

The Role of Computational Linguistics in Computer Assisted Language Teaching (CALT) : An Overview

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Introduction

The scientific study of computational linguistics is in its infancy. Computational linguistics attempts to draw heavily on theoretical linguistics, although direct relations between computational linguistics and natural language processing to core linguistics have not been materialized so much. During