

Přirozený jazyk, mozek a akvizice jazyka

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Jazyk jako instinkt

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Noam Chomsky

- 1957 Syntaktické struktury
- 1965 Aspects of the Theory of Syntax

Jazyk = gramatika

- negramatičnost:

(1) *Já nejsem přišel.

Mozek a jazyk

Frenologický model mozku

Brocova a Wernickova oblast

Wernickova oblast

Afázie

Příklady Brocovy afázie

(2) Yes – ah Monday – ah – Dad – and Dad – ah Hospital – and ah Wednesday – ah – nine o'clock and ah Thursday – ten o'clock ah doctors two two ah doctors – and – ah teeth yah. And a doctor – ah girl – and gums and I.

Příklady Brocovy afázie

(3) The cat was chased by the dog.

(4) The car was chased by the dog.

(269)

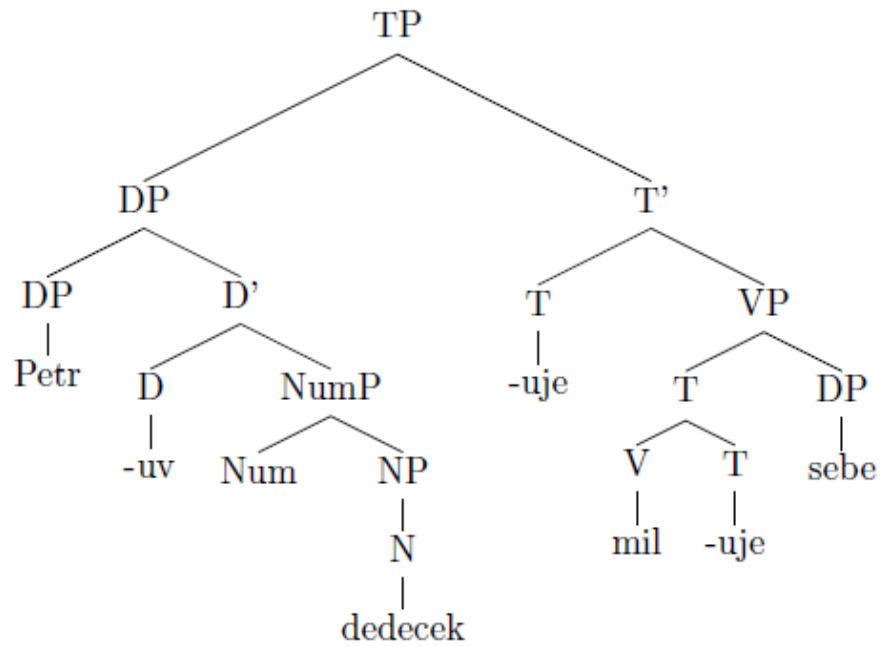


Figure 1: Strom1

Příklady Wernickovy afázie

- (5) I felt worse because I can no longer keep in mind from the mind of the minds to keep me from mind and up to the ear which can be to find among ourselves.

Příklady Wernickovy afázie

- (6) Me? Yes, sir. I'm a male demaploze on my own. I still know my tubaboys what for I have that's gone hell and some of them go.

Příklady afázie

Evidence pro modularitu

- (7) *The man admired Don's headache of the landscape.

vs.

- (8) The man admired Don's sketch of the landscape.



