

Spec-CP and wh-movement in German

Important things you will learn in this section:

- German wh-questions resemble English wh-questions
- German yes/no questions resemble English yes/no questions
- German declaratives resemble English wh-questions

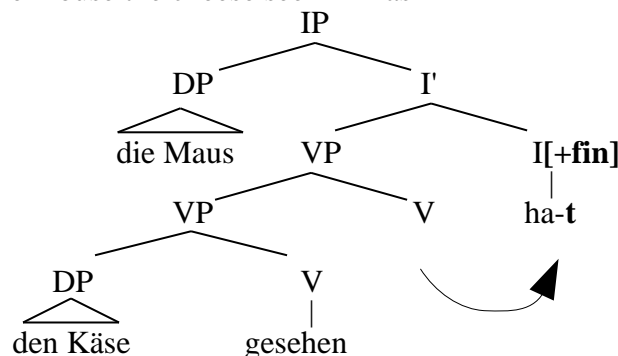
1 The German clause

1.1 German basic clause structure

Remember that the structure of the basic German clause is very similar to the structure of the basic English clause. They are both IPs. The important difference is that German verbal projections, VP and IP, are head-final, which is the same as saying that they take their complements on the left. (head-final = 'take complements on left', 'head-initial' = 'take complements on the right'). So far so good.

Let us also recall that in German all verbs start in their own VP, and the top verb, which is finite, moves up from V to I in order to carry the finiteness feature.

- (1) (weil) die Maus den Käse gesehen hat
 because the mouse the cheese seen has



This is the **basic clause structure of German**. The main clause (with the finite verb in second position, eg *Der Vogel frisst den Wurm*) is regarded as a derived form.

This is often not clear to speakers of German. So why are we saying that the basic German clause is the **embedded clause** such as (2a), and **not** the matrix clause such as (2b):

- (2) a. ... (weil) die Maus den Käse sieht
 b. Die Maus sieht den Käse

There are many reasons, some of which we shall discuss in future sessions, but here are a couple of them.

First reason: if we express just the verb and object, without the rest of the sentence structure around it, then the basic order is object verb:

- (3) A: Hast du eine Lösung für die Klimakrise?
 B: Bus fahren, Rad fahren, den Fernseher ausschalten, die Heizung runterdrehen.
 B: *fahren Bus, fahren Rad, ausschalten den Fernseher, runterdrehen die Heizung

There is no CP or IP (non-finite verb!) so this is just a VP. It is systematically head-final. Even small children learn this very early. So the German VP is basically head-final, with its complement on the left. This is not what we find in *Der Vogel frisst den Wurm*.

Second reason: Even in declarative main clauses, the basic order of verbs and their complements is complement>verb. If we only have one verb, we do not see this, but as soon as we add several verbs we can see that **just the first, finite verb shifts forwards:** the rest never do. The finite verb is the exception. The others always appear to the right of their complements. This shows us that the basic order is head-final; the shifted verb is the exception.

- (4) a. Du hast es.
 b. Du hast es<gemacht.
 c. Du hast es<machen<können
 d. Du hast es<machen<können<wollen
 e. Du hast es<machen<können<wollen<müssen

Even then the finite verb only **sometimes** appears at the beginning of the clause. In many circumstances, it appears as the top (ie right-most) verb at the end with the others.

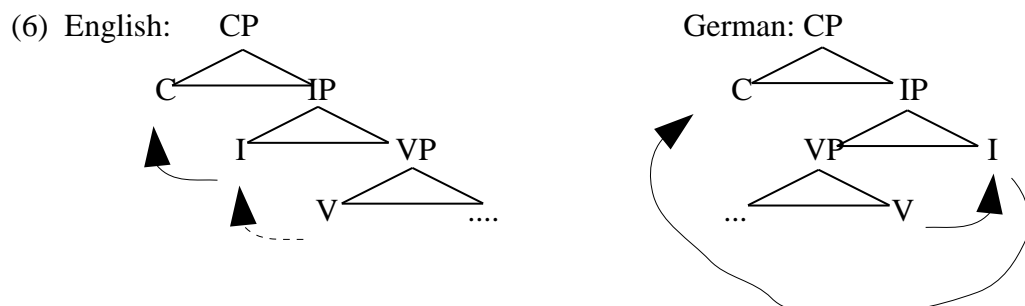
- (5) weil du es<machen<können<wollen<müssen<**hast**

There seems to be little doubt that the basic clause structure in German is head-final, and that the verbs in second position occur there for quite independent separately identifiable reasons.

