

$$2) K = \{A, F, M, N, I, B, C, E\}$$

$$F = \{L \rightarrow F, FMN \rightarrow AE, I \rightarrow INE, MN \rightarrow I, NC \rightarrow NI, N \rightarrow FE\}$$

- ДЕКЛАРИРАЊА

$$FMN \rightarrow A$$

$$FMN \rightarrow E$$

$$I \rightarrow I$$

$$I \rightarrow N$$

$$I \rightarrow E$$

$$NC \rightarrow N$$

$$NC \rightarrow I$$

$$N \rightarrow C$$

$$N \rightarrow F$$

$$F = \{L \rightarrow F, FMN \rightarrow A, FMN \rightarrow E, I \rightarrow I, I \rightarrow N, I \rightarrow E, MN \rightarrow I, NC \rightarrow N, NC \rightarrow I, N \rightarrow C, N \rightarrow F\}$$

- РЕДУКЦИЈА НАМНОЖИТЕЛНА

$$FMN \rightarrow A : (F)^+ = F, (M)^+ = M, (N)^+ = NCFIE$$

$$(\overline{FMN})^+ = (NM)^+ = NFM \rightarrow A \text{ } \checkmark$$

$$FMN \rightarrow E : (N)^+ = NCFIE \text{ } \checkmark$$

(U, P)

мыслим канонический формализм

$$C) = 1 \dots 1n$$

$$M) = MN \rightarrow \Sigma : (M)^+ = M, (N)^+ = N \cup E \in W$$

$$N) = N \rightarrow N$$

$$N) = N \rightarrow I : (N)^+ = N \cup E \in W$$

$$H = \{ C \rightarrow F, NM \rightarrow A, N \rightarrow E, I \rightarrow N, I \rightarrow E, N \rightarrow I, N \rightarrow C, N \rightarrow F \}$$

- Enrichissement du langage

$$C \rightarrow F : F \notin (C)^+_{H \setminus \{ C \rightarrow F \}} = C$$

$$\begin{pmatrix} F \\ F \end{pmatrix} A \begin{pmatrix} E \\ E \end{pmatrix} N I C$$

$$NM \rightarrow A : A \notin (NM)^+_{H \setminus \{ NM \rightarrow A \}} = NM E I C F$$

$$N \rightarrow E : E \notin (N)^+_{H \setminus \{ N \rightarrow E \}} = N I C F E \quad \checkmark$$

$$I \rightarrow N : \text{Hera, parce que } I \in H \text{ et } N \in H \text{ donc } I \rightarrow N \text{ est possible}$$

car on peut avoir

$$I \rightarrow E : E \notin (I)^+_{H \setminus \{ I \rightarrow E \}} = I N \quad \checkmark \quad N \rightarrow E \text{ est possible}$$

$$N \rightarrow F : F \notin (N)^+_{H \setminus \{ N \rightarrow F \}} = N I C F \quad \checkmark$$

$$H = \text{kb}(F) = \{ C \rightarrow F, NM \rightarrow A, I \rightarrow N, N \rightarrow I, N \rightarrow C, I \rightarrow E \}$$

Получили каноническое покрытие

$$G(C) = \{ C \rightarrow F \}$$

$$G(NM) = \{ NM \rightarrow A \}$$

$$G(I) = \{ I \rightarrow N, I \rightarrow E \}$$

$$G(N) = \{ N \rightarrow I, N \rightarrow C \}$$

~~Где~~

$$(C)^+ = CF$$

$$(NM)^+ = NMA \pm CEF$$

$$(I)^+ = INC \pm FE$$

$$(N)^+ = N \pm CFE$$

$$(\pm)^+ = (N)^+$$

$$G(N, I) = G(N) \cup G(I) = \{ I \rightarrow N, I \rightarrow E, N \rightarrow I, N \rightarrow C \}$$

$$G = \{ G(N, I), G(C), G(NM) \}$$

$$J = \{ N \rightarrow I, I \rightarrow N \}$$

$$G(N, I) = \{ I \rightarrow E, N \rightarrow C \}$$

$$G_0 = \{ I \rightarrow E, N \rightarrow C, C \rightarrow F, MN \rightarrow A \}$$

E C F A I N

$$M = \{ I \rightarrow E, N \rightarrow C, C \rightarrow F, MN \rightarrow A, N \rightarrow I, I \rightarrow M \}$$

$$I \rightarrow E : E \notin (F)^+ M \setminus \{ I \rightarrow E \} \neq \{ N \}$$

НЕМА ПОТРЕБЕ ПРОБЕЉИТИ ЈЕДНА ДЕФИНИЦИЈА
СТРАЊЕ НЕМА ПОТВРЂАВАЊА

$$G(I, N) = \{ I \rightarrow E, N \rightarrow C, I \rightarrow N, N \rightarrow I \} \quad |ENC$$

$$G(C) = \{ C \rightarrow F \}$$

$$G(MN) = \{ MN \rightarrow A \}$$

$$S = \{ N_1(\{ I, E, N, C \}, \{ N, I \}), N_2(\{ C, F \}, \{ C \}), N_3(\{ M, N, A \}, \{ MN \}) \}$$

- отпаћује бр.

