Subject-Verb Inversion as Generalized Alignment

Benjamin Bruening, University of Delaware

McGill University, October 3, 2014

Table of Contents

Theoretical Idea

Phonological alignment, as in the theory of Generalized Alignment in phonology and morphology (McCarthy and Prince 1993), plays a role in syntax.

(1) Align V-C:
Align($C(x)$, L/R, V_{tense}, L/R)
(The left/right edge of some projection of C must be aligned with the left/right edge of the tensed verb.)

(2) Align V-C (English):
Align(Comp-C^*, L, V_{tense}, L/R)
(The left edge of the complement of C^* (i.e., TP) must be aligned with an edge of V_{tense}.)

(3) a.   Who [TP *t* <u>ate</u> the Lucky Charms]?
     b. * Who <u>did</u> [TP *t* eat the Lucky Charms]?

(4) a.   What <u>did</u> [TP the leprechaun eat]?
     b. * What [TP the leprechaun <u>ate</u>]?

Cross-Linguistic Variation

Alignment constraints can vary in two dimensions:

1. The entities that are to be aligned (which projection of C);
2. The directionality of that alignment (left or right edges).

Roadmap

1. The English SAI Generalization
2. Formalizing Align
3. Align V-C in other areas of English
4. Align V-C in other languages

Table of Contents

Initial Motivation for Align: Adjacency

Rizzi 1997, Haegeman 2012:

(5) a. When at last the sun came up, the desert was as empty as it had ever been.

  b. * When will at last the sun come up?

(6) a. I think that this week the gorilla has escaped only once.

  b. * Only once has this week the gorilla escaped.

(7) (Rizzi 1997, (59))

  a. If yesterday John had done that, . . .

  b. * Had yesterday John done that,. . .

(8)   a.   Who [$_{TP}$ *t* <u>ate</u> the Lucky Charms]?

        b.   * Who <u>did</u> [$_{TP}$ *t* eat the Lucky Charms]?

(9)   a.   What <u>did</u> [$_{TP}$ the leprechaun eat]?

        b.   * What [$_{TP}$ the leprechaun <u>ate</u>]?

(10)   a.   When <u>did</u> [$_{TP}$ the leprechaun eat the Lucky Charms]?

        b.   * When [$_{TP}$ the leprechaun <u>ate</u> the Lucky Charms]?

Two Problems for the Subject Generalization

1. Negative inversion plus subject extraction;
2. Locative inversion.

Negative Inversion Plus Subject Extraction

(11)   a.   Only in that election did Leslie run for public office.

       b.   * Only in that election Leslie ran for public office.

(12)   Culicover (1992, note 4)

       a.   * Leslie is the person who I said that only in that election did run for public office.

       b.   Leslie is the person who I said that only in that election ran for public office.

(13)   . . . person [$_{CP}$ who I said [$_{CP}$ that [$_{CP}$ only in that election C* [$_{TP}$ ~~who~~ <u>ran</u> for public office]]]

Questioning PP in Locative Inversion

(14) a. On which wall hung a picture?

b. * On which wall did hang a picture?

Postal (2004), Bruening (2010): Locative inversion sentences have a null expletive in Spec-TP.

(15) [$_{CP}$ On which wall C* [$_{TP}$ ~~there~~ <u>hung</u> a picture]]?

Evidence for Null Subject: Tag Questions

(16) a. To Gloria will fall a number of unpleasant tasks, won't there?
(Postal 2004, 42, (92b))

b. At that time were built a number of warships, weren't there?
(Postal 2004, 42, (92d))

(17) a. That task fell [to Gloria], but it shouldn't have fallen *there/to
her. (Postal 2004, 42, (92a))

b. They built a number of warships [at that time], but they didn't
deploy them *there/then. (Postal 2004, 42, (92c))

(18) a. From that great conflict and from our incompatible viewpoints has/*have emerged a new, exciting idea for progress.

      b. There has/*have emerged a new, exciting idea for progress.

      c. Under the bed and in the fireplace are not the best places to leave your toys. (Levine 1989, 1015, (8))

(19) a. Those women have all/both/each filed a complaint. (Postal 2004, 23, (19a))

b. To those women was (*all/*both/*each) proposed a distinct alternative. (Postal 2004, 23, (19c))

c. Under the table and under the bed would both be good places to store our ski equipment. (Postal 2004, 23, (20a))

d. Under the table and under the bed was (*both) stored our ski equipment. (Postal 2004, 23, (20b))

(20) a. There was (*all/*both/*each) a distinct alternative proposed to those women.

b. To those women there was (*all/*both/*each) a distinct alternative proposed.

