



A Factivity analysis for Italian Questions: differentiating *perché* and *come mai*

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GOALS:

- Show that *come mai* ‘how come’ (lit. *how ever*) is factive
 - distributional differences with *perché* ‘why’
 - these differences pattern like the English ones
- Show that factivity, along with a detailed account of the left periphery, can account for lack of a long distance reading
 - *come mai* and *how come* must sit higher in the left periphery due to factive operator
- Show that distribution that occurs with *how come* is not a historical accident, as it occurs cross-linguistically

Introduction

- *Come mai* ‘how come’ behaves in many ways like *perché* ‘why’ (Rizzi 2001)
- *Come mai* and *perché* do not require inversion (1)-(4)¹

- | | | |
|---|---|-------------------|
| 1. | Perché Gianni è venuto?
<i>Why Gianni has left</i> | [wh-subject-verb] |
| 2. | Perché è venuto Gianni?
<i>Why has left Gianni</i> | [wh-verb-subject] |
| 3. | Come mai Gianni è partito?
<i>How come Gianni has left</i> | [wh-subject-verb] |
| 4. | Come mai è partito Gianni?
<i>How come has left Gianni</i> | [wh-verb-subject] |
| • This can be contrasted with the rest of the <i>wh</i> words in Italian, which do require inversion, as shown in (5) – (10) ² . | | |
| 5. | *Come Gianni è partito?
<i>How Gianni left</i> | [wh-subject-verb] |
| 6. | Come è partito Gianni?
<i>How left Gianni</i> | [wh-verb-subject] |
| 7. | *Dove Gianni è andato?
<i>Where Gianni went</i> | [wh-subject-verb] |
| 8. | Dove è andato Gianni?
<i>Where went Gianni?</i> | [wh-verb-subject] |
| 9. | *Che cosa Gianni ha fatto?
<i>What Gianni did</i> | [wh-subject-verb] |

¹ In fact, the examples in (2) & (4) are right dislocation of the subject, not subject-verb inversion: which is the type of inversion which will be referred to for the remainder of the talk.

² All examples in this section taken from Rizzi 2001

10. Che cosa ha fatto Gianni? [wh-verb-subject]
What did Gianni

- *Perché* and *come mai* both allow adverbials to precede the verb (11) & (12)

11. Perché (i tuoi amici) già hanno finito il lavoro?
Why (your friends) already have finished the work

12. Come mai (voi) già siete tornati a Milano?
How come (you) already have come back to Milan

- Other *wh* words do not allow adverbials to precede the verb (13) – (14)

13. Dove (*già) siete (già) andati?
Where (already) have (already) gone

14. Che cosa (*già) hanno (già) fatto?
What (already) have (already) done

- There are also unreported differences between *perché* and *come mai*
- These differences pattern much like the differences between *why* and *how come* in English.

How come in English

- There are a variety of ways in which *how come* differs from *why*.

Rhetorical questions

- *How come* not allowed in rhetorical questions (16) & (18), while *why* can be (17) & (19)

Modals

15. Why would I do that?

16. #How come I would do that?

Non-finite complement

17. Why go to the store, we already have milk?

18. *How come go to the store, we already have milk?

*Suggestions*³

- *How come* not allowed in suggestions (20), while *why* can be (19)

19. Why don't we go to the store?

20. #How come we don't go to the store?

³ It is possible that suggestions are a subset of rhetorical questions. I do not take a position either way, and the analysis does not rely on this point.

Question Quantifier Interaction

- *How come* can not undergo question-quantifier interaction (22), while *why* can (21)
21. Why does everyone like Joe?
Why>every, every>why
22. How come everyone likes Joe?
How come>every, *every>how come

Long Distance Interpretation

- *How come* not allowed to interpreted long distance (24), while *why* can (23)
23. Why did Joe say Stacey ordered pizza? [ambiguous]
24. How come Joe said Stacey ordered pizza? [matrix only]

Come Mai in Italian

- In Italian, there are distributional differences between *come mai* and *perché*

Rhetorical Questions

- *Come mai* not allowed in rhetorical questions (26) & (28), while *perché* can (25) & (27)

Conditional

25. Perché dovrebbe partire?
why should.CONDITIONAL.3sg. leave.INF
'Why should he leave?'
26. #Come mai dovrebbe partire?
how ever should.CONDITIONAL.3sg. leave.INF
'How come he should leave?'