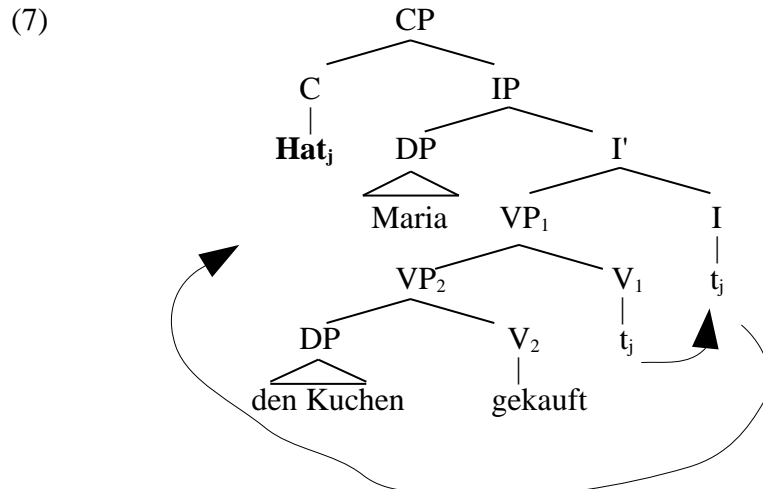
1.2 Revision: German yes/no questions

Recall that the mechanisms for making questions in German are like the mechanisms in English. From the I position, the finite verb moves up to the next highest head position, C. This is just head movement, like in English, but the heads I and C look further apart because the V and I projections are head-final in German, but the German CP is head-initial, like in English.

It looks more complex, but it is just the head direction in German VP and IP. Here as a sketch:



So the full structure we get for a German yes/no question is:



1.3 Wh-questions: wh-movement

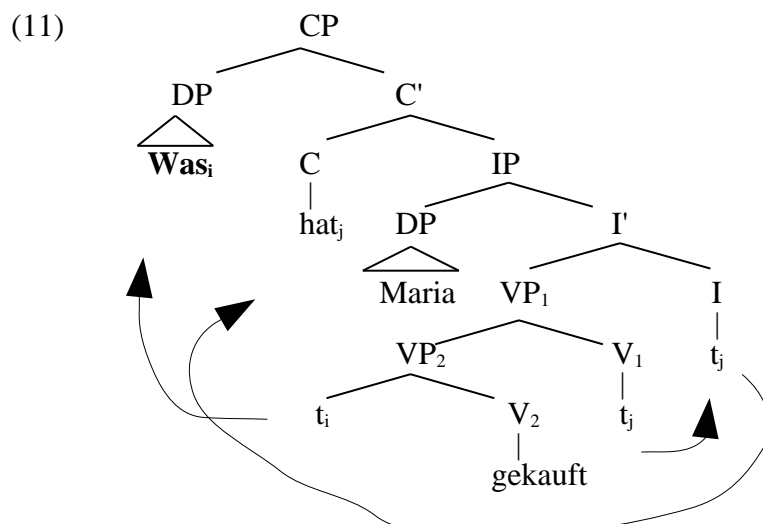
In wh-questions in both languages, a wh-phrase (eg *who*, *what*: *wer*, *was*) moves into the sentence-initial position spec-CP. The finite verb occupies the next position, the head C.

- (9)
- | | | | |
|-----------------|---------------|------------------------|---|
| spec-CP | C | [IP |] |
| a. [what] | <u>can</u> | Mary buy ____ ? | |
| b. [which cake] | <u>will</u> | Mary buy ____ ? | |
| c. [for whom] | <u>should</u> | Mary buy a cake ____ ? | |

- (10)
- | | | | |
|---------------------|---------------|-------------------------------|---|
| spec-CP | C | [IP |] |
| a. [was] | <u>kann</u> | Maria __ kaufen? | |
| c. [welchen Kuchen] | <u>wird</u> | Maria __ kaufen? | |
| d. [für wen] | <u>sollte</u> | Maria __ einen Kuchen kaufen? | |

As in English, the wh-phrase in German comes to be in the initial position by wh-movement, i.e. movement of a phrasal projection XP into the specifier of CP.

The wh-phrase appears to come from a different place in German, but it is not really different, structurally it is exactly the same place. A *what* or *was* asking about the object will leave a gap in the position of the complement of V in both languages, for example (11):



Two surprising facts follow:

i) So **German declaratives have the same structure as English wh-questions**, but in English only a wh-phrase moves to spec-CP: in German declaratives **any** one phrase can move there.

ii) So **German wh-questions and declaratives have the same structure**, only the existence of the wh-phrase distinguishes them.

