

# Control Theory

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# Introduction

- Look at the following sentence
- 1. Sohan claims [that he knows someone in the intelligence department]
- predicates in (1)? **claim** and **know**
- Predictions of Theta Theory:

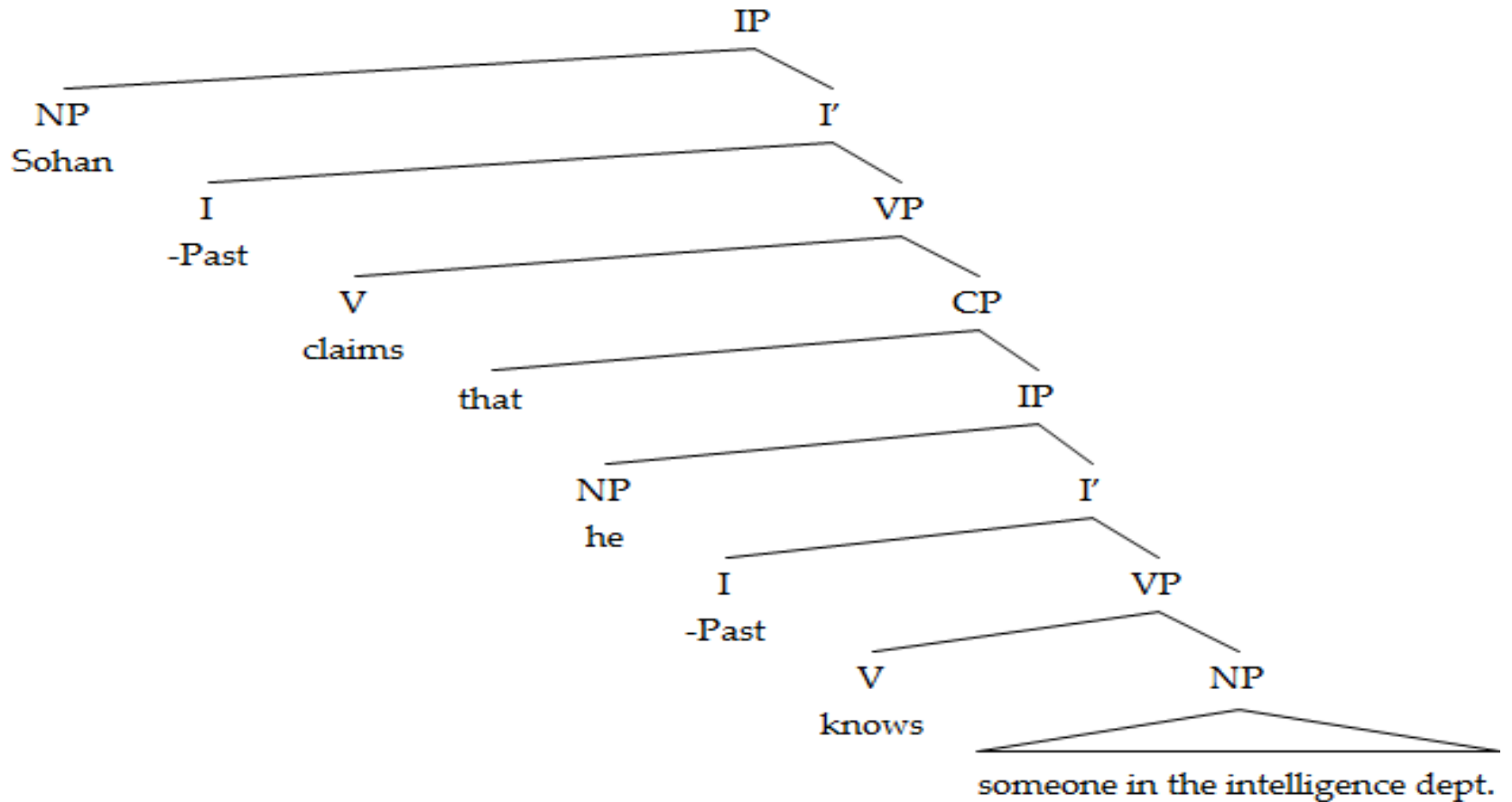
- Claim: V;

	1	2
	NP	{ NP CP }

# Cont..

- Know: V;      1                      2  
                    NP                      { NP }  
    { CP }
- 2. Sohan Claims the insurance money
- 3. Sohan knows him
- 4. Sohan knows that he will not rescue him
- Predicates require their arguments realized in sentences with them.

