

Building Smart Worlds from Smart Objects

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*Smart objects are
a modular way of
controlling animation
state.*

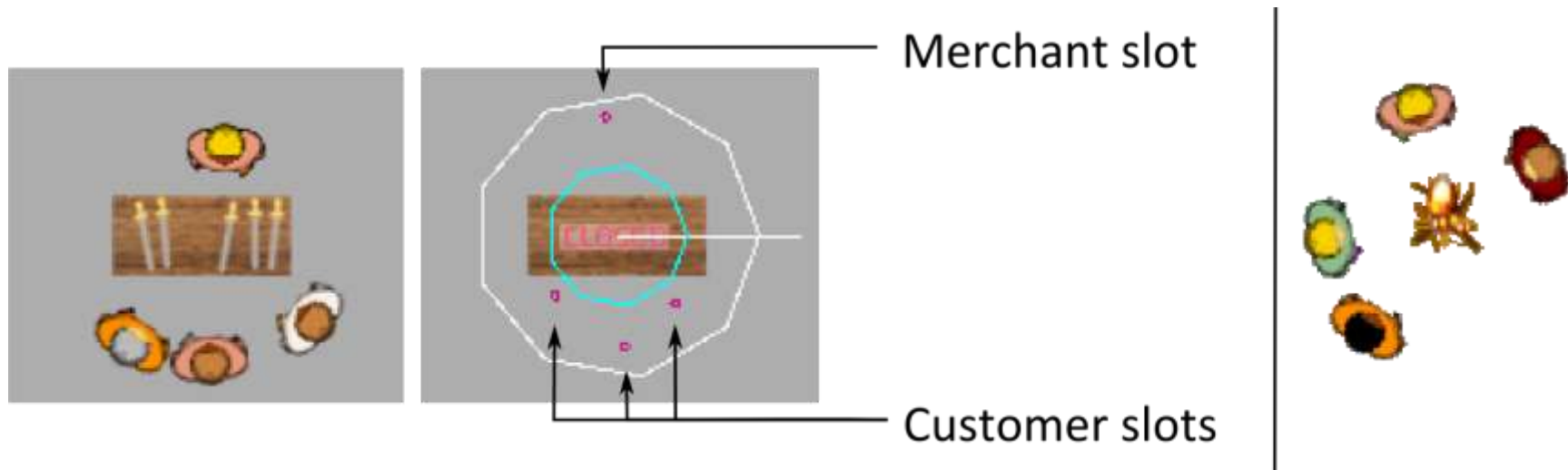


Impulsion Engine (Pedica, Vilhjálmsón)



- Presented here 2012.
 - Natural looking social movement.
- Agent-centric model of territoriality for open spaces.
 - But: Furniture influences proxemic behavior.
 - But: Social context influences proxemic behavior.

