

Subgame

Definition

The **subgame of the extensive game with perfect information** $\Gamma = \{N, H, P, (\succeq_i)\}$ that follows the history h is the extensive game $\Gamma(h) = \{N, H|_h, P|_h, (\succeq_i|_h)\}$ where

- $H|_h$ is the set of sequences h' of actions for which $(h, h') \in H$,
- $P|_h(h') = P(h, h')$ for each $h' \in H|_h$, and
- $\succeq_i|_h$ is defined by $h' \succeq_i|_h h''$ if and only if $(h, h') \succeq_i (h, h'')$.

