

Experiments on Environmental Reinforcement of Semantic Structures

D. Gueorguiev 5/17/2022

We need to devise an experiment which will clearly demonstrate the necessity of the reinforcement environment in Semantic Space, represented by the vector field \mathfrak{F} . Recall \mathfrak{F} is defined by a vector \vec{f} from the field at position \vec{r} and time t in Semantic Space:

$$\vec{f} = \vec{f}(\vec{r}, t) \quad (1)$$

Experiment 1:

We are given:

- a) a set \mathcal{S}_A of semantic aspects $\{A_1, A_2, \dots, A_L\}$
- b) a set \mathcal{S}_P of already constructed semantic properties $\{P_1, P_2, \dots, P_M\}$ each of which uses a subset of the defined semantic aspects
- c) a set \mathcal{S}_V of already constructed primitive semantic particles $\{V_1, V_2, \dots, V_N\}$