Example for social context

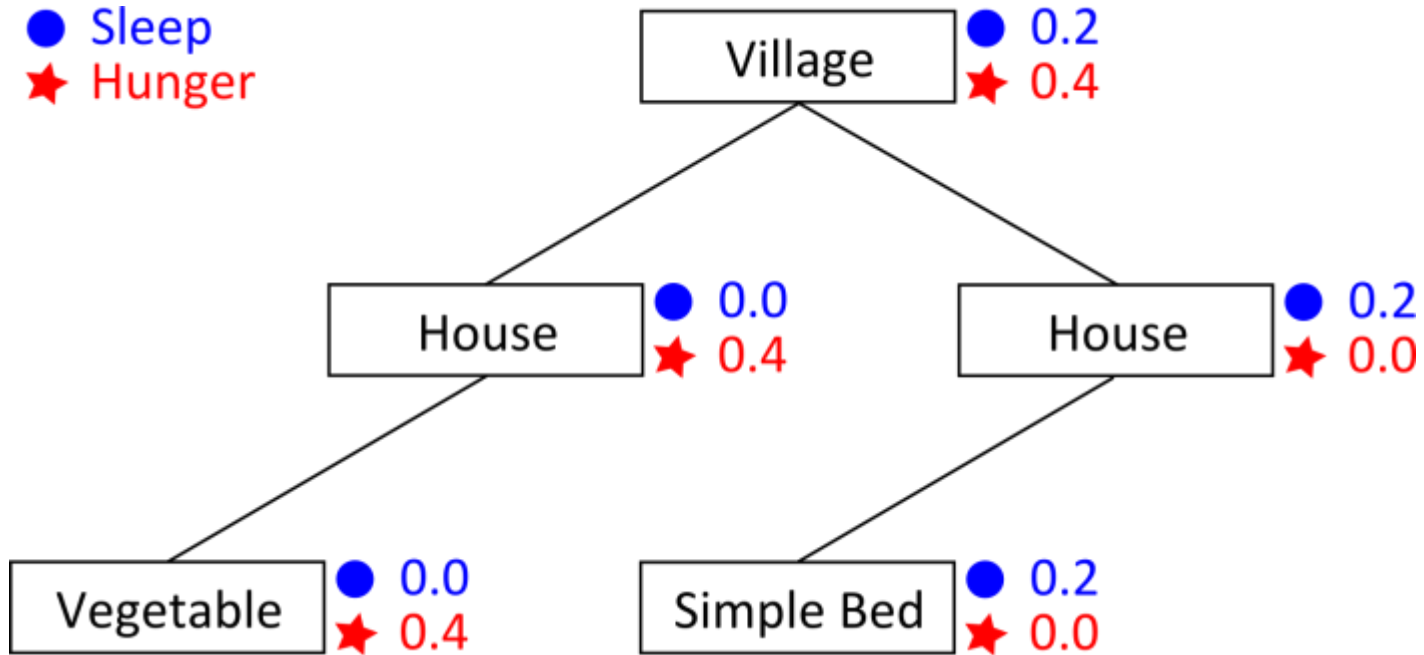


Making a decision

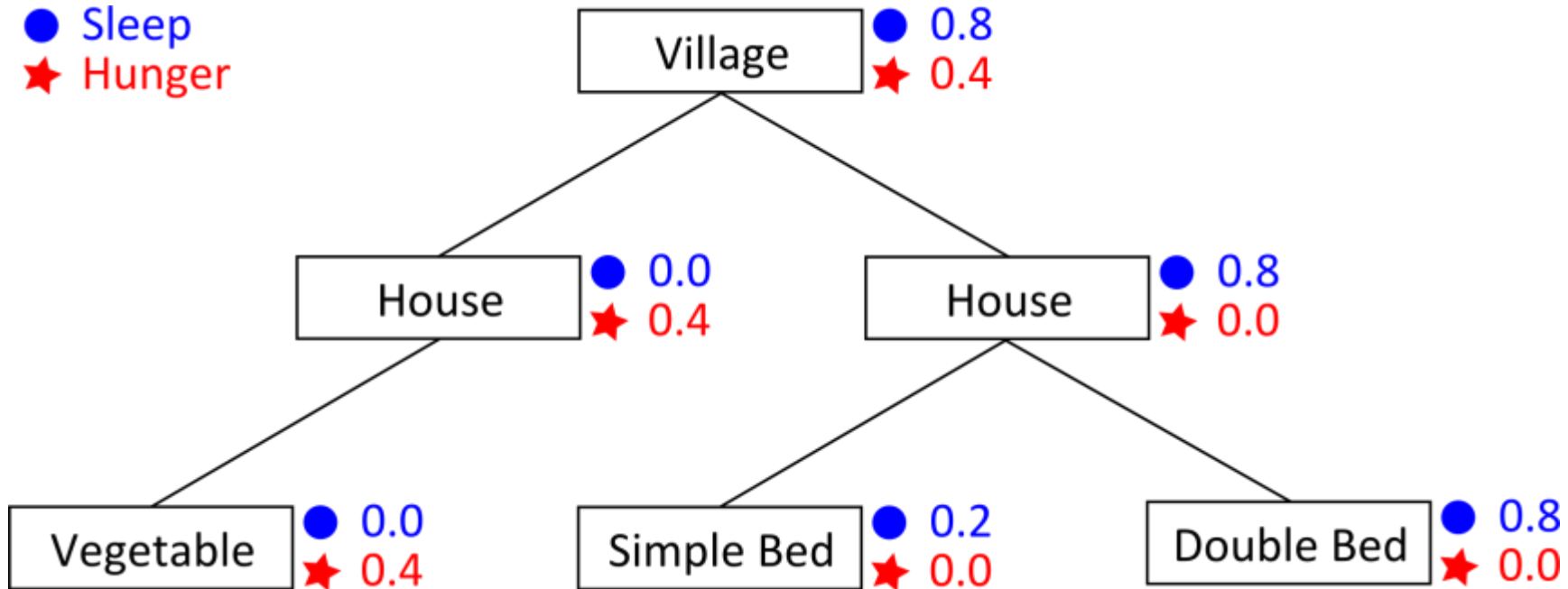


- Problem:
 - 6 houses, with 12 objects each:
 - **$6 * 12 = 72$** options to consider.
- Solution:
 - Decide on house, then on object:
 - **$6 + 12 = 18$** options to consider.

