-NoValue-

## syn.1 Valorações and Satisfaction

mvl:syn:val:sec

**Definição syn.1 (Valorações).** Let $V$ be a set of truth values. A *valoração* for $\mathcal{L}$ into $V$ is a function $\mathfrak{v}$ assigning um membro of $V$ to the variáveis proposicionais of the language, O.s., $\mathfrak{v}\colon \mathrm{At}_0 \to V$.

mvl:syn:val:defn:pValue

**Definição syn.2.** Given a valoração $\mathfrak{v}$ into the set of truth values $V$ of a many-valued logic $\mathbf{L}$, define the evaluation function $\overline{\mathfrak{v}}\colon \mathrm{Frm}(\mathcal{L}) \to V$ inductively by:

1. $\overline{\mathfrak{v}}(p_n) = \mathfrak{v}(p_n)$;
2. If $\star$ is a 0-place connective, then $\overline{\mathfrak{v}}(\star) = \widetilde{\star}_{\mathbf{L}}$;
3. If $\star$ is an $n$-place connective, then

$$\overline{\mathfrak{v}}(\star(\varphi_1, \ldots, \varphi_n)) = \widetilde{\star}_{\mathbf{L}}(\overline{\mathfrak{v}}(\varphi_1), \ldots, \overline{\mathfrak{v}}(\varphi_n)).$$

mvl:syn:val:defn:satisfaction

**Definição syn.3 (Satisfaction).** The fórmula $\varphi$ is *satisfied* by a valoração $\mathfrak{v}$, $\mathfrak{v} \models_{\mathbf{L}} \varphi$, iff $\overline{\mathfrak{v}}_{\mathbf{L}}(\varphi) \in V^+$, where $V^+$ is the set of designated truth values of $\mathbf{L}$.

We write $\mathfrak{v} \not\models_{\mathbf{L}} \varphi$ to mean "not $\mathfrak{v} \models_{\mathbf{L}} \varphi$." If $\Gamma$ is a set of fórmulas, $\mathfrak{v} \models_{\mathbf{L}} \Gamma$ iff $\mathfrak{v} \models_{\mathbf{L}} \varphi$ for every $\varphi \in \Gamma$.

## Créditos das Imagens

## Referências Bibliográficas