# ~~Thought~~ Synthesis of Semantic Structures

## Particle model for thought synthesis

### Recombination Particles and Conservation Laws

### Affinities and Affinity Sets

Let us consider a particle denoted by . Let us consider the case when the particle combines from the right with another compound particle as shown below

The affinity for each of the two -particles gets calculated and information about the affinity value gets recorded inside the -particle which is intermediary for the two -particles. In this case the intermediary -particle is which stores information on chosen combination . Any new attempt to combine the particle with another compound particle will involve another instance of which has learned the affinity for and will encourage combination with such particles which are with close enough semantic distances to .

Example: Let us consider the compound particle *“Dimitar’s book”*, represented by

Here: