Complexity Index

Complex sentences are those that contain an independent clause (sometimes called a main clause) plus one or more dependent clauses. In order to calculate the Complexity Index (CI), each C-unit in the transcript must be examined for dependent clauses. (A C-unit is essentially a sentence; each is entered on a separate line in a transcript. Partial sentences are also C-units, but partial sentences due to ellipsis when answering a question or those that are cut off before the child finished them are not analyzed. See the Transcription section for how to determine utterance boundaries.)

Dependent clauses are units with verbs. There are two basic types: subordinate and nonfinite. Dependent clauses include the following types. It is not necessary to identify the type, just to identify the dependent clauses. To identify dependent clauses, first look for 'extra' verbs in the sentence (those not in the main verb clause). Not all 'extra' verbs will count – see the exceptions at the end of the list.

Note: As noted above, some partial sentences will be included; however, do not count any dependent clauses that are in partial sentences. For example, "not happy because it fell in" would be counted as a main clause but the dependent clause would not be counted.

Complex sentences: Main clause plus any of the following types of dependent clauses.

Subordinate clauses:

<**adverbial clause**

   He was angry *because she had dropped it.*
   Although it was an accident she ran away.
   When she tried to fly it, the plane fell in the water.
   She grabbed it *before he could stop her.*
   After she grabbed it, he was really mad.

<**relative clause** (wherever it occurs)

   The elephant, *who was very large,* could move very fast.
   The lifeguard used the net *that was by the pool.*

<**sentences in which full sentences serve as noun phrases**

   She thought *the plane was cool.*
   She believed *(that) she could do it.*

<**sentences with wh-clauses** (wh- words as well as *how, if,* and *like*)

She doesn't know *where she's going.*
That's *how it happened.*
She wanted to see *if she could fly it.*
Do it *like he does (it).*

⊲ **Direct or indirect quotations**

Sentences containing quotations followed by at least a clause.

She said, *ADon=t do that.@*
"*Look*!" he shouted.
He said, "*Thank you*" / "*You're welcome.*"
She explained (that) she had dropped it in the pool.

NOT: *She said, AHello.@* or *He said, ANot that.@*

⊲ **appositive clause**

The answer, *whether or not we like it,* is complex.

Note: An appositive is only a clause if it contains a verb. Otherwise, it is an appositive **phrase** and not a clause, as in "The answer, short and sweet...". Appositive phrases are not counted.

Nonfinite clauses:

⊲ **infinitive clause**

He really wanted *to get the plane.*
He got the ball for her *to have.*
She had *to ask for help.*
They wanna play [= want *to play*].
It's gonna fall in the water [= going *to fall*].
[Note: it is better to transcribe *gonna* and *wanna* as *going to* and *want to,* so that both words are counted and it is easier to see the infinitives when counting clauses.]

⊲ **unmarked infinitive clause**

She let the ball *fall in the water.*
She made the plane *fall in.*

⊲ **Wh- infinitive clauses** (count as one dependent clause, not two)

Tell me *when to start.*
I know *how to do that.*

⟨**gerund clause**

She made a big mistake by *dropping the plane.*
She made a mistake *trying that.*
Trying to fly the plane was a mistake.

[note: 'she was almost hit by *the falling plane*= would **not** contain a gerund
clause, since 'falling' functions as an adjective here, but 'she was almost hit by
the plane falling' would contain a gerund clause]

<**past participles**

She had a wagon with a balloon *tied to it.*
the boy did not want his sandcastle *ruined.*
He had no more balloons *left.*

Double embeddings

C-units may contain more than one dependent clause. Count each dependent clause.

Main clause + 2 dependent clauses:

She was sorry *1) when she realized 2) that the plane had fallen in.*

I think *1) I know 2) what this is.*

I'm gonna [= going *1) to*] *let* it *2) go* now.

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Units that are NOT counted as dependent clauses:

Conjoined phrases, either nouns or verbs (also called coordinated phrases)

She had coffee, toast and cereal for breakfast. (1 main clause only)

She sat down and ate her breakfast. (Second subject was deleted--thus 1 main
clause. This can be confusing because there are two verbs, but no dependent
clause)

Auxiliary and main verbs in the same clause (these are considered one verb phrase)

She *should have been thinking* about his feelings.

Prepositional phrases, however long or numerous they may be

She was tired from the top of her head to the tips of her toes. (1 main clause only)

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To calculate the Complexity Index:

1. Add up all the independent and dependent clauses in the transcript. (Note: count partial sentences as independent clauses except for any you have excluded according to the rules above.)

2. Divide by the number of independent clauses.

Example: In a transcript with 20 C-units that are countable, there are 20 independent clauses. If there were 5 dependent clauses in the transcript, the CI would be:

20 + 5 / 20 = 1.25.