(21) a. That sofa may itself have been the motive.

  b. Under that sofa may (*itself) have been lying two snakes.
      (Postal 2004, 24, (26b))

  c. Under the table may (itself) have been a glood place to hide a
      snake. (Postal 2004, 24, (26c))

  d. Under that sofa there may (*itself) have been lying two snakes.

(22) a.   In the bathroom is a great place to hide without PRO really being a good place to live. (Postal 2004, 25, (29))

      b.   * Near Jane and Clarissa stood the two men after PRO dawdling the two teenagers. (cf. Near Jane and Clarissa were dawdling the two teenagers.)

      c.   * To the chimp was handed a banana without PRO being handed a peach. (Postal 2004, 25, (28e))

      d.   * There occurred three more accidents without PRO being any medical help available on the premises. (Haegeman 1994, 279, (46g))

(23) a.   On which wall hung a picture?

      b.   * On which wall did hang a picture?

(24) [$_{CP}$ On which wall C* [$_{TP}$ ~~there~~ hung a picture]]?

(25) a. * On which wall [_TP_ there <u>hung</u> a picture]?

   b.   On which wall <u>did</u> [_TP_ there hang a picture]?

(26) Subject-auxiliary inversion occurs in inversion environments when Spec-TP is occupied by a pronounced phrase. Subject-auxiliary inversion does not occur in inversion environments when Spec-TP is occupied by an unpronounced phrase (trace, null expletive).

(27) Nothing may come between a fronted auxiliary and the subject in Spec-TP.

The left edge of the complement of C* (i.e., TP) must be aligned with the tensed verb.

(28) a. And why in Paris did the Americans modify the agreement at the last minute...? (example from *The Guardian*, cited by Haegeman 2000, note 2)

b. To whom at last will the government turn? (*The Guardian*, cited by Haegeman 2012, 51, note 49)

(29) a. Which delegation at the last minute modified the agreement?

b. Which hominid at that time started using simple stone tools?

(30) a. * Which delegation <did> at the last minute <did> modify the agreement?

b. * Which hominid <did> at that time <did> start using simple stone tools?

Table of Contents

(31) Align V-C (English):
Align(Comp-C*, L, V_{tense}, L/R)
(The left edge of the complement of C* (i.e., TP) must be aligned
with an edge of V_{tense}.)

Assumption: CP Recursion

- Fronted adverbs are in a specifier of CP in an instance of CP recursion (Reinhart 1981, Bhatt and Yoon 1991, Culicover 1991, Authier 1992, McCloskey 2006, among others).
- Second C can sometimes be pronounced (McCloskey 2006):

(32)   He says **that** if that happens **that** he must be warned immediately

- Assumption: The grammar strictly bars adjunction to TP, so that Spec-TP is always the left edge of TP.
- Assumption: In CP recursion, only the lower C is C*, so that it is again the left edge of TP that needs to be aligned with the tensed verb.

(33) a. [$_{CP}$ if [$_{CP}$ yesterday [$_{TP}$ John had done that]]]...

     b. * [$_{CP}$ <u>had</u> [$_{CP}$ yesterday [$_{TP}$ John t_{had} done that]]]...

(34) [$_{CP}$ why C [$_{CP}$ in Paris [$_{\overline{C}}$ <u>did</u> [$_{TP}$ the Americans ...]]]]

(35) [$_{CP}$ Which delegation C [$_{CP}$ at the last minute C [$_{TP}$ ~~which delegation~~ <u>modified</u> the agreement]]]?