Figure 2: Frenologický model

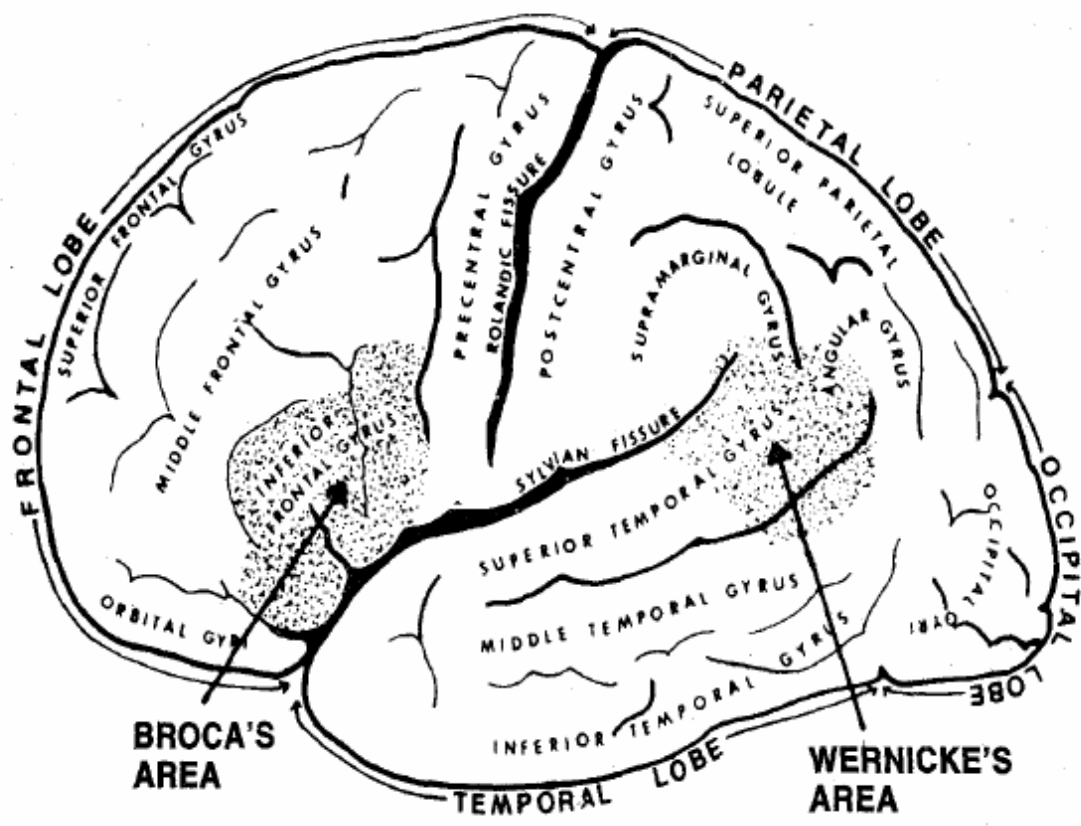


Figure 3: Brocova a Wernickova oblast

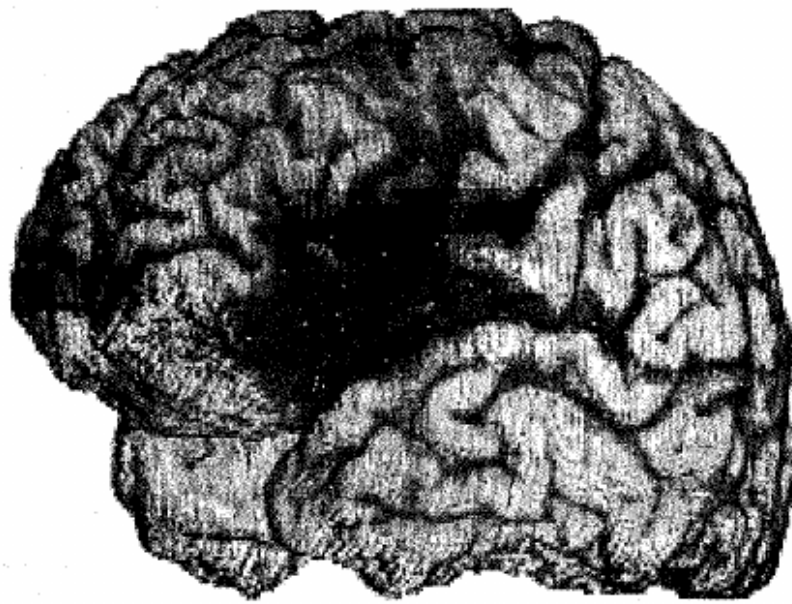


Figure 2.4 Three-dimensional reconstruction of the brain of a living patient with Broca's aphasia. Note area of damage in left frontal region (dark gray), which was caused by a stroke. (Courtesy of Hanna Damasio)⁴

Figure 4: Pacient s Brocovou afázií

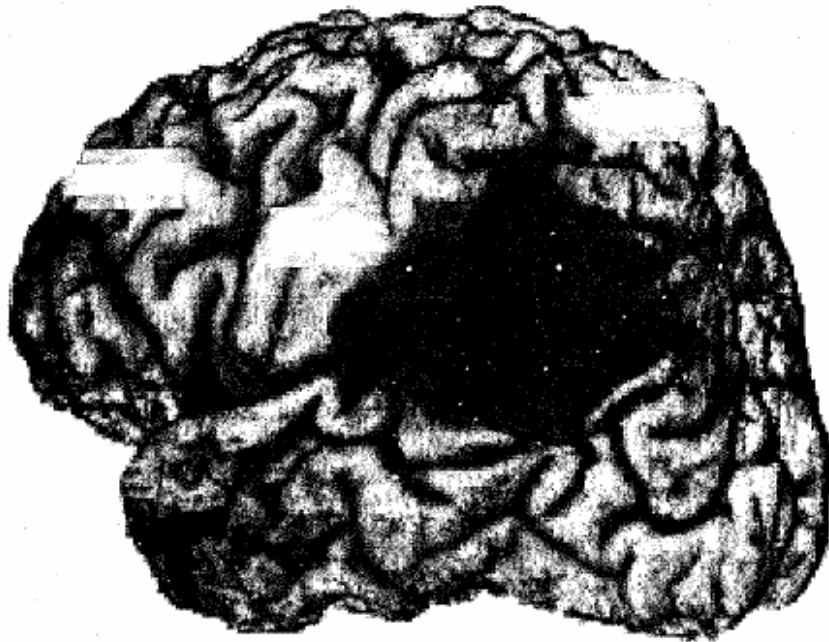


Figure 2.5 Three-dimensional reconstruction of the brain of a living patient with Wernicke's aphasia. Note area of damage in left posterior temporal and lower parietal region (dark gray), which was caused by a stroke. (Courtesy of Hanna Damasio)⁵

