57) Doris knows which dish most guests made.
$\text{KNOW}(i_0)(\text{MOST GUESTS}(y)(\text{TrAnsw}(\text{QUEST}(\lambda p\ x[\text{DISH}(x) \wedge p = \text{MADE}(x)(\text{AL})]))))(\text{DORIS})$

Problem: This analysis does not predict lack of root phenomena with *know*-type verbs

Alternative Analysis

Questions embedded by *know*-type verbs aren't speech acts, but sentence radicals, cf. Krifka (1999). Pure sentence radicals do not show root clause behavior.

(58) a. Doris wondered which dish Al made.
$\text{WONDERED}(i_0)(\text{QUEST}(\lambda p\ x[\text{DISH}(x) \wedge p = \text{MADE}(x)(\text{AL})]))(\text{DORIS})$
b. Doris knows which dish Al made.
$\text{KNOW}(i_0)(\lambda p\ x[\text{DISH}(x) \wedge p = \text{MADE}(x)(\text{AL})])$

Where we have to assume a rule reducing question-radical embedding *know* to proposition-embedding *know*, like the following for the exhaustive interpretation:

(59) $\text{KNOW}^{Q}_{i}(P)(y) \Leftrightarrow \forall p\ P[\text{KNOW}_i(p)(y)]$
(y knows a proposition set P iff P knows every proposition p in P)

Quantifiers and *know*-type verbs

Moltmann & Szabolcsi (1994): Layered quantifier interpretation of questions.

Layered quantifiers within NP:

(60) a. Some host or other knows [every guest's mother].
b. every guest: $\lambda P \; \exists x[\text{GUEST}(x) \rightarrow P(x)]$
c. mother: $\lambda x[\text{MOTHER}(x)]$
d. type clash requires type lifting:
$\lambda P \; \exists x[\text{GUEST}(x) \rightarrow P(x)]$ to $\lambda f \lambda P \; \exists x[\text{GUEST}(x) \rightarrow P(f(x))]$
e. every guest's mother: $\lambda P \; \exists x[\text{GUEST}(x) \rightarrow P(\text{MOTHER}(x))]$
f. every guest's mother $\lambda 1$[some host knows $t_1$]:
$\lambda P \; \exists x[\text{GUEST}(x) \rightarrow P(\text{MOTHER}(x))](\lambda x \; \exists y[\text{HOST}(y) \;\; \text{KNOW}(x)(y)])$
$= \; \exists x[\text{GUEST}(x) \rightarrow \; \exists y[\text{HOST}(y) \;\; \text{KNOW}(\text{MOTHER}(x))(y)]]$

Layered quantifiers within questions:

(61) a. which book every student needs
b. Quantifiying into sentence radical: [every student $\lambda 1$ [ which book $t_1$ needs]]
c. type clash requires type lifting of *every student*, cf. already Karttunen (1977):
$\lambda R \; \exists x[\text{STUDENT}(x) \rightarrow R(\text{which book y [x needs y]})]$
i.e. $\lambda R \; \exists x[\text{STUDENT}(i_o)(x) \rightarrow R(\lambda p \; \exists x[\text{BOOK}(i_o)(y) \;\; p = \lambda i[\text{NEED}(i)(y)(x)]])]$
d. some librarian or other knows which book every student needs
[every student $\lambda 1$ [ which book $t_1$ needs]] $\lambda 2$ [some librarian knows $t_2$]
$\exists x[\text{STUDENT}(i_o)(x) \rightarrow$
$\exists y[\text{LIBRARIAN}(i_0)(y) \;\; \text{KNOW}(i_0)(\lambda p \; \exists x[\text{BOOK}(i_o)(y) \;\; p = \lambda i[\text{NEED}(i)(y)(x)]])(y)]]$

Notice: This is not restricted to universal quantifiers, a welcome result.

Problems:

♦ Why is apparent wide-scope reading of quantifiers possible with questions embedded by *know*-type verbs, but not with *that*-clauses, cf. (43)?

Answer: The only option to achieve wide scope interpretation of *every student* within its clause is by type lifting, cf. (61.c). Wide-scope interpretation within *that* clauses does not require type lifting, hence no apparent wide-scope interpretation. Needs background assumption that type lifting is a costly operation.

(62) a. that every student needs a book
$\lambda i \; \exists x[\text{STUDENT}(i) \rightarrow \; \exists y[\text{BOOK}(i)(y) \;\; \text{NEED}(i)(y)(x)]$

♦ Why is wide-scope reading of quantifiers impossible with *wonder*-type verbs, cf. (44)?

Universal quantifiers can be intepreted without type lifting, as speech-act conjunction. This is the preferred option because it does not require type lifting.

♦ But then why is wide-scope reading with *wonder*-type verbs not even possible with non-universal quantifiers?

(63) Some librarian or other wondered which book most (of the) students need.
* 'For most students x: Some librarian wondered which book x needs.'

Perhaps the speech act cannot itself scope, cf. (64), because there are no traces of the type speech act? But overt movement is o.k., cf. (65).

(64) * $\lambda 2$ [some librarian wonders $t_2$]

(65) What did Al bring, some librarian wonders.