Apparent Counterexample

(36)   a.   Who completely destroyed this flower patch?

         b.   [CP who [TP *t* [VoiceP completely <u>destroyed</u> this flower patch]]]?

         c.   That gardener completely destroyed this flower patch.

         d.   * Completely that gardener destroyed this flower patch.

         e.   That gardener (*completely) is (completely) destroying the flower patch!

Response 1: Cyclic Nature of Syntax

- Syntax is put together in *phases* (Chomsky 2000).
- Within each phase, cannot see any other phase.
- Align V-C can only be evaluated in phase where edge of TP occurs.
- Syntax works top-down, left-to-right (Phillips 1996, 2003; Richards 1999; Bruening 2010, 2014):

(37)   [$_{CP}$ who C* [$_{TP}$ ~~who~~ [$_{VoiceP}$ completely destroyed...

(38) [$_{CP}$ who C* [$_{TP}$ ~~who~~ T [$_{VoiceP}$ completely destroyed...

- Whether or not to insert Aux in C has to be decided in CP phase, nothing inside VoiceP is visible yet;
- Rule: Aux will be merged in C* if Spec-TP is a pronounced phrase;
- No Aux will be merged in C* if Spec-TP is unpronounced.
- Align V-C can only be evaluated in the CP phase, in that phase it is not violated;
- Nothing intervenes between the left edge of TP and T.

(39) [$_{CP}$ why C* [$_{TP}$ the gardener T [$_{VoiceP}$ completely destroy...

- In CP phase, can see at C* that Spec-TP will be pronounced;
- Align V-C will be violated unless tensed Aux is merged in C, then copied in T (and lower Aux).

(40) [$_{CP}$ why [$_{C*}$ <u>did</u>] [$_{TP}$ the gardener [$_T$ ~~did~~] [$_{AuxP}$ [$_{Aux}$ ~~did~~] [$_{VoiceP}$ completely destroy...

Response 2: Reformulate Align V-C

(41) Align V-C (English):
Align(Comp-C*, L, V_{tense}, L/R)
(The left edge of the complement of C* (i.e., TP) must be aligned with an edge of V_{tense}.)

Reformulate as:

(42) Align T-C (English):
Align(Comp-C*, L, T, L/R)
(The left edge of the complement of C* (i.e., TP) must be aligned with an edge of T.)

(43) [$_{CP}$ who [$_{TP}$ t $\underline{T}$ [$_{VoiceP}$ completely destroyed this flower patch]]]?

Table of Contents

Quotative Inversion

One of few cases where main verb ends up to left of subject:

(44)   "I am going to follow you all the rest of my life," declared the man.

QI: Adjacency

Alexiadou and Anagnostopoulou (2001): the subject has to be adjacent to the fronted verb:

(45) a.   "Why is that?" asked the student of his professor.

    b.   * "Why is that?" asked of his professor the student.

(46) a.   "It's too hot!" complained Ray loudly.

    b.   * "It's too hot!" complained loudly Ray.

The subject is Spec-TP, marks left edge of TP:

(47)   * "It's too hot!" <u>complained</u> loudly [$_{TP}$ Ray].

(48)   "It's too hot!" <u>complained</u> [$_{TP}$ Ray loudly].

Collins and Branigan 1997 argue that the subject is low in QI, but their arguments do not go through.

(49) (Collins and Branigan 1997, (11c), (12c))

    a.   * "We must do this again," declared the guests all to Tony.

    b.   * "Do you have the time?" asked the bankers each of the receptionist.

Floating Qs: Alternative Explanation

- What moves is a phrase, not just the verb.
- Elements to the right of the subject have to be ones that are independently able to strand.
- These floating Qs cannot strand with these PPs:

(50) a. Declare "Yes!" though the guests might (*all) to Tony,...
     b. The hostess declared "Of course!" to the pastry chef, and the guests did (*all) to the head waiter.

(51) a. Ask the time though the bankers might (*each) of the receptionist,...
     b. The CEO asked what time it was of the bellhop, and the bankers did (*each) of the receptionist.