Non-finite complement

27. Perché andare al negozio quando abbiamo di già il latte?
Why go.INF to-the store when have.1pl already the milk
'Why go to the store when we already have milk?'
28. *Come mai andare al negozio quando abbiamo di già il latte?
how ever go.INF to-the store when have.1pl already the milk
'How come go to the store when we already have milk?'

Suggestions

- *Come mai* not allowed in suggestions (30), while *perché* can (29)
29. Perché non andiamo al cinema?
why not go to-the movies
'Why don't we go to the movies?'
30. #Come mai non andiamo al cinema?
how ever not go to-the movies
'How come we don't go to the movies?'

Question Quantifier Interaction

- Not available in Italian with *why*-type words

Long Distance Interpretation

- *Come mai* can not be interpreted long distance (33) & (34), while *perché* can be interpreted long distance with inversion (32)

31. Perché Gianni ha detto che si é dimesso? [non-inverted, matrix only]
Why Gianni has said that he resigned
'Why did Gianni say that he resigned?'
32. Perché ha detto Gianni che si é dimesso? [inverted, embedded only]
Why has said that he resigned
'Why did he say that he resigned?'
33. Come mai Gianni ha detto che si é dimesso? [non-inverted, matrix only]
How ever Gianni has said that he resigned
'How come Gianni said that he resigned?'
34. ?? Come mai ha detto Gianni che si é dimesso? [inverted, ??]
How ever has said that he resigned
'How come he said that he resigned?'

Analysis

- Fitzpatrick (2005) claims that *how come*, in English, is factive, based on evidence from rhetorical questions and question quantifier interaction.
- I show corresponding evidence in Italian and using data from both these languages, I present that the factivity analysis can also extend to describe facts concerning long-distance questions.

The factivity analysis for English

- Fitzpatrick (2005) proposed a that *how come* presupposes the truth of its complement
- One way this is implemented is to say that *how come* has a factive head, which selects for a complement which must be presupposed true.
- I assume that it is a surface constraint that *how come* must be in a spec-head relation with the factive operator

Presupposition

- Presuppositions in questions are what are required for a successful speech act (Katz 1972)
- Most questions contain presuppositions, as in (35)

35. Why did you go to the store?
=> *you went to the store*

- However, the presupposition required in questions is needed for felicitous speech acts

- It is not the case that *why* requires the truth of its complement, as it can be used in suggestions, as shown in (36)

36. Why don't you go to the store?

*=> you don't go to the store

- Presupposition, in this talk, will refer to requiring the truth of the complement

Rhetorical Questions

- Rhetorical questions not allowed with *how come*, as shown in (16) and (18)
- Rhetorical questions permitted with *why* (15) and (17)
- Complements are of various constructions (no one syntactic analysis)
- Rhetorical Questions are negatively biased
- This negative bias contradicts the presupposition requirement of *how come*

Suggestions

- *how come* can not be used in suggestions (Conroy 2005), as shown in (20)
- Suggestions are fine with *why*, as shown in (19)
- Suggestions are not presupposed

Question Quantifier Interaction

- How come can not undergo question-quantifier interaction (Collins 1991), as shown in (22)
- *Why* can undergo question-quantifier interaction, as shown in (21)
- An analysis that Fitzpatrick provides is that the quantifier is stuck in a factive island.
- An alternative analysis is that the syntactic position of *how come* is too high for the quantifier. I will show that the factive operator forces this syntactic position.

Same Analysis works in Italian

Rhetorical Questions

- Rhetorical questions not allowed with *come mai*, as shown in (26) and (28)
- Rhetorical questions permitted with *perché* (25) and (27)
- Complements are non-finite and conditional
- Rhetorical Questions are negatively biased
- This negative bias contradicts the presupposition of *come mai*

Suggestions

- *Come mai* can not be used in suggestions, as shown in (30)
- Suggestions permitted with *perché* (29)
- Suggestions are not presupposed

Question Quantifier Interaction

- Not permitted in Italian with *why*-type words

Summary

- Factive analysis holds for both English and Italian

Extending the factivity analysis

- Does the factivity analysis account for the lack of long distance interpretation?

