

1. Perform vaguely specified tasks.
2. Learn things (as opposed to being told them).
3. Perform common-sense reasoning.
4. Deal with some problems where there are a large number of potential solutions.

The necessity of finding precisely formulated rules is a cornerstone in computer programming. Much of the difficulty in MT arises from the ability to find straight forward formulations. Learning is also a problematic area from a computational perspective; “what a computer needs to know, it must be told, in the form of explicit rules, written by humans” (ibid: 121). Coding Common-sense reasoning involves huge amount of data about the world to be computed which is a strenuous task. The fourth problem is connected with time required to achieve the task depending on the probabilities such task has. This issue is not significant nowadays as computers have improved their hardware and speed tremendously.

One can find different inexpensive or free services that call themselves ‘translation programs’ which produce low-quality translations. This reality contradicts the goal of many NLP researches who aim at producing error-free texts that read fluently in the target language (TL). To be more systematic, we should examine the different approaches mentioned above elucidating each challenge MT researchers are faced with.

The first and simplest approach as we mentioned above is the direct approach which translates ‘word-for-word’. Linguists as well as translators can easily predict the challenge. There is no one-to-one correspondence between words in different languages. ‘Cake’ in English is ‘قالب حلوى’ in Arabic. This example shows that the equivalence is one-to-two. Another problem is the lexical ambiguity. ‘Suit’ could have different senses depending on its context where it