Some Floating Qs are Allowed

(52) a. "We must do this again," declared the guests all at the same time.

b. "Happy New Year!" shouted the guests all punctually at 12 o'clock.

c. "Thank God," whispered Sam and Isaac, both dead tired.

(53) a. Declare "Yes!" though the guests might all at the same time,...

b. Shout "Happy New Year!" though the guests might all punctually at 12 o'clock,...

c. Mary whispered "Thank God," and Sam and Isaac did too, both dead tired.

Tag Questions: Postverbal Subjects

(54) a. That that theory is wrong and that it is overly complicated are (both) generally acknowledged, aren't they?

b. It is generally acknowledged that that theory is wrong and that it is overly complicated, isn't it? (*aren't they?)

(55) a. Afterwards, violent earthquakes and floods occurred, didn't they?

b. Afterwards there occurred violent earthquakes and floods, didn't there? (*didn't they?)

(56) a. A fire-breathing dragon stormed out of the cave, didn't it/ ?one?

b. Out of the cave stormed a fire-breathing dragon, didn't there? (*didn't it/ ??didn't one?)

Tag Questions: Quotative Inversion

(57) a. "Aaargh!" screamed a woman, didn't she/one? (*didn't there/it)

b. "Yes," said John, didn't he? (*didn't there/it)

(58) a. * "Aaargh!" screamed a woman, didn't so?

b. * "Yes," said John, didn't so?

VP Ellipsis: Postverbal Subjects

(59) a. Into the room stepped a large purple dragon, and out of it there did too.

b. She hoped it would be acknowledged that her theory was correct, and eventually it was.

c. In Galilee there occurred violent earthquakes and floods, and in Sicily there did, too.

(60) a. * "Beef," said the woman to Sandy and Erica, and "Chicken," said too.

   b. * "When?" asked the bankers of the receptionist, and "What time is it now?" asked too.

VP Ellipsis: So Inversion

(61)   Or so has said an anonymous Obama official.

(62)   a.   A: Or so had said an anonymous Obama official. B: *So had, indeed.

        b.   A: Or so had said an anonymous Obama official. B: So had said one, indeed.

Control: Adjoined Participial Clauses

(63) a. "Yes," mumbled Gil_1, PRO_1 being only half awake.

b. The $governor_1$ waltzed into the room, PRO_1 being a man of flamboyant flair.

c. ?? Into the room waltzed the $governor_1$, PRO_1 being a man of flamboyant flair.

d. [Elias and $Moses]_1$ appeared unto them, PRO_1 being venerated prophets of old.

e. ?? There appeared unto them [Elias and $Moses]_1$, PRO_1 being venerated prophets of old.

What moves is an entire phrase, stranded material is late-adjoined to lower copy of moved phrase (Landau 2007):

(64) a. "Wait a minute!" Bob <u>abruptly broke in</u> <u>in an affronted tone</u>.
      b. "Wait a minute!" <u>abruptly broke in</u> Bob <u>in an affronted tone</u>.
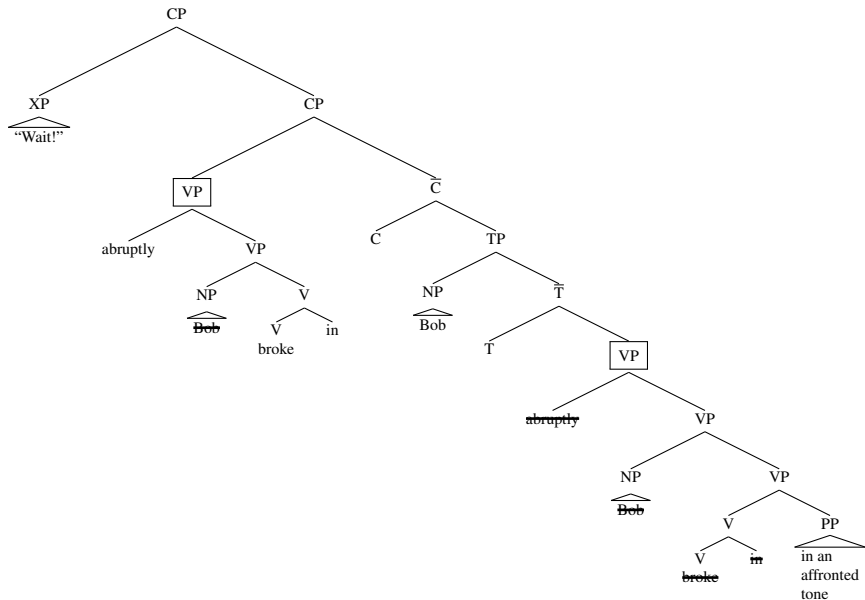
QI Adjacency as Alignment