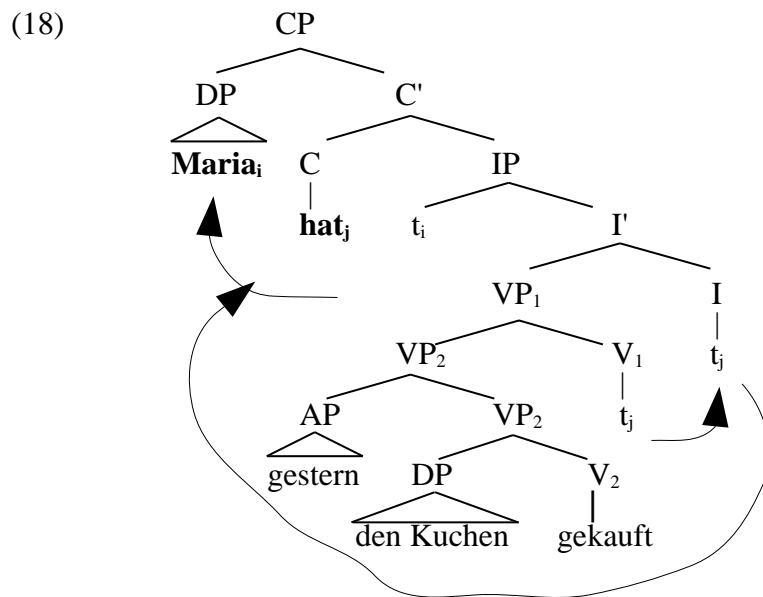
So in German main clause declaratives the finite verb, whatever it is, moves from V to I to C:

- (16) a. [_{spec-CP} Maria]_j [C muss]_i [IP t_j [VP₂ [VP₁ den Kuchen kaufen] t_i] t_i]
- b. [_{spec-CP} Maria]_j [C hat]_i [IP t_j [VP₂ [VP₁ den Kuchen gekauft] t_i] t_i]
- c. [_{spec-CP} Maria]_j [C kauft]_i [IP t_j [VP₁ den Kuchen t_i] t_i]

... and the initial position is filled by any phrasal projection:

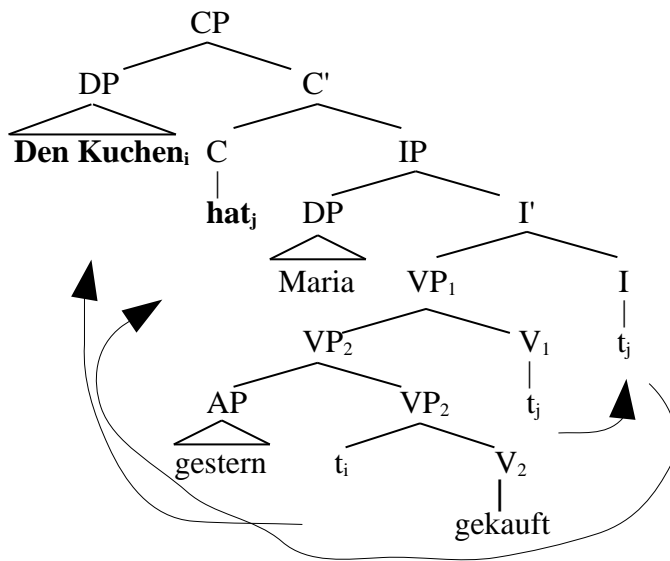
- (17) a. Markus hat ___ gestern den Kuchen gekauft
 - b. Den Kuchen hat Markus gestern ___ gekauft
 - c. Gestern hat Markus _____ den Kuchen gekauft.
- and so on...

This explains why German declaratives can easily start with a subject . . .



