

## How does Thinknowlogy work internally?

- After a sentence is entered by the user, the word type of each word is determined automatically, such as proper noun, singular noun, plural noun and adjective. This process works for any language, without use of extensive words lists. Only a few basic words are defined for each language. Scientists are unable to develop a similar process. Certainly not the multilingual part;
- Then the sentence is stored in a language-independent data structure, without losing meaning. Such a data structure is not defined scientifically. Therefore, scientific reasoning systems are limited to one language only;
- The reasoning system then performs all kinds of operations on the data structure, such as drawing conclusions, making assumptions, asking choice questions, detecting conflicts, adjusting the uncertainty level of self-generated assumptions, adjusting self-generated choice questions and checking whether self-generated knowledge has been confirmed by the user. This reasoning process is much more advanced than scientists have described;
- When the reasoning process is complete, the results — the changes in the data structure — are presented to the user as readable sentences;
- A justification report for the self-generated knowledge can be requested at any time. With this feature, my system meets the objectives of Explainable AI ([https://en.wikipedia.org/wiki/Explainable\\_artificial\\_intelligence](https://en.wikipedia.org/wiki/Explainable_artificial_intelligence)).