Subject is in Spec-TP in QI, and so adjacency falls out from Align V-C:

(65)   * "It's too hot!" <u>complained</u> loudly [$_{TP}$ Ray].

(66)   "It's too hot!" <u>complained</u> [$_{TP}$ Ray loudly].

(67) a. "No!" shouted out the man.

  b. "What?!" blurted out Jill without thinking.

Zeller 2001, Toivonen 2003, among others:

(68)
```
        V
       / \
      V   P
    blurt out
```
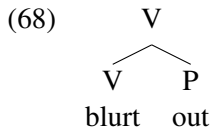
(69) * "Back to the bunker!" yelled right out the captain to the troops.
        (Collins and Branigan 1997, (8))

QI: Auxs not Allowed

(Quirk et al. 1985, Collins and Branigan 1997)

(70) a.   "No way," you should say.
     b. * "No way," should say you.

(71) a.   "Hodor!" Hodor is always saying.
     b. * "Hodor!" is always saying Hodor.

(72) a.   "Who paid you?" the witness was asked repeatedly.
     b. * "Who paid you?" was asked the witness repeatedly.

(73)   * "No way," <u>should</u> say [$_{TP}$ you].

(74)   * "Who paid you?" <u>was</u> asked [$_{TP}$ the witness repeatedly].

Summary

Align V-C accounts for:

1. Adjacency between fronted Aux and subject;
2. Do-support when Spec-TP is pronounced (and problems for the subject generalization);
3. Adjacency in quotative inversion;
4. Ungrammaticality of Auxs in quotative inversion.

Table of Contents

French Stylistic Inversion

In French stylistic inversion, the subject in a [wh] CP optionally appears in a postverbal position, which is normally not allowed:

(75) (Kayne and Pollock 2001, (1a), (2a))

    a.   A qui a téléphoné ton ami?
           to whom has telephoned your friend
           'Who did your friend telephone?'

    b. * A téléphoné ton ami.
           has telephoned your friend
           'Your friend telephoned.'

Analysis: Phrasal Movement

Kayne and Pollock (2001), among others: Subject is in a high position, while a phrase including the auxiliary and main verbs fronts around it.

- First, a [wh] C attracts a wh-phrase to its specifier.
- CP recursion: a C that is the complement of the [wh] C attracts the complement of T to its specifier.

Align V-C in French
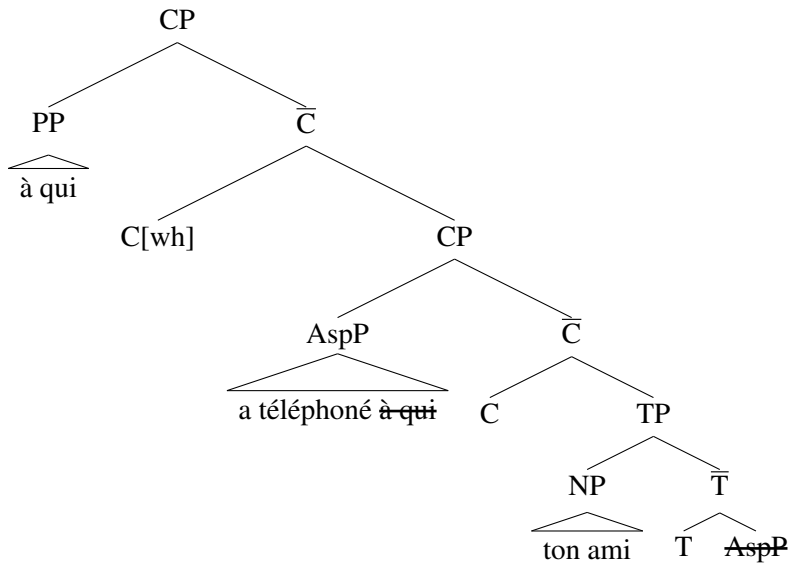
(76) Align V-C, French:
Align(Residue-C[wh],R,V_{tense},L)
(The right edge of the residue of [wh] C must be aligned with the left edge of V_{tense}.)