Figure 5: Pacient s Wernickovou afázií



Figure 6: Jazyk a rozvoj mozku

Autonomie jazyka

- (9) He was saying that I lost my battery powered watch that I loved; I just loved that watch; Last year at school when I first went there, three tickets were gave out by a police last year

Specific Language Impairment

- (10) She remembered when she hurts herself the other day. He did it then he fall. The boy climb up the tree and frightened the bird away.

Jazyk a rozvoj mozku

- (11) Man motorcycle have, Genie full stomach, Genie bad cold live father house, Want Curtiss play piano, Open door key

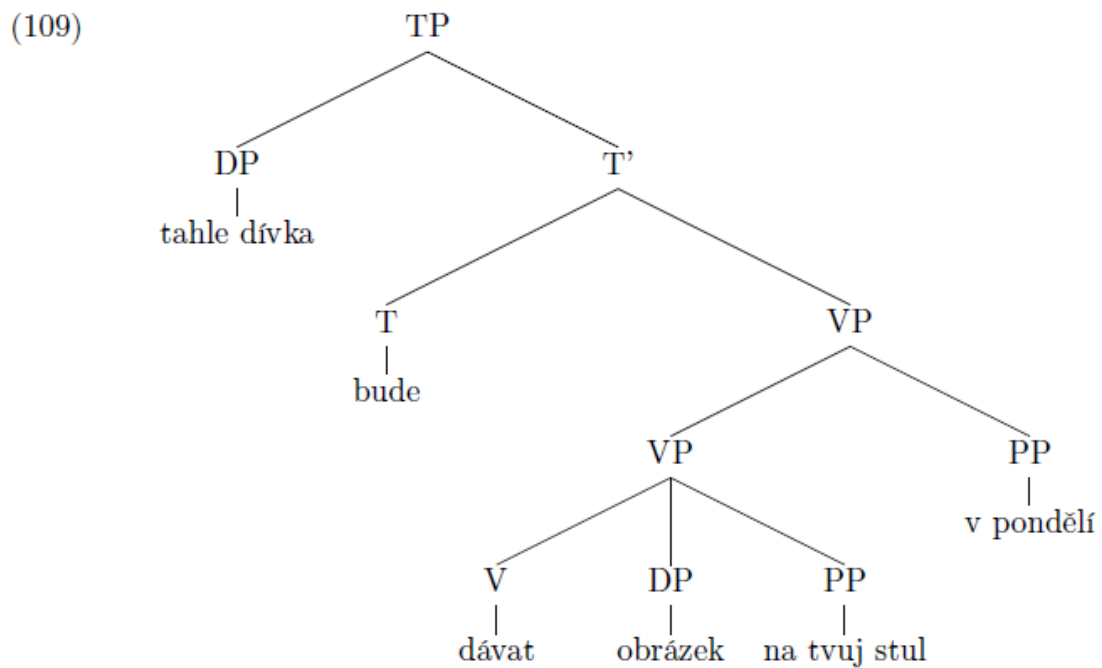


Figure 7: Syntaktický strom

Osvojování si jazyka

- Fáze v osvojování si jazyka:

První zvuky:

První slova

Dvouslovná fáze

Od dvouslovné fáze k nekonečnu

Teorie akvizice jazyka

- Ch: My teacher holded the baby rabbits and we patted them.
- M: Did you say your teacher held the baby rabbits?
- Ch: Yes.
- M: What did you say she did?



Figure 8: Wug

- Ch: She holded the baby rabbits and we patted them.
- M: Did you say she held them tightly?
- Ch: No, she holded them loosely.

Teorie akvizice jazyka

- Ch: Nobody don't like me.
 - M: No, say „Nobody likes me“
 - Ch: Nobody don't like me (8*)
 - M: Now, listen carefully, say „Nobody likes me.“
 - Ch: Oh, Nobody don't likes me.
-
- klasický příklad: učení se morfologie (J. Berko The Child's Learning of English Morphology. Word 14 (1958).
-
- This is a wug.
 - Now here is another one. There two of them. There are two ____.
 - [wugz] X [biks]



Figure 9: Washoe

Naučitelnost lidského jazyk

Opice

Washoe

Washoe

Sarah

Nim Chimpsky

- nejdelší věta: GIVE ORANGE ME GIVE EAT ORANGE ME EAT ORANGE GIVE ME EAT ORANGE GIVE ME YOU
- asi jen 12 % výpovědí bylo spontánních, zbytek byly odpovědi na stimuly (x lidské děti)

Shrnutí