Left Periphery: the syntax of *come mai*

Structure of the Left Periphery (Rizzi 1997)

- Rizzi proposed the CP layer has a structure as shown in (37)

37. Force (Topic*) Focus (Topic*) Finiteness IP

Evidence for two Complementizer Positions (Rizzi 2001)

- Evidence from embedded questions in Italian suggests that there are two distinct complementizer positions (Rizzi 2001)
- Italian has two complementizers, *se* 'if' and *che* 'that'
- While both can be followed by focus phrases (examples omitted), the two complementizers are not identical with respect to distribution of topic phrases
- *Se* can both be preceded and followed by a topic phrase (38)-(39), while *che* can only be followed by a topic phrase (40)-(41)

38. Non so **se**, **a Gianni**, avrebbero potuto dirgli a verità [se > TOP]
'I don't know if to Gianni, they could have said the truth'

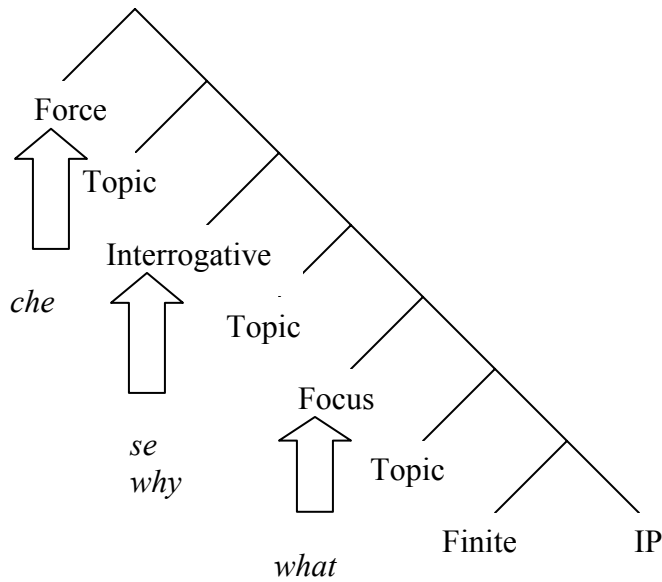
39. Non so, **a Gianni**, **se** avrebbero potuto dirgli a verità [TOP > se]
'I don't know, to Gianni, if they could have said the truth'

40. Credo **che a Gianni** avrebbero potuto dirgli a verità [che > TOP]
'I believe that to Gianni, they should have said the truth to him'

41. *Credo, **a Gianni**, **che** avrebbero potuto dirgli a verità [*TOP > che]
'I believe, to Gianni, that should have said the truth to him'

- This suggests *che* occupies a position higher than *se* in the CP domain
- These two distinct complementizer positions result in the structure shown in (42), and is extended to matrix questions:

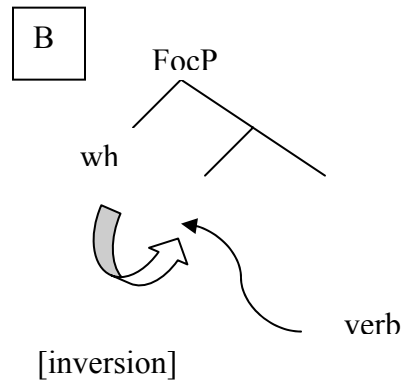
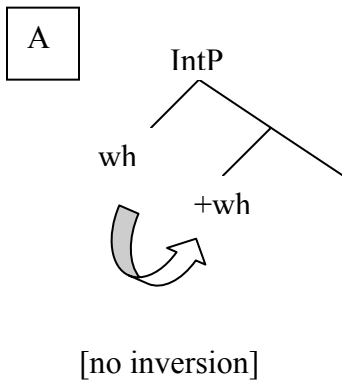
42.



- Wh-criterion is a requirement of all question words (Rizzi 1996), shown in (43).

43. Wh-Criterion: a *wh* operator and a head endowed with the *wh* feature must be in a spec-head configuration at s-structure

- IntP is automatically specified for the wh-criterion (head is endowed with +wh features) (figure A)
- A *wh* in FocP requires verb movement to satisfy the wh-criterion (since verbs are assumed to carry the relevant features) (figure B)



Perché

- Can sit in both of these spots, since it can appear inverted and non-inverted (as shown in (31) & (32), repeated here)

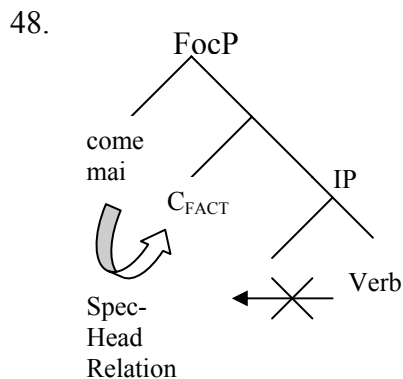
44. Perché **Gianni ha detto** che si é dimesso? [non-inverted]
Why Gianni has said that he resigned

- ‘Why did Gianni say that he resigned?’
 45. Perché **ha detto Gianni** che si é dimesso? [inverted]
Why has said that he resigned
 ‘Why did he say that he resigned?’