(77) The *residue* of X is material immediately dominated by a projection of X, excluding the complement of X, i.e., Spec-X and X (Chomsky 1993).

Nothing may intervene between the complementizer or a fronted wh-phrase and the tensed verb (preverbal clitics: treat as particles).

Adjacency

(78)   (Kayne and Pollock 2001, (127a), (129a))

    a.   ? le jour où,   ce livre-là,   Marie l' a   lu
          the day when that book-there Marie it has read
          'the day when, that book there, Marie read it'

    b.   * le jour où,   ce livre-là,   l' a   lu   Marie
          the day when that book-there it has read Marie
          'the day when, that book there, Marie read it'

(79) a. Evidemment Bob a   enthousiasmé les juges avec son
          evidently   Bob has impressed   the judges with his
          accordéon solo.
          accordion solo
          'Evidently Bob has impressed the judges with his accordion
          solo.' (Engels 2004, (2.52a))

     b. * Quels juges évidemment a   enthousiasmé Bob avec son
          which judges evidently   has impressed   Bob with his
          accordéon solo?
          accordion solo

Adjacency: Adverbs

(80)   a.   l' homme à qui   a   téléphoné ton ami
            the man   to whom has telephoned your friend
            'the man your friend telephoned' (Kayne and Pollock 2001,
            (1b))

       b.   * l' homme à qui   évidemment a   téléphoné ton ami
            the man   to whom evidently   has telephoned your friend

No Adjacency with Subject

(81) (Bonami et al. 1999, (12a–b))

    a.   la lettre qu' enverra à la direction **le patron**
          the letter that will.send to the management the boss
          'the letter that the boss will send to the management'

    b.   la lettre qu' enverra **le patron** à la direction
          the letter that will.send the boss   to the management
          'the letter that the boss will send to the management'

(82)   a.   And why in Paris did the Americans modify the agreement at the last minute... ? (example from *The Guardian*, cited by Haegeman 2000, note 2)

        b.   To whom at last will the government turn? (*The Guardian*, cited by Haegeman 2012, 51, note 49)

French: Auxiliaries

- French stylistic inversion, unlike English quotative inversion, permits auxiliaries.
- Align V-C in French aligns the *left* edge of the finite verb with the *right* edge of the residue of C[wh].
- The tensed auxiliary is the left edge of the fronted constituent, so the Align constraint is satisfied even when there is an auxiliary verb.

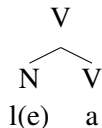# Exception: Clitics

Treat like optionally non-projecting particles, above:

(83)   A qui l' a   montré Jean-Jacques?
       to who it has shown J-J
       'To whom did Jean-Jacques show it?' (Kayne and Pollock 2001, 111, (13))

(84)   V
         ╱╲
        N   V
       l(e)   a

Variation

- French stylistic inversion and English quotative inversion involve the same mechanism: phrasal movement of the complement of T.
- The details of the way they work are very different but fall out from variation in the way Align constraints can vary.
- An Align approach is able to capture a range of facts that do not fall out in any obvious way in other approaches.
- Rizzi (1997) and Haegeman (2012) offer various stipulations about the ordering of topic and focus projections, and what kinds of things block head movement through the heads of these projections.