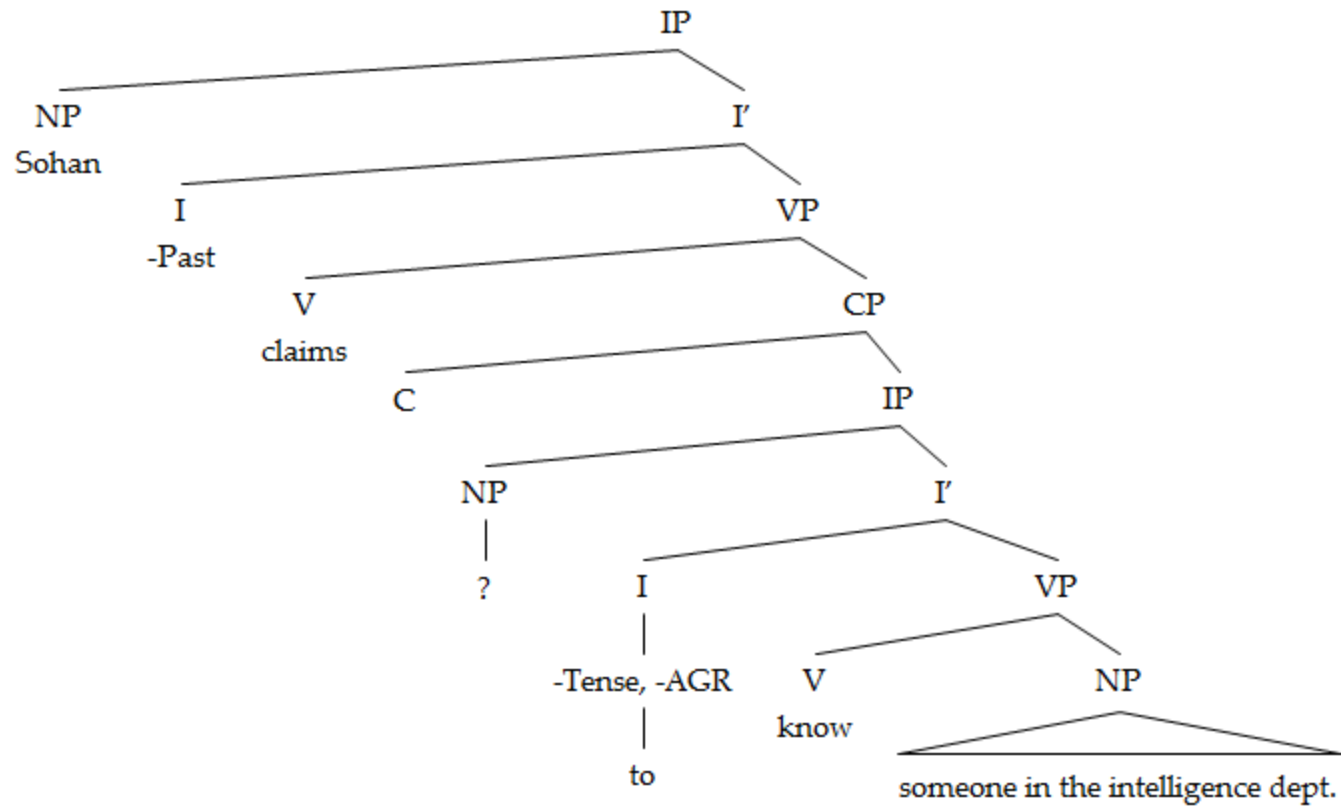
# S-Structure



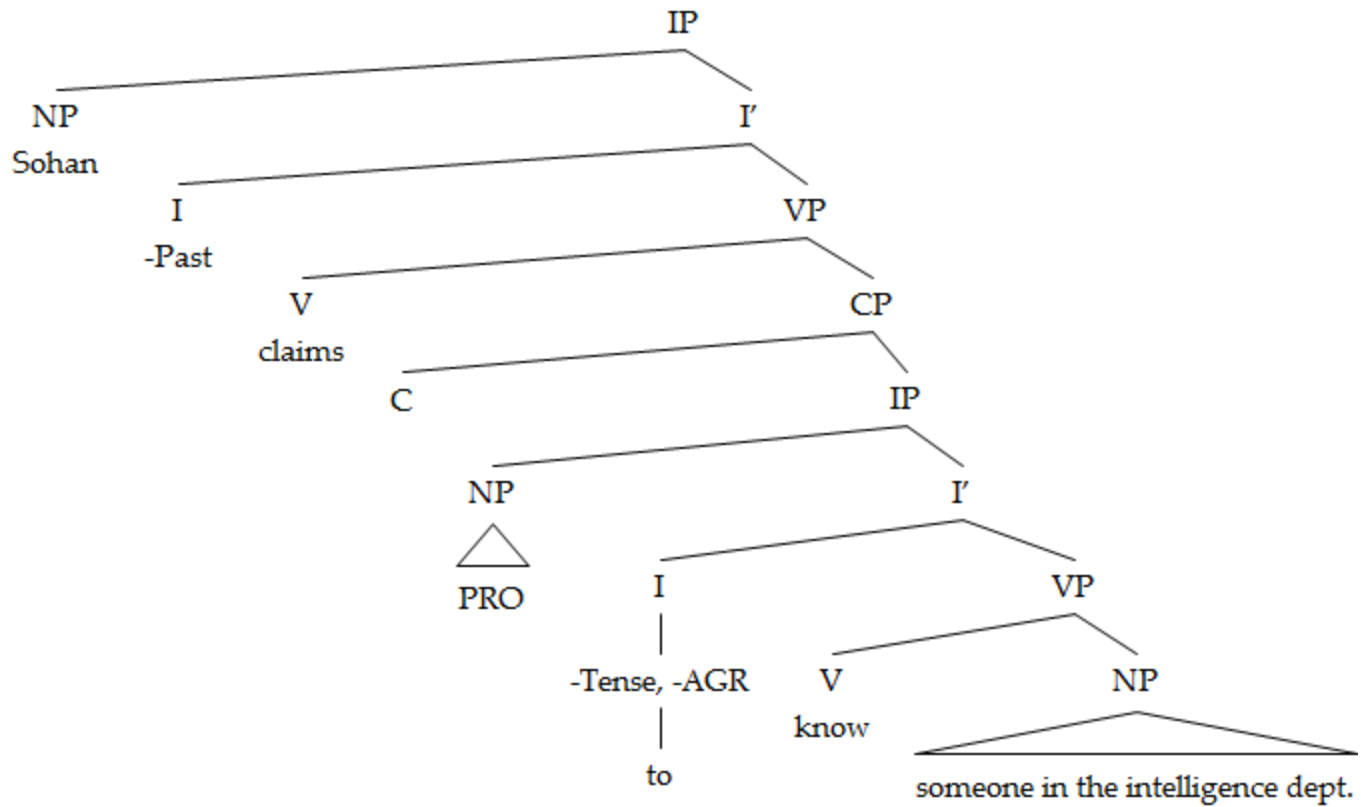
# Invisible Subject

- 5. Sohan claims[ to know someone in the intelligence dept.]
- 6. [ To know someone in the intelligence dept.] is enviable.
- The invisible subject pronoun in infinitives – PRO
- Required to satisfy Theta criterion and also EPP
- It may have specific reference or arbitrary reference
- It is both a pronominal and an anaphor
- When anaphoric, its antecedent is said to be controller and PRO, its controllee