Perhaps the layered quantifier interpretation is out, cf. (66.b), because conjunctive interpretation of quantifier is simpler?

(66) a. [every student λ1 [QUEST [which book $t_1$ needs]]
b. * λR x[STUDENT($i_o$)(x) → R(QUEST(λp y[BOOK($i_o$)(y) p = λi[NEED(i)(y)(x)]]))]
c. λf [&{f(x) | x STUDENT}](λx[QUEST(λp y[BOOK($i_o$)(y) p = λi[NEED(i)(y)(x)]]))

This still does not explain why the layered quantifier interpretation is not an option for quantifiers like *most books* that cannot be interpreted as generalized speech act conjunction. Perhaps variables for speech act predicates like R in (66.b) are not available?

## 4. Other Cases of (Apparently) Embedded Speech Acts

Negated speech acts? Searle (1969: 32)

(67) a. I promise not to come. PROMISE(¬ {w | speaker comes in w})
b. I do not promise to come. ¬ PROMISE({w | speaker comes in w})

(a) is an act of promise – of the complement of the proposition {w | speaker comes in w}.

(b) is a refusal of an act of promise – of PROMISE({w | speaker comes in w}) It is not Boolean complement formation (Vanderveken (1990): acts of illocutionary denegation).

A case of metalinguistic negation (cf. Horn 1985)?

Conditional speech acts: Dummett (1978), Davison (1973):

(68) a. Since you're so smart, what's the capital of South Dakota?
b. In case you're hungry, there is a restaurant around the corner.
c. In conclusion, the world is not ready for peace.

(a): The speech act is assigned a reason why it is performed. (b): Speech act is performed in case a certain condition holds (cf. "Vorrats-Beschluss" of a committee). (c) The rhetorical function of a speech act is made explicite (drawing a conclusion from premises); the speech act is part of series of acts.

Adverbially modified speech acts: Davison (1973), Sadock (1974):

(69) Quite frankly, he is unable to do the job.

Speaker indicates why, and how, the speech act is carried out.

Embedded reason clauses: Mittwoch (1977)

(70) a. *Doris admitted that she, frankly, doesn't like Bill.
b. Doris voted for John because she, frankly, doesn't like Bill.

To be interpreted as two speech acts connected by a rhetorical relation of reason.

(71) Doris voted for John. She, frankly, doesn't like Bill.

But cases like the following require further analysis:

(72) a. He did better than, frankly, I had expected.
b. What, frankly, he mismanaged is the farm he inherited from his aunt.

Embedded performative speech acts Lee (1975):

(73) I regret that I have to inform you that [you are hereby dismissed].

Quotation of speech act as a device for indirectness?

Disjunction of speech acts: Commands

Dummett (1973) on disjunction of commands:

> Just as we may draw up a truth-table for 'or', […], so we may draw up an 'obedience-table' for disjunctive commands. Thus we could say that the command 'Either shut the door or open the window' was said to have been obeyed just in case at least one of the commands 'Shut the door' and 'Open the window' was obeyed […]. But there is an oddity about saying this. If I say, 'Either shut the door or open the window', I have not given any command to shut the door nor have I given a command to open the window. […] What this is intended to bring out […] is that the imperatival force governs the sentence as a whole, and not its constituent clauses taken separately. [p. 303; context: Russell's assumption that the indicative mood of the verb marks assertion.]

Hamblin (1987), two readings of disjunction of commands:

(74) Take her to Knightsbridge or Bond Street.
  a. but I haven't decided which. (alternative-offering)
  b. you can decide which. (choice-offering).

Merin (1991) doubts reading (a). For permission sentences (b) cf. Kamp (1973, 1978). Merin (1992), including a proposal that involves a disjunction over permissions.

Disjunction of speech acts: Commands with threats

(75) Get out of here or I call the police.

Apparent disjunction of a command and threat, conventialized as a command that specifies the consequences for non-obedience.

This may be a disjunction of two speech acts (and their perlocutionary consequences): Speaker offers Addressee a choice between the command *Get out of here* (with the result that the speaker gets out of here) or the threat *I call the police* (with the result that the police will come). Speaker considers the first option much more preferable, and expects that addressee takes this option. Notice that this would not lead to an ambiguous commitment state, hence disjunction of two speech acts is fine in this case.

Disjunction of speech acts: Alternative questions

(76) a. Is it /raining or \snowing?
  'What is it doing, raining or snowing?'
  b. Will Bill come /today or \tomorrow?
  'When will Bill come, today or tomorrow?'
  c. Is it /raining or is it \snowing?

Form: polarity question; function: constituent question. Possible root for this grammaticalized form: Disjunction of polarity question.

(77) QUEST({RAINING, ¬RAINING}) QUEST({SNOWING, ¬SNOWING})

Addressee can chose which question to answer – possibilities: *It is raining* or *It is snowing*; *yes / no* impossible as it would not be clear which question was answered; *It is not raining* or *It is not snowing* disfavored because the forms are more complex. The disjunction of speech acts is benign because Speaker presupposes that the two options {RAINING, SNOWING} are disjunct, and that one of them must hold. Hence a reaction of Addressee is expected that reduces the ambiguous commitment state to an un-ambiguous one.

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