Spanish

Fronts Aux and main V:

(85) (Torrego 1984, (14a–b))

    a.   Por quién fue organizada la reunión?
           by whom was organized the meeting
           'By whom was the meeting organized?'

    b.   * Por quién fue la reunión organizada?
           by whom was the meeting organized
           'By whom was the meeting organized?'

Spanish: Adverbs

(86)　　Siempre lee　lo mismo María.
always reads the same Mary
'Mary always reads the same.' (Torrego 1984, (4a))

(87)　　(Torrego 1984, (4b–c))

　　a.　* Qué siempre lee　María?
what always reads Mary
'What does Mary always read?'

　　b.　Qué lee　María siempre?
what reads Mary always
'What does Mary always read?'

(88)   Align V-C, French/Spanish:
       Align(Residue-C[wh],R,V_{tense},L)
       (The right edge of the residue of [wh] C must be aligned with the left
       edge of V_{tense}.)

V2 in German

(89) a. Gestern   <u>haben</u> die Kinder   ein Pony bekommen.
          yesterday have   the children a   pony gotten
          'Yesterday the children got a pony.'

    b. <u>Hab'</u> ich schon   gesehen. (Topic Drop)
          have I   already seen
          'I saw [him] already.'

    c. <u>Hast</u> du   ein Pony mit   langem Schwanz? (Y/N Q)
          have you a   pony with long   tail
          'Do you have a pony with a long tail?'

(90) Align V-C, German:
Align(C^*,L,V_{tense},L)
(The left edge of C^* must be aligned with the left edge of V_{tense}.)

- C^* refers in German to the class of Cs that are V2 (mostly root Cs).
- If most such Cs also attract a constituent to their specifier, we have V2.
- Only yes/no question Cs do not.

No V-Subject Adjacency

(91)   Wahrscheinlich wird später Hans dieselbe Uhr   kaufen.
         probably   will later Hans the.same watch buy
         'Hans will probably buy the same watch later.' (Haeberli 2000,
         (6a))

Unlike English, Align V-C does not refer to the complement of C (TP).

Summary

- The Generalized Alignment account proposed here for the relation between C and V_{tense} can account for the facts in numerous different languages.
- We see variation across languages in exactly the ways that the Alignment model predicts.
- At the same time, we want to relate all of these inversion constructions, and Align V-C does that.

- Preverbal clitics may have to align with T (or V_{tense} again);
- Second-position clitics may have to Align with some projection of C.

Alexiadou, Artemis, and Elena Anagnostopoulou (2001), "The Subject-in-Situ Generalization and the Role of Case in Driving Computations." *Linguistic Analysis* 1: 205–245.

Authier, J.-Marc (1992), "Iterated CPs and Embedded Topicalization." *Linguistic Inquiry* 23: 329–336.

Bhatt, Rakesh, and James Yoon (1991), "On the Composition of COMP and Parameters of V2." In Dawn Bates, ed., *The Proceedings of the Tenth West Coast Conference on Formal Linguistics*, Stanford: CSLI Publications, pp. 41–52.

Bruening, Benjamin (2010), "Language-Particular Syntactic Rules and Constraints: English Locative Inversion and *Do*-Support." *Language* 86: 43–84.

Bruening, Benjamin (2014), "Precede-and-Command Revisited." *Language* 90: 342–388.

Chomsky, Noam (1993), "A Minimalist Program for Linguistic Theory." In Kenneth Hale and Samuel Jay Keyser, eds., *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger*, Cambridge, MA: MIT Press, pp. 1–52.

Chomsky, Noam (2000), "Minimalist Inquiries: The Framework." In Roger Martin, David Michaels, and Juan Uriagereka, eds., *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik*, Cambridge, MA: MIT Press, pp. 89–155.

Collins, Chris, and Phil Branigan (1997), "Quotative Inversion." *Natural Language and Linguistic Theory* 15: 1–41.

Culicover, Peter W. (1991), "Topicalization, Inversion and Complementizers in English." In Denis Delfitto, Martin Everaert, Arnold Evers, and Frits Stuurman, eds., *Going Romance and Beyond*, Utrecht: University of Utrecht, pp. 1–45.

