

~~P \wedge T \notin LP~~

~~P \in T \rightarrow P \wedge T \notin LP~~ nu ASA

PP. RA că P \wedge T \in LP \Rightarrow există un altul caz aplicat în construcția lui

• C1 $\neg \neg A \Rightarrow P \wedge T \in LP$
nu se aplică deoarece P \wedge T \notin A

• C2 nu se aplică
 $\frac{P \wedge T}{\text{nu poate fi inclus ca } \neg P}$
nu începe cu \neg

• C3 nu se aplică încă odată ()

- P \wedge T

$$\frac{q_1 \in LP \quad q_2 \in LP}{(q_1 \wedge q_2) \in LP}$$

• C4 (), \vee

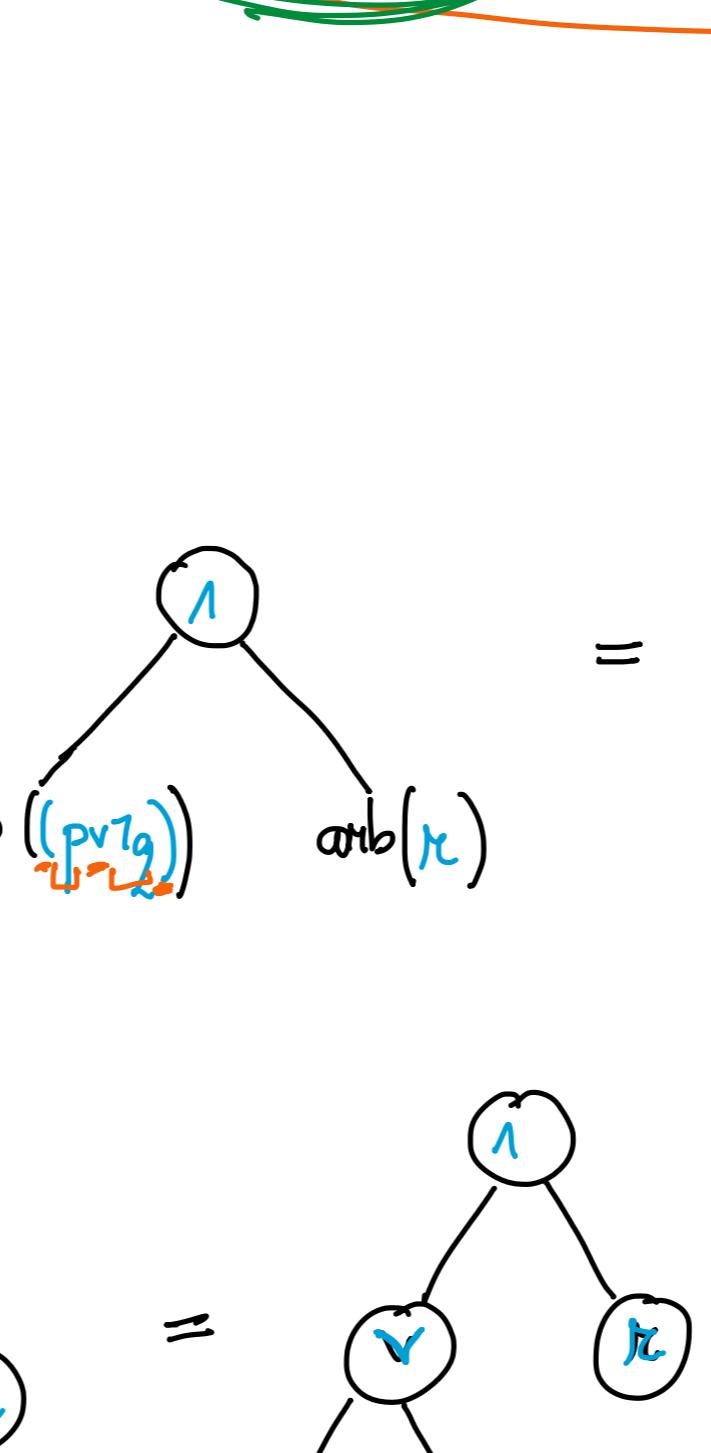
$\Rightarrow P \wedge T \notin LP$

SEMANTICA LP

B = {0, 1}

fals adevarat

$\tau: A \rightarrow B$



$$\begin{cases} \tau(p) = 0 \\ \tau(q) = 1 \\ \tau(r) = 0 \\ \tau(s) = 1 \end{cases} \quad p \in A \setminus \{q, r, s\}$$

$$- : B \rightarrow B \quad 0 = 1 \quad 1 = 0 \quad - \text{not.}$$

$$+ : B \times B \rightarrow B \quad \begin{array}{l} 0+0=0 \\ 0+1=1 \\ 1+0=1 \\ 1+1=1 \end{array} \quad - \text{nu}$$

$$\cdot : B \times B \rightarrow B \quad \begin{array}{l} 0 \cdot 0 = 0 \\ 0 \cdot 1 = 0 \\ 1 \cdot 0 = 0 \\ 1 \cdot 1 = 1 \end{array} \quad - \text{as}$$

$\hat{\tau}: LP \rightarrow B$

Ex 19

$$\begin{aligned} \text{subf}\left(\frac{(P \wedge T_1) \wedge T_2}{q_1 \quad q_2}\right) &= \{(P \wedge T_1) \wedge T_2\} \cup \text{subf}(P) \cup \text{subf}(T_1) \cup \text{subf}(T_2) \\ &= \{(P \wedge T_1) \wedge T_2, (P \wedge T_1), T_2, P, T_1, T_2\} \cup \text{subf}(q_1) = \\ &= \{(P \wedge T_1) \wedge T_2, (P \wedge T_1), T_2, P, T_1, T_2, q_1\} \\ &\cup \{(P \wedge T_1)\} \cup \text{subf}(P) \cup \text{subf}(T_1) \cup \{q_1\} \end{aligned}$$

Ex 20

$$2) \text{arb}\left(\frac{(P \vee T_1) \wedge T_2}{q_1 \quad q_2}\right) = \text{arb}(P) \cup \text{arb}(T_1) =$$

$$= \text{arb}(P) \cup \text{arb}(T_1) \cup \text{arb}(T_2) =$$

$$= \text{arb}(P) \cup \text{arb}(T_1) \cup \text{arb}(T_2) \quad \Rightarrow$$

$$\Rightarrow \text{cavt } \tau: A \rightarrow B \text{ a.i. } (\tau(P) \cdot \overline{\tau(T_1)} + \tau(T_2)) = 1$$

Alegem $\tau(P) = 0 \quad \tau(P) = 1$

- $\tau(T_2) = 1$

$$\tau(A) = 0, \forall a \in A \setminus \{T_2\}$$

$$\text{Verificare } \left(\frac{0 \cdot 1}{1} + 1 \right) = \left(\frac{0 \cdot 0}{1} + 1 \right) =$$

$$= \frac{0}{1} + 1 = \frac{1}{1} = 1 \quad \Rightarrow$$

$$= (1 \cdot 1) \cdot \overline{0} = (1 \cdot 0) \cdot 1 = 1 \cdot 1 = 1 \quad \Rightarrow$$

$$\Rightarrow \tau(A) = 0 \quad \Rightarrow$$

$$\Rightarrow \tau(P) = 1 \quad \Rightarrow$$

$$\Rightarrow \tau(T_2) = 1 \quad \Rightarrow$$

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