$$N_3[N] \subseteq N_1[N]$$

КАДА ЈЕ $MN \in M \pm$

$$N_1[C] \subseteq N_2[C]$$

ТАКО ДА НЕМА ТУБЕТА

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(U, P)



$$K_1 = \{A, C, D, E, G, H, I, L\}$$

$$\{D, \rightarrow\}, \{D \rightarrow, \rightarrow\}$$

BCNF

$$F_1 = \{E \rightarrow C, G \rightarrow D, G \rightarrow H, G \rightarrow A, H \rightarrow G, I \rightarrow E, L \rightarrow C\}$$

$$\{G, \rightarrow\}, \{G \rightarrow, \rightarrow\}$$

BCNF

$$K_2 = \{A, C, E, G, H, I, L\}$$

$$F_2 = \{E \rightarrow C, G \rightarrow H, G \rightarrow A, H \rightarrow G, I \rightarrow E, L \rightarrow C\}$$

$$\{C, \rightarrow\}, \{L \rightarrow, \rightarrow\}$$

BCNF

$$K_3 = \{A, E, G, H, I, L\}$$

$$F_3 = \{E \rightarrow C, G \rightarrow H, G \rightarrow A, H \rightarrow G, I \rightarrow E\}$$

$$\{E, \rightarrow\}, \{E \rightarrow, \rightarrow\}$$

BCNF

$$K_4 = \{A, E, G, H, I\}$$

$$F_4 = \{G \rightarrow H, G \rightarrow A, H \rightarrow G, I \rightarrow E\}$$

$$\{I, E\}, \{I \rightarrow, E\}$$

BCNF

$$K_5 = \{A, G, H, I\}$$

$$F_5 = \{G \rightarrow H, G \rightarrow A, H \rightarrow G\}$$

$$\{G, H\}, \{G \rightarrow H, H \rightarrow G\}$$

BCNF

$$K_6 = \{A, G, I\}$$

$$F_6 = \{G \rightarrow A\}$$

Handwritten notes on the right margin, including $G \rightarrow D$, G, H, L , A, D , and $L \rightarrow C$.

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- ДЕКЛАРАЦИЯ

$$P = \{ \cancel{P \rightarrow D}, \cancel{P \rightarrow J}, E \rightarrow L, G \rightarrow D, G \rightarrow H, GI \rightarrow A, H \rightarrow G, I \rightarrow E, \cancel{L \rightarrow L}, \cancel{L \rightarrow C} \}$$

- РЕДУКЦИЯ НЕКИХ ГРАММ

$$GI \rightarrow A : (GI)^+ = GI \cup H, (I)^+ = I \cup EL \quad \times$$

НЕ МОЖЕ

- ЕНУНУНОТНУА РЕДУКЦИЯ

$$P \rightarrow J : J \notin (P)^+ \mid H \mid P \rightarrow J = D$$

$$E \rightarrow L : L \notin (E)^+ \mid H \mid E \rightarrow L = E$$

$$G \rightarrow D : D \notin (G)^+ \mid H \mid G \rightarrow D = G \cup H$$

$$G \rightarrow H : (G)^+ = G \cup D$$

$$GI \rightarrow A : (GI)^+ = GI \cup H$$

$$H \rightarrow G : (H)^+ = H$$

$$I \rightarrow E : (I)^+ = I$$

$$L \rightarrow C : (L)^+ = L$$

ТНОВА СЕ НЕ ИЗМЕНЯЕ

срп и иако нису једнак по мн.

срп и

срп

2

$$F = \{P \rightarrow J, E \rightarrow L, G \rightarrow D, G \rightarrow H, G \rightarrow A, H \rightarrow G, I \rightarrow E, L \rightarrow C\}$$

$$\text{како се } G \rightarrow \{G, H\}$$

DE kompozicija:

$$P \rightarrow J: J \notin P, P^+ = P \neq \emptyset$$

$$F_P = \{P \rightarrow J\}, F_P(h_1) = F \setminus \{P \rightarrow J\}$$

- 3AD0B0A0A 011

$$G \rightarrow D: D \notin G, G^+ = G \neq \emptyset$$

$$F_G = \{G \rightarrow D\}, F_G(h_1) = F \setminus \{G \rightarrow D\}$$

- 3AD. 011

$$G \rightarrow A: A \notin G, G^+ = G \neq \emptyset$$

$$F_G = \{G \rightarrow A\}, F_G(h_1) = F \setminus \{G \rightarrow A\}$$

$$L \rightarrow C: C \notin L, L^+ = L \neq \emptyset$$

$$F_L = \{L \rightarrow C\}, F_L(h_1) = F \setminus \{L \rightarrow C\}$$

- 3AD 011

$$L \rightarrow C: L \neq E, E^+ = EL \neq h_3$$

$$F_{3EL} = \{E \rightarrow L\}, F_{3E}(h_3 \setminus L) = F_3 \setminus \{E \rightarrow L\}$$

$$-3AD \quad \cap \cap$$

$$I \rightarrow E: E \neq I, E^+ = EI \neq h_4$$

$$F_{4IE} = \{I \rightarrow E\}, F_{4I}(h_4 \setminus E) = F_4 \setminus \{I \rightarrow E\}$$

$$-3AD \quad \cap \cap$$

$$G \rightarrow H: H \neq G, G^+ = GH \neq h_5$$

$$F_{5GH} = \{G \rightarrow H, H \rightarrow G\}, F_{5G}(h_5 \setminus H) = \{G \rightarrow A\}$$

$$3AD \quad \cap \cap$$

$$S = N_1(\{D, \emptyset\}, \{D\}), N_2(\{G, \emptyset\}, \{G\}), N_3(\{L, C\}, \{L\}),$$

$$N_4(\{E, L\}, \{E\}), N_5(\{I, E\}, \{I\}), N_6(\{G, H\}, \{G\}),$$

$$N_7(\{G, A\}, \{G\})$$

$$- N_2[D] \subseteq N_1[D] \quad N_4[E] \subseteq N_3[L] \quad N_2[G] \subseteq N_6[G]$$

$$- N_6[G] \subseteq N_2[G] \quad N_5[E] \subseteq N_4[E] \quad N_7[G] \subseteq N_6[G]$$

$$- N_7[G] \subseteq N_2[G] \quad N_7[I] \subseteq N_5[I]$$