Culicover, Peter W. (1992), "The Adverb Effect: Evidence against ECP Accounts of the *That-t* Effect." In Amy J. Schafer, ed., *Proceedings of the North East Linguistic Society (NELS) 23*, Amherst, MA: GLSA, pp. 97–111.

Engels, Eva (2004), *Adverb Placement: An Optimality Theoretic Approach*. Ph.D. thesis, Universität Potsdam.

Haeberli, Eric (2000), "Adjuncts and the Syntax of Subjects in Old and Middle English." In Susan Pintzuk, George Tsoulas, and Anthony Warner, eds.,

Diachronic Syntax: Models and Mechanisms, Oxford: Oxford University Press, pp. 109–131.

Haegeman, Liliane (1994), *Introduction to Government and Binding Theory*. Oxford: Blackwell, second ed.

Haegeman, Liliane (2000), "Inversion, Non-Adjacent Inversion, and Adjuncts in CP." *Transactions of the Philological Society* 98: 121–160.

Haegeman, Liliane (2012), *Adverbial Clauses, Main Clause Phenomena, and the Composition of the Left Periphery*. Oxford: Oxford University Press.

Kayne, Richard, and Jean-Yves Pollock (2001), "New Thoughts on Stylistic Inversion." In Aafke Hulk and Jean-Yves Pollock, eds., *Subject Inversion in Romance and the Theory of Universal Grammar*, Oxford: Oxford University Press, pp. 107–162.

Landau, Idan (2007), "Constraints on Partial VP-fronting." *Syntax* 10: 127–164.

Levine, Robert D. (1989), "On Focus Inversion: Syntactic Valence and the Role of a SUBCAT List." *Linguistics* 27: 1013–1055.

McCarthy, John, and Alan Prince (1993), "Generalized Alignment." *Yearbook of Morphology*: 79–153.

McCloskey, James (2006), "Questions and Questioning in a Local English." In Raffaella Zanuttini, Héctor Campos, Elena Herburger, and Paul H. Portner, eds., *Negation, Tense and Clausal Architecture: Cross-Linguistic Investigations*, Georgetown, D.C.: Georgetown University Press, pp. 86–126.

Phillips, Colin (1996), *Order and Structure*. Ph.D. thesis, Massachusetts Institute of Technology. Distributed by MIT Working Papers in Linguistics, Cambridge, Mass.

Phillips, Colin (2003), "Linear Order and Constituency." *Linguistic Inquiry* 34: 37–90.

Postal, Paul M. (2004), "A Paradox in English Syntax." In *Skeptical Linguistic Essays*, Oxford: Oxford University Press, pp. 15–82.

Reinhart, Tanya (1981), "A Second Comp Position." In Adriana Belletti, Luciana Brandi, and Luigi Rizzi, eds., *Theory of Markedness in Generative Grammar: Proceedings of the 1979 GLOW Conference*, Pisa: Scuola Normale Superiore di Pisa, pp. 517–557.

Richards, Norvin (1999), "Dependency Formation and Directionality of Tree Construction." In Karlos Arregi *et al.*, eds., *Papers on Morphology and*

Syntax, Cycle Two, Cambridge, MA: MITWPL, vol. 34 of *MIT Working Papers in Linguistics*, pp. 67–105.

Rizzi, Luigi (1997), "The Fine Structure of the Left Periphery." In Liliane Haegeman, ed., *Elements of Grammar*, Dordrecht: Kluwer, pp. 281–337.

Toivonen, Ida (2003), *Non-Projecting Words: A Case Study of Swedish Particles*. Dordrecht: Kluwer.

Torrego, Esther (1984), "On Inversion in Spanish and Some of Its Effects." *Linguistic Inquiry* 15: 103–129.

Zeller, Jochen (2001), *Particle Verbs and Local Domains*. Amsterdam: John Benjamins.

Department of Linguistics and Cognitive Science
University of Delaware
Newark, DE 19716
(302) 831-4096
bruening@udel.edu