Come mai

- Can not appear in an inverted context (46), repeated from (34)
46. ?? *Come mai* ha **detto Gianni** che si é dimesso? [inverted]
How ever has said that he resigned
 ‘How come he said that he resigned?’
- Only occurs in IntP, which does not require inversion
 - Why? Factive operator sitting in the head, which blocks inversion
 - Any derivation where *come mai* sits in FocP will crash, due to inability to satisfy wh-criterion

47. [_{FocP} *come mai* [_{FOC} C_{FACT} [_{IP} ...]]]



- In (47), the verb can not move up (to the head of FocP), and wh-criterion fails.
 - This derivation fails
- Due to its factivity, *come mai* must sit in IntP.

Long distance interpretation

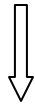
- I will show why only *wh* phrases that can occur in FocP can receive a long distance interpretation
- Since *perché* can occur in FocP, it can receive a long distance interpretation
- *Come mai* is restricted to matrix interpretations because it must sit in IntP.
- In Italian, long distance questions originate in FocP (Rizzi 2001)

Perché

Long distance derivation with *perché*

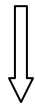
- Long distance *wh* phrases are generated in the embedded FocP

49. Gianni ha detto che si [_{FocP} perché [_{IP} é dimesso]]
Gianni has said that why has resigned



wh movement yields derivation in (50)

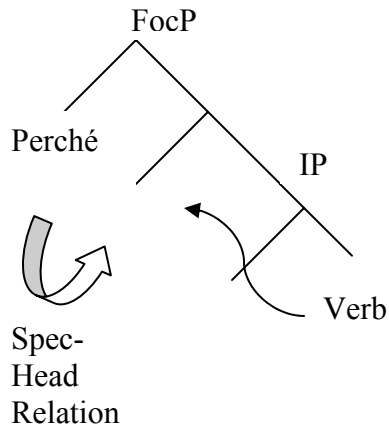
50. [_{FocP} perché Gianni ha detto che si [_{FocP} t [_{IP} é dimesso]]]
why Gianni has said that has resigned



verb raises to satisfy the *wh* criterion, resulting in (51)

51. Perché ha detto Gianni che si é dimesso?
Why has said Gianni that has resigned

52.



Come Mai

Long distance derivation with *come mai*

- There are 2 possible derivations of an embedded question with *come mai*
 - *Come mai* is generated in the embedded clause with the factive operator
 - The factive operator is generated in the matrix clause with *come mai* generated in the embedded clause

Derivation one

53. Gianni ha ditto che si [_{FocP} come mai C_{FACT} [_{IP} é dimesso]]
Gianni has said that how come has resigned



wh movement results in (54)

54. [_{FocP} Come mai Gianni ha detto che si [_{FocP} t C_{FACT} [_{IP} é dimesso]]]
how come Gianni has said that has resigned

- This derivation will not converge because the surface locality constraint between *come mai* and its factive operator has been broken

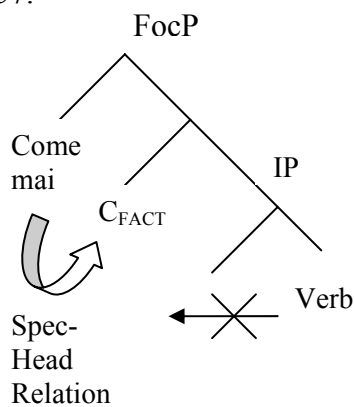
Derivation two

55. C_{FACT} Gianni ha ditto che si $[_{FocP}$ *come mai* $[_{IP}$ *é dimesso*]]
Gianni has said that how come has resigned

↓ *wh* movement results in (54)

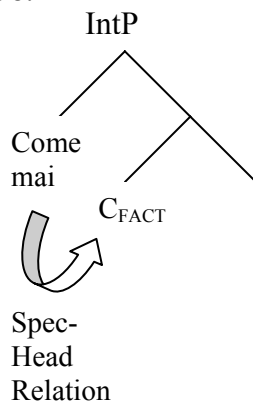
56. $[_{FocP}$ *Come mai* C_{FACT} Gianni ha detto che si $[_{FocP}$ t $[_{IP}$ *é dimesso*]]]
how come Gianni has said that has resigned

57.



