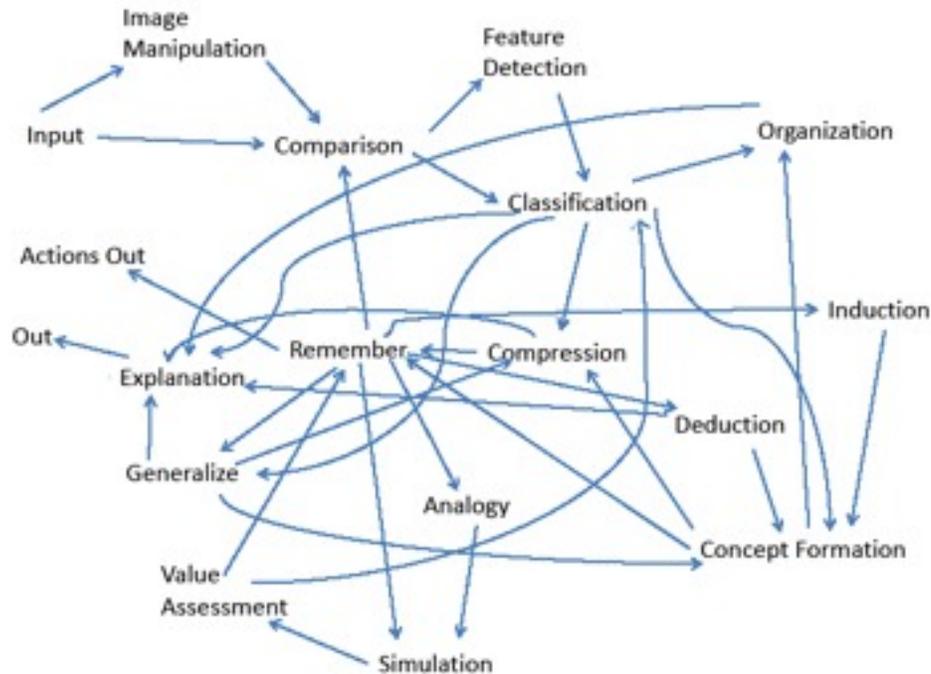# Theory of Thought

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- Remembering involves saving, updating and searching a case base
- Generalization consists of updating each prototype case by example vector averaging.
- Comparison is accomplished by vector normalization and scalar product computation.
- Explanation consists of searching for and retrieving a best matching sequence vector.
- Deduction involves chaining of sequence vectors.
- Organization consists of recording/creating new cases and inserting them in the category/sequence hierarchy.
- Induction is performed by nearest neighbor algorithm.

- Classification is by search and vector similarity measure.
- Concept formation occurs when new cases are created/recorded and updated.
- Image manipulation is performed by shifting, scaling, rotation, and other transformation.
- Features are identified by activation of low level categories.
- Analogy occurs in various of the case extrapolation (learning) algorithms.
- Compression occurs during vector clustering/category updating.
- Simulation is performed when extrapolated synthetic cases and proposed outputs are evaluated.

- Value assessment occurs when utility is estimated for a case or set of active cases.