# Structural representation



# S-structure



# Arguments motivating PRO

- PRO Subject has syntactic presence in the sentence playing a role to explain several facts.
- **Binding of Anaphors**
- 7. John claims[ PRO to have saved himself from a situation].
- **Distribution of *together***
- 8 a. They claimed [PRO to have reached the station together]
- b. \*John claimed [ PRO to have reached the station together]



# Control Theory

- The module of grammar dealing with the distribution and interpretation of PRO is known as control theory

# Distribution of PRO

- 9. \*Sohan<sub>i</sub> wondered [whether [ PRO<sub>i</sub> to read PRO before his examination]
- 10. \*Sohan wondered [whether[ PRO must read the prescribed textbooks before his examination
- 11. \*John believed [PRO to be honest]
- Replacing ungrammatical instances of PRO with an overt NP makes sentences (6-8) grammatical

# PRO must be ungoverned

- Legitimate instances of PRO cannot be substituted with an overt NP.
- Positions where overt NPs occur are Governed and assigned case
- Positions where PRO occur overt NPs are excluded.
- So the assumption: PRO is found in ungoverned positions. And hence not assigned with case.

# PRO Theorem

- PRO, a pronominal anaphor
- Hence its feature matrix  $\left( \begin{array}{l} +\text{Pronominal} \\ +\text{Anaphor} \end{array} \right)$
- 
- Binding Conditions A and B require quite contradictory requirements on its governing category
- Binding conditions on PRO cannot be met with
- Hence PRO satisfies Binding conditions vacuously: i.e without being governed at all