- *wh* criterion is still not satisfied, and requires verb raising.
- C_{FACT} is blocking this movement, so the *wh* criterion fails.
- Therefore, due to its factive head, *come mai* can not receive a long distance interpretation.
- However, a derivation in which *come mai* is base generated in IntP, will converge

58.



Wh-criterion satisfied

- This results in a matrix-only interpretation

Implications for English

- Same analysis holds for *why* and *how come*
- Why can only sit in FocP, long distance derivations converge.
- *how come* must sit in IntP, and can not get long distance movement
- IntP position explains why *how come* can not invert, as in (59)-(60).

59. How come Stacey likes chocolate?

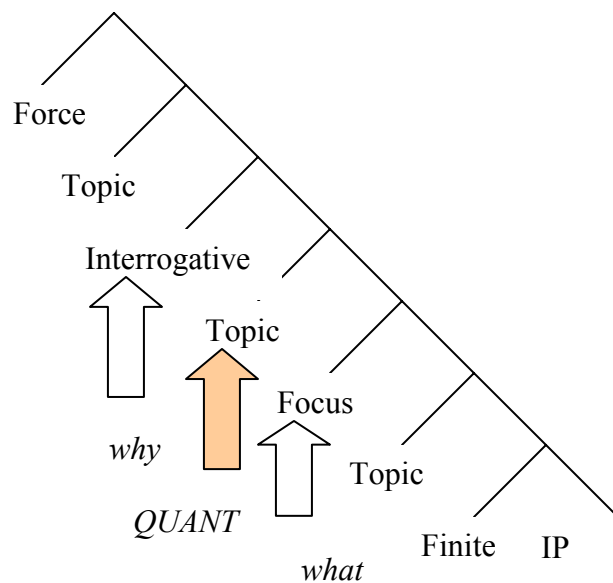
60. *How come does Stacey like chocolate?

- Factivity operator sitting in head, any derivation in FocP will crash because the operator is a blocker for inversion (*wh* criterion failure)
- Converging derivation will have *how come* in IntP, resulting in non-inversion

Question-Quantifier Interaction

- Recall, I proposed an alternative analysis for why question-quantifier interaction is not permitted with *how come*, and that is because it sits too high for the quantifier
- If quantifiers move to a topic phrase lower than IntP, this would explain why Question-Quantifier Interaction is not permitted with the higher sitting *wh*-phrases

61.



- Therefore, we would expect that Q-Q be permitted with question words that sit in FocP, but not IntP
- This is the case in Italian, as shown in (62)-(63)

62. Cosa ha proposto ogni senatore nella commissione? [both readings]
What ha suggested every senator in-the committee
 'what did every senator in the committee suggested?'
63. Perché ogni senatore nel commissione era in ritardo ieri? [non-pair list only]
Why every senator in the committee was late yesterday
 'Why was every senator in the committee late yesterday?'

- This suggests that it is the position of *how come* and *come mai* that forbid question-quantifier interaction, an indirect result of factivity

Conclusions

- *Come mai* is factive
- Due to the factivity operator, both *come mai* and *how come* are forced to IntP
- No long distance movement from this position
- Question-quantifier interaction facts explained by position in CP domain

References

- Collins, C. 1991. Why and How Come. *MIT Working Papers in Linguistics* 15, MITWPL.
- Conroy, A. (2005) "How come Syntax isn't enough for *how come*?" University of Maryland Working Papers in Linguistics 13, University of Maryland, College Park, MD
- Fitzpatrick, J. 2005. The Whys and How Comes of Presupposition and NPI Licensing in Questions. *Proceedings of the West Coast Conference on Formal Linguistics 24*. Simon Fraser University, Vancouver, BC, Canada.
- Katz, Jerrold J. (1972). *Semantic Theory*. New York: Harper & Row.
- Rizzi, L. (1996) "Residual Verb Second and the Wh Criterion", in A. Belletti & L. Rizzi (eds.) *Parameters and Functional Heads*, Oxford University Press, 63-90.
- Rizzi, L. (1997) "The Fine Structure of the Left Periphery", in L. Haegeman (ed.) *Elements of Grammar*, Kluwer, Dordrecht, 281-337.
- Rizzi, Luigi (2001) On the position "Int(errogative)" in the left periphery of the clause. In Guglielmo Cinque & Giampaolo Salvi (ed) *Current studies in Italian syntax. Essays offered to Lorenzo Renzi*. Amsterdam: North Holland. pp. 287-296.

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