

$$\begin{aligned} P &= \{ t_1 = t'_1, t_2 = t'_2, \dots, t_n = t'_n \} \\ &\quad \text{de unde } \tau_i = \{ x \mapsto t'_1, y \mapsto t'_2, \dots, z \mapsto t'_n \} \text{ este relație pt. } \tau_i \circ \tau_i^{-1} = \text{id} \\ &\quad \tau_i^{-1} = \{ x \mapsto t_1, y \mapsto t_2, \dots, z \mapsto t_n \} \text{ este inversă} \\ &\quad \tau_i \circ \tau_i^{-1}(x) = \tau_i^*(\tau_i(x)) \end{aligned}$$

$$\begin{cases} \tau_1 \text{ mai generală decât } \tau_2 \\ \text{există } \tau_3 \text{ a.s. } \tau_2 = \tau_3 \circ \tau_1 \end{cases}$$

$$\tau_3 = \{ y \mapsto e \}$$

$$\tau_3 \circ \tau_1(x) = \tau_3^*(\tau_1(x)) = \tau_3^*(e) = e$$

$$\tau_3 \circ \tau_1(y) = \tau_3^*(\tau_1(y)) = e$$

$$\tau_3 \circ \tau_1(z) = \tau_3^*(\tau_1(z)) = h(e)$$

$$\tau_3 \circ \tau_1(x_i) = \tau_3^*(\tau_1(x_i)) = x_i$$

$$\begin{aligned} \text{mgu}(t_1, t_2) &= \text{relatia care unifică } t_1, t_2 \\ &\quad \text{nu neapărat unică} \\ &\quad \text{nu este mai generală decât} \\ &\quad \text{toate relatii care unifică } t_1, t_2 \end{aligned}$$

$$x \doteq y$$

$$\tau_1 = \{ x \mapsto y \}$$

$$\tau_2 = \{ y \mapsto x \}$$

$$\tau_3 = \{ y \mapsto x \}$$

$$\begin{cases} \tau_1 \text{ mai general decât } \tau_2 \\ \tau_2 \text{ mai general decât } \tau_3 \end{cases}$$

$$\begin{aligned} \text{Pb. de unificare} &\rightarrow P = \{ t_1 = t'_1, \dots, t_n = t'_n \} \\ \tau - \text{relația} &\quad \text{adică } \tau^*(t_i) = \tau^*(t'_i) \end{aligned}$$

$$\text{pt. orice } i$$

$$\text{mgu}(P) - \text{multimea de soluții}$$

$$\text{mgu}(P) - \text{cea mai generală soluție.}$$

$$P = \{ x \doteq f(x) \}$$

$$\tau = \{ x \mapsto e \}$$

$$x \mapsto x \quad e = f(x)$$

$$x \mapsto x \quad e = f(x)$$

$$P = \text{formă rezolvată.}$$

$$\bullet P = \{ \text{ } \} \doteq t'_1, \text{ } \doteq t'_2, \dots, \doteq t'_n \} \quad \Rightarrow \text{mgu}(P) = \{ \text{ } \doteq t'_1, \dots, \doteq t'_n \}$$

$$\text{pt. orice } i$$

$$\bullet P = \perp \quad \Rightarrow \text{mgu}(P) = \emptyset$$

$$P \rightarrow \text{formă rezolvată.}$$

$$P' \rightarrow \text{formă rezolvată.}$$

$$\text{mgu}(P) = \text{mgu}(P') \Rightarrow \text{mgu}(P) = \text{mgu}(P')$$

$$\text{mgu}(P) = \text{mgu}(P')$$