A DEFINING MOMENT

CĂTĂLIN DEHELEAN

Keywords: *Computational Linguistics; Scientific journal; Science.*

Abstract

The definition of Computational Linguistics should be a precise logical sentence. But things are complicated by the term being used for more than one phenomenon. This article presents the phenomena styled Computational Linguistics and as well as their relationship.

Meanings

Before any further discussions, one must clarify the meaning of a key term, namely computational linguistics. It can either refer to a scientific journal called Computational Linguistics or to the science called Computational Linguistics. (See Figure 1.)

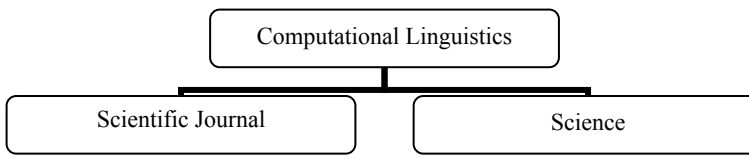


Figure 1: A graphic representation of the meanings of Computational Linguistics

The Scientific Journal

The scientific journal called Computational Linguistics is published by the Association for Computational Linguistics, abbreviated ACL, at The MIT Press. It is classified as a quarterly

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journal. In order to cover a wide range of research it makes good use of a variety of means such as book reviews, interviews, articles, etc. Technically speaking the journal exists only as of 1984. However it was preceded by the American Journal of Computational Linguistics which was in print from 1980. Before that date the American Journal of Computational Linguistics was nothing more than a collection of microfiches, established in 1978. (See Table 1.)

Year	1978	1980	1984
Name	American Journal of Computational Linguistics	American Journal of Computational Linguistics	Computational Linguistics
Type	collection of microfiches	scientific journal	scientific journal

Table 1: Graphic representation of the evolution of Computational Linguistics into the current scientific journal

The Science

The science called Computational Linguistics, abbreviated CL, is a discipline of Linguistics dedicated to the study of the natural language, that is to say of the naturally occurring languages. One may easily argue that it borrows methods and discoveries primarily from Computer Science and from a few other Sciences like Engineering and/or Psychology, but these developments are of secondary and tertiary importance. (See Figure 2.)

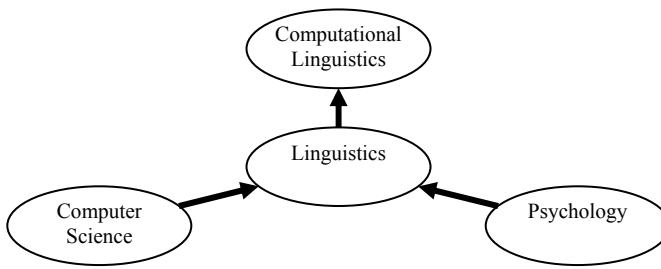


Figure 2: A graphic representation of the lineage of Computational Linguistics

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Computational Linguistics is credited with the development of many methods of studying the spoken and written natural language. Computational Linguistics makes the interaction with machines a lot easier. (See Figure 3.)

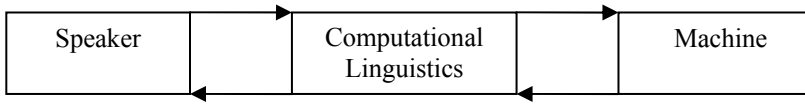


Figure 3: A Graphic representation of the role of Computation Linguistics in human – machine interaction

In doing so, Computational Linguistics also helps overcome the language barriers. Its influence on our daily lives is increasing: surfing the internet, using a translation tool, etc. (See Figure 4.)

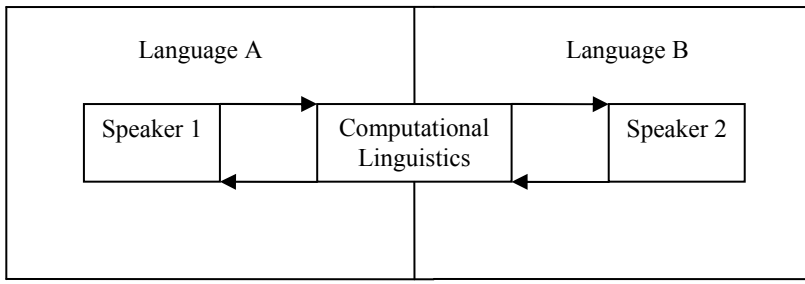


Figure 4: A Graphic representation of the role of Computation Linguistics in overcoming language barriers.

Their relationship

The science called Computational Linguistics makes much use of the scientific journal called Computational Linguistics, as it was and still is one of the most important means of spreading the latest achievements in this field. (See Figure 5.)

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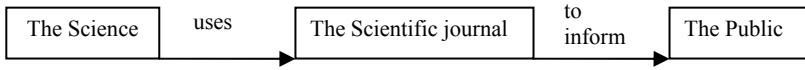


Figure 5: A Graphic representation of the scientific journal for the science called Computational Linguistics

The scientific journal called Computational Linguistics, in turn, can only exist via the science called Computational Linguistics, as the developments of the later are the only topics for the former. (See Figure 6.)

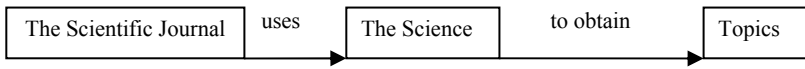


Figure 6: A graphic representation of the usefulness of the science for the scientific journal called Computational Linguistics

Therefore, even though there are two scientific entities covered by the term Computational Linguistics, their relationship is extremely close-knit. It can be compared to the relationship between language and thinking where the two different phenomena need each other in order to exist; and much like the aforementioned relationship the borders of the two are not perfectly delineated. (See Figure 7.)

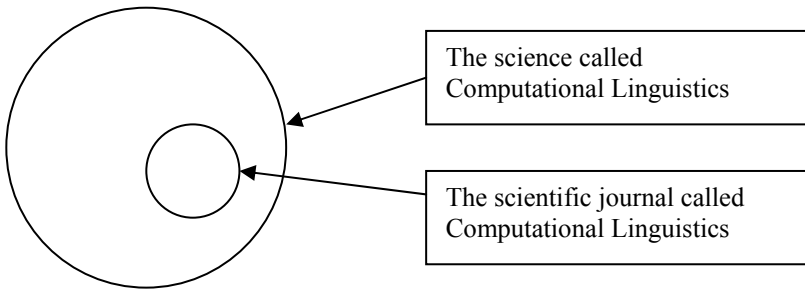


Figure 7: A graphic representation of the relationship between the science and the scientific journal called Computational Linguistics.

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Conclusions

The relationship between the science and the scientific journal called Computational Linguistics can be compared to the relationship between language and thinking in the sense of two different phenomena needing each other in order to exist; and much like the aforementioned relationship the borders of the two are not perfectly delineated.

It is however linguistically relevant to try and focus on developments from the science called Computational Linguistics.

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UN MOMENT DEFINITORIU

Acest articol abordează pe scurt înţelesul conceptului de Lingvistică Computaţională. Se pune problema existenţei a doi semnificaţi care se ascund în spatele acestui semnificant. Este vorba despre ştiinţa numită Lingvistică Computaţională şi de jurnalul ştiinţific numit tot Lingvistică Computaţională. Ştiinţa numită Lingvistică Computaţională studiază fenomenele de limbă, iar jurnalul ştiinţific numit Lingvistică Computaţională prezintă realizările celei dintâi. Relaţia dintre cele două este atât de strânsă încât acestea sunt greu de delimitat pentru cei interesaţi de studiul limbii.

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