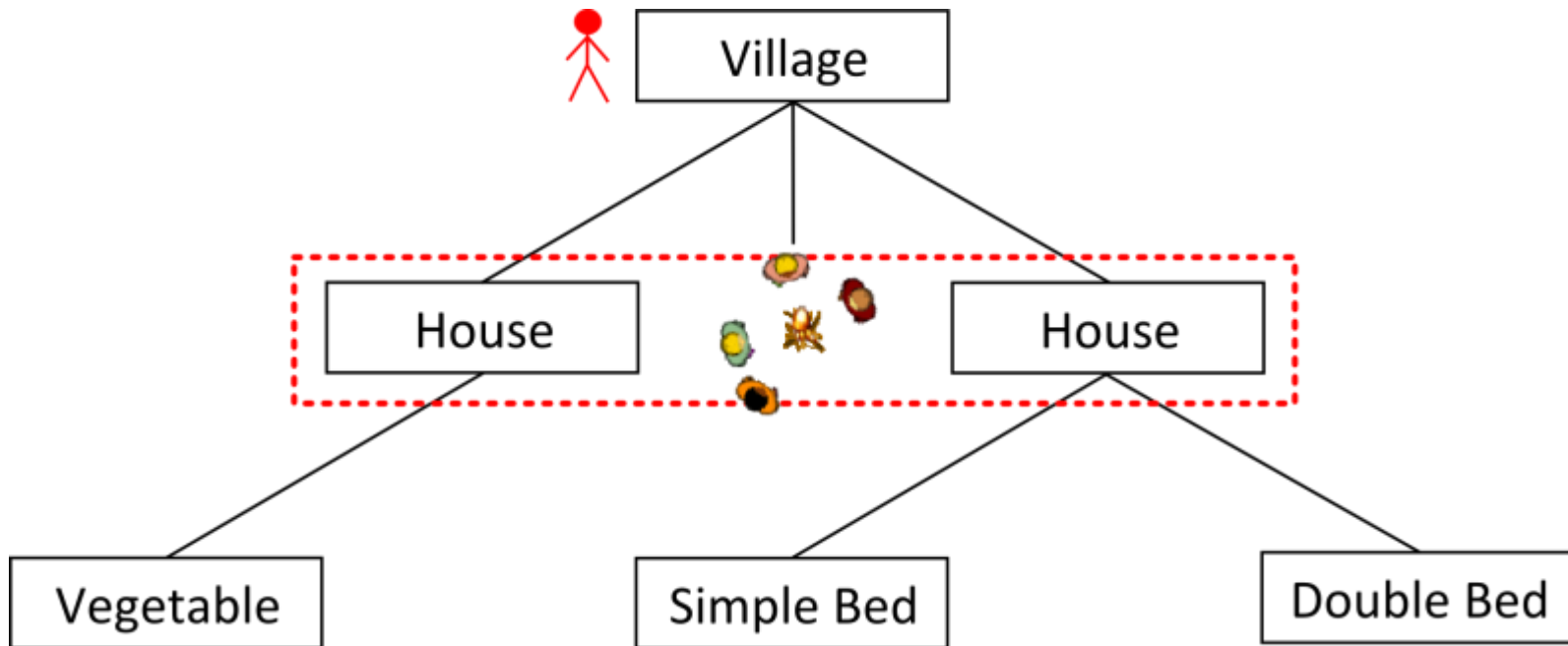
The Affordance Tree



The Affordance Tree



Decision layers



Goals of this approach



- Affordance Tree applicable in various genres:
 - RPGs: Replace idle state with life simulation.
 - Building-games: Go beyond 'one room, one purpose'.
- Make motion look social in context.
- Easy authoring, good performance.

Lets talk!



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Video: bt-medien.de/thesisvideo.html

Two page paper: Tilman Geishauser, Yun-Gyung Cheong and Mark J. Nelson. *A Prototype using Territories and an Affordance Tree for Social Simulation Gameplay*. Proceedings of the Digital Foundations of Games Conference 2014.