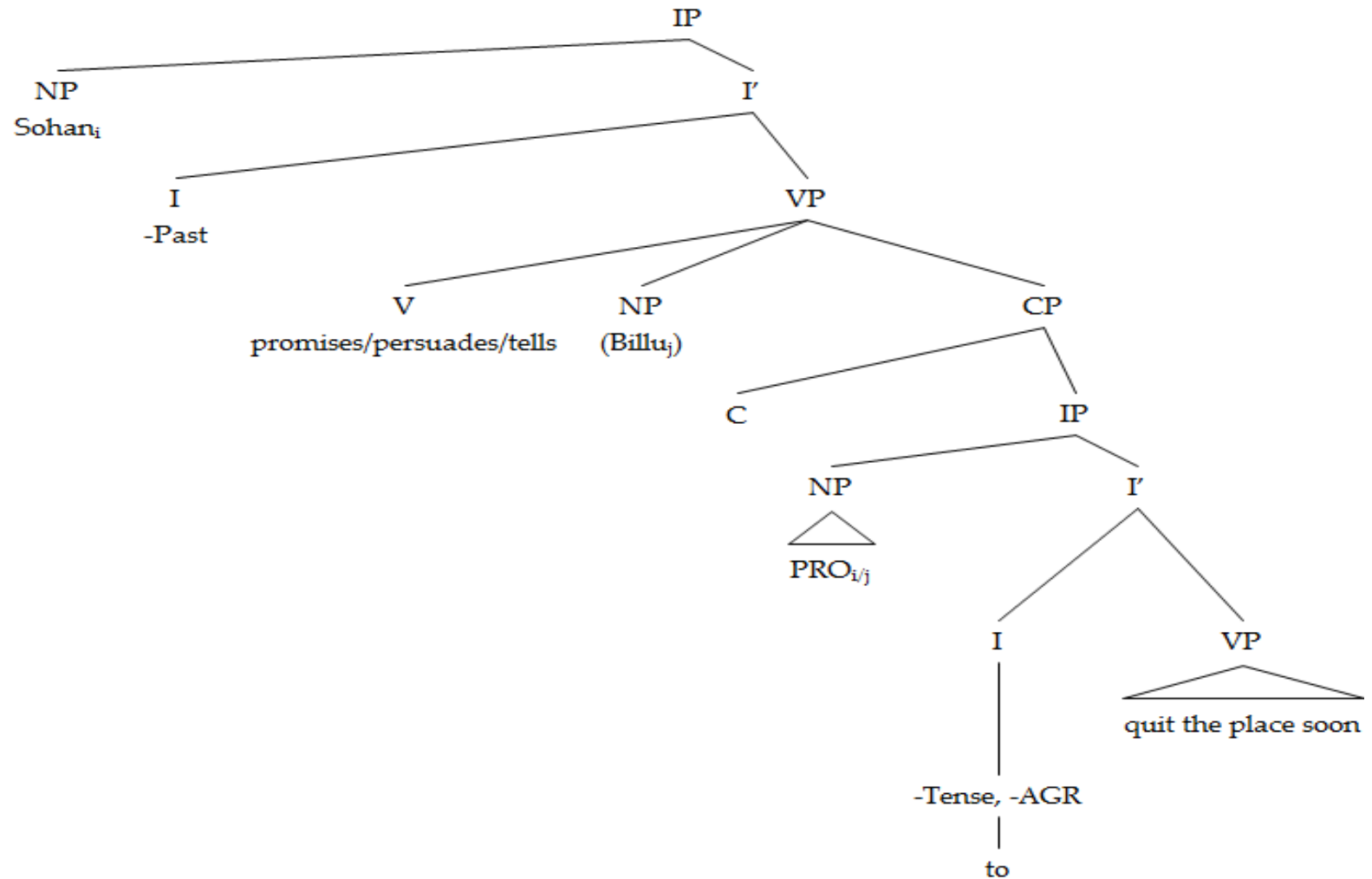
# Types of Control

- **Obligatory and optional**
- **Optional:**
- 12. John told us that it was important [ PRO to behave oneself/ourselves]
- 13. John wondered [how [PRO to behave oneself/himself]]
- **Only obligatory**
- 14. John tried [PRO to behave \*oneself/himself]
- 15 John was reluctant [ PRO to behave \*oneself/himself] (from Haegeman, 1994)

# Contd...

- 16. John promised [PRO to behave  
\*oneself/himself]
- 17. John persuaded Bill [PRO to behave  
\*oneself/himself]
- 18. John arrived [PRO pleased with  
\*oneself/himself]
- Types of Obligatory Control:
- Subject & Object Control: Matrix verbs decide

# S-structural representation



# C-Command and Control

- **Obligatory Control:** Controller must C-command its controllee
- Optional Control: C-Command not necessary
- 19 a. [PRO not to behave myself /himself/ oneself] would be wrong.
- b. [PRO to behave myself] would be my pleasure



# Only arguments can be Controllers

- **Non-arguments cannot be controllers**
- 20. There occurred three accidents [without there being any medical help around]
- 21. \*There<sub>i</sub> occurred three accidents [without PRO<sub>i</sub> being any medical help around]
- **Implicit arguments can control PRO but not omitted arguments(cf. 22 and 24)**
- 22. Certain allowances for employees were withdrawn [PRO to tackle the COVID crisis](Controller: Implicit Agent)
- 23. COVID-19 crisis led people<sub>i</sub>[ PRO<sub>i</sub> to lose hope in the almighty]
- 24\* COVID-19 crisis led [PRO to lose hope in the govt.](Controller: Omitted argument )

# References

- Carnie, Andrew. 2006. *Syntax: A Generative Introduction* (2<sup>nd</sup> Ed.). Oxford: Blackwell.
- Chomsky, N. A. 1981. *Lectures on Government and Binding*. Dordrecht: Foris.
- Haegeman, L. 1994. *Introduction to Government and Binding theory* (2<sup>nd</sup> Ed.). Oxford: Blackwell.