

## Factivity and veridicality in South Slavic and Balkan languages

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### 1. Introduction: Factivity vs veridicality

Ever since the seminal work in Kiparsky & Kiparsky (1970), it has been widely observed that there exists a special class of verbs on a cross-linguistic level which introduce complements that are assumed to be true: **factive verbs**. Below we present a (non-exhaustive) list of predicates that have been typically labeled as factives (taken from Anand, Grimshaw and Hacquard [2017]).

#### (1) 'Factive' verbs

absorb, acknowledge, ascertain, aware, bother, catch on, catch, comprehend, conscious, detect, discover, figure out, find out, forget, get, glimpse, grasp, hear, happy, intuit, know, learn, mindful, mystified, notice, observe, prove, puzzled, realize, recall, recollect, register, resent, regret, remember, see, smell, surprised, take in, unaware, understand, uninformed, unsurprised

The truth of the complements introduced under factives (e.g. *know*, *regret*) typically cannot be cancelled by the speaker (2), whereas this is possible with non-factives (e.g. *think*, *believe*, *say*) (3).

- (2) a. John believes that Mary left, but he is wrong.  
b. Ivan kazva će Marija e pristignala, no tja ošte ne e tuk. (Bg)  
I. says that M. has arrived but she still not is here  
'Ivan says that Marija has arrived, but she is still not here.'  
c. Ivan misli da je Marija otišla, ali to nije istina. (SC)  
I. thinks that has M. left but it is not-is true  
'Ivan thinks that Marija left, but it is not true.'
- (3) a. # John knows that Mary left, but he is wrong.  
b. # Ivan sažaljava će Marija si e zaminala, no az znam, će tja e ošte tuk. (Bg)  
I. regrets that M. REFL.has left but I know that she is still here  
'Ivan regrets that Marija left but I know that she is still here.'  
c. # Ivan je sretan da je Marija došla, ali zapravo ona nije došla. (SC)  
I. is happy that has M. arrived but in fact she not-has arrived  
'Ivan is happy that Marija arrived, but in fact she has not arrived.'

The contrast in acceptability in (2-3) is usually explained by referring to the notion of *presuppositionality* (Stalnaker 1973, Heim 1992, Abbotts 2008 etc.)

- (i) **Presupposition** – Shared background assumption grounded in discourse (i.e. common ground) (Stalnaker 1973, 1974 etc.).

Factive predicates like *regret* introduce a *presupposition* which forces the complement clause to be interpreted as true rather than just having a truth value (i.e., be evaluated as true or false), as is the case of non-factive predicates.

- (ii) **Veridicality**- truth entailment (Egré 2008)  
 $S [Vp] \models p \rightarrow$  ‘Mary knows that John left’  $\models$  ‘John left’ – truth entailment

Certain ‘factive’ verbs in (1) project presuppositions (typically emotive factives, e.g. *regret*, *be happy*, *be surprised*)- *true factives*; others involve truth entailment (typically cognitive factives, e.g. *know*, *realize*, *prove* etc.)- *veridical verbs*.

## 2. Factive vs veridical verbs

### 2.1 Presupposition projection

Truth presupposition survives in certain environments where truth entailment fails, in particular in non-veridical contexts such as negated clauses, questions, conditionals etc. As a result, veridical verbs (i.e. cognitive factives) lose their truth reading in such environments, whereas factive/presuppositional verbs (i.e. emotive factives) preserve their truth reading (Langendoen&Savin 1971 Heim 1992 etc.)

- (4) a. Tužitelj nije iznenađen/ne žali da je Ivan bio na mjestu zločina. (SC)  
 ‘The prosecutor is not surprised/does not regret that I. was at the scene of the crime.’  
 >>presupposition: Ivan was at the crime scene
- b. Ako kasnije zažalim da sam ga prevario, ispričat ću se.  
 ‘If I later regret that I swindled Ivan, I will apologize.’  
 >> presupposition that the speaker swindled Ivan
- (5) a. Tužitelj nije dokazao/otkrio da je Ivan bio na mjestu zločina. (SC)  
 ‘The prosecutor did not prove/find out that I. was at the scene of the crime.’  
 //>> no presupposition, i.e. Ivan was not (necessarily) at the crime scene
- b. Ako kasnije otkrijem/shvatim da sam prevario Ivana, ispričat ću se.  
 ‘If I later discover/realize that I swindled I., I will apologize.’  
 //>> no presupposition that the speaker swindled Ivan

### 2.2 Old vs new information

Presuppositions cannot arise in assertions, i.e., they cannot introduce new information into the common ground but may only refer back to old information. As a result, factive verbs cannot be used assertively to bring about new information, e.g. in an answer to a question (7), whereas veridical verbs can be used in assertions (6). (Abbott 2000 etc.)

- (6) ‘When does the same start?’
- a. # Ivanu je žao/Ivan je iznenađen da počinje u 7. (SC)
  - b. Na Ivan mu e mačno/se iznenada, će započva v 7. (Bg)  
‘Ivan is sorry/suprised that it starts at 7.’
- (7) ‘When does the game start?’
- a. Ivan je doznao/se sjetio/shvatio da počinje u 7. (SC)
  - b. Ivan razbra/si spomni, će započva v 7. (Bg)  
‘I. has found out/remembered/realized that it starts at 7.’

### 2.3. Pragmatic presuppositions and the context of false belief

We analyze presuppositions as arising pragmatically, which means that they are context-dependent. In a given context (e.g. the context of false belief), the truth reading of presuppositional/factive clauses can be lost (8) (Egrè 2008, Baunaz 2017 etc.). On the other hand, veridical complements cannot lose their truth reading in such a way (9), because it is based on the semantic/logical relation of truth entailment.

- (8) a. Edip pogrešno misleše, će e nanesāl smārtonosna rana i sāžaljavaše, će e ubil strannika.  
Kak možeše da znae, će strannikāt se beše prestoril na märtav, za da se spasi.  
‘Oedipus wrongly thought that he inflicted a fatal wound, and he regretted that he killed a stranger. How could he know that the stranger pretended to be dead in order to save himself.’
- b. Ivan si je krivo umislio da se Marija udala za tog tipa, i žao mu je da više nije slobodna.  
‘Ivan got the wrong idea that Marija married that guy and he is sorry that she is no longer single.’
- (9) # a. Edip pogrešno misleše, će e nanesāl smārtonosnarana i znaeše, će e ubil strannika.  
‘Oedipus wrongly thought that he inflicted a fatal wound, and he knew that he killed a stranger.’
- # b. Ivan si je krivo umislio da se Marija udala za tog tipa, i shvatio je da više nije slobodna.  
‘Ivan got the wrong idea that Marija married that guy and he realized that she is no longer single.’

Factive and veridical verbs also differ because they can select different complementizers in certain Balkan and South Slavic languages.

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