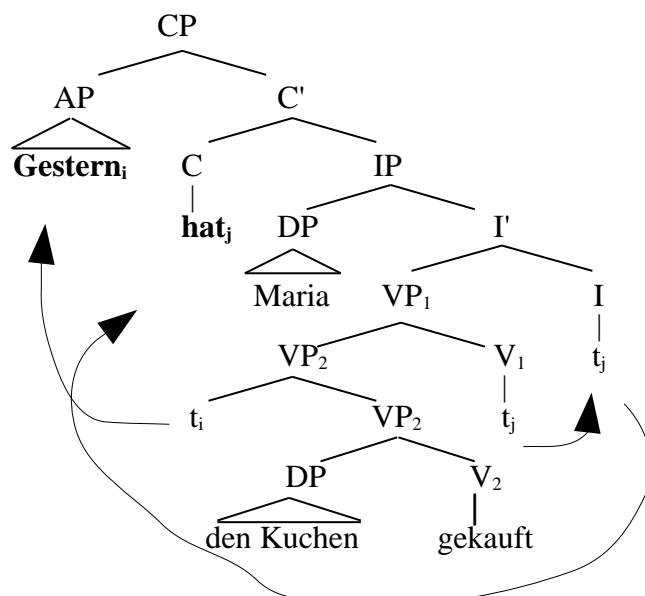
... but they can just as easily start with an object ...

(19)



... or any other phrasal constituent ...

(20)



. . . since the surface word order is not determined by the structural positions of the various constituents. English word order is very tightly restricted to *Subject Verb Object the rest....* This SVO order reflects the order of the projections: spec-IP > I > V > complement...

The word order at the beginning of German sentences, on the other hand, reflects the CP position. What is fixed is that the finite verb moves to C. Any phrasal constituent can move to spec-CP, but if it is not the subject, the subject comes next after the C position. So German sentence word order has the pattern: *Any phrase XP finite verb subject (unless it is the initial XP) the rest..* This reflects the order of the projections: spec-CP > C > spec-IP > VP

It is worth noting here that this **more abstract analysis with a CP projection** can explain why German word order behaves as it does, and why it is different from English. Rules which try to account for these orders by just looking at the surface patterns cannot do this. This illustrates that more abstract analyses can often be **more explanatory** in linguistics.

2.1 Verb-second in English

It is interesting to note that this sort of structure is not completely impossible in English. Look at these examples, which show the same pattern as German: 'any one XP to spec-CP' and then 'finite verb in second place'. English has lost this as the normal structure, however, and it is only possible now with initial XPs which are in some way negative. Notice also that the verb which moves to C must be one which can appear in the I position (ie no main verbs).

- (21) a. **Never again** will I allow that dog into my house!
 b. **Hardly had** Harry put on his invisibility cloak when Snape appeared in the room.
 c. **No better chocolate cake** have I ever tasted.
 d.*No better chocolate cake I have ever tasted.

Summary:

- German and English yes/no questions have the same structure. They are CPs with a finite verb in the C position but an empty spec-CP position. This is why the verb appears first.
- German and English wh-questions have the same structure. They are CPs with a finite verb in the C position and a wh-phrase in the spec-CP position.
- German main declarative clauses are CPs too, with the finite verb in the C position and any phrasal constituent in spec-CP. This contrasts with English declarative clauses which are normally IPs, with nothing in CP. But this structure is still possible in English too, in certain circumstances.

Exercises 1

1. Was wird er wollen?
what will he want
2. Kauft sie Blumen?
buys she flowers
3. Was machst du?
what make you
4. Hat sie es gemacht?
has she it done
5. Wer sucht ihn?
who looks.for him
6. Wen frisst der Tiger?
whom eats the tiger
7. Was wird die Kanzlerin erwartet haben?
what will the chancellor expected have
8. Wen hat die Polizei jetzt gefangen?
who has the police now caught
9. Stefan hat ein Haus gebaut.
Steven has a house built
10. Morgen kommt der Weihnachtsmann
tomorrow comes the Father.Christmas
11. Käsespätzle esse ich jeden Sonntag.
cheese.pasta eat I each Sunday
12. Never had I seen a bigger mess!

Exercises 2

1. Wir sollten einen Polizisten fragen.
we should a police.officer ask
2. Jetzt suche ich eine Tankstelle
now look.for I a petrol.station
3. Fußball spielt Maria selten
football play Mary rarely
4. Welche Räuber fanden das Geld?
which robbers found the money
5. Peter hat Pizza gemacht.
Peter has pizza made
6. Pizza isst Maria gerne.
pizza eats Mary with.pleasure
7. Wo wohnt Jakob?
where lives Jacob
8. Wer von euch spielt welches Instrument?
who of you plays which instrument
9. Die Pizza schmeckt gut.
the pizza tastes nice
10. Karl mag Pizza mit Meeresfrüchten.
Charles likes pizza with seafood
11. Schlafen die Studis immer in der Klasse?
sleep the students always in the class
12. Wie wird der neue Papst dann heißen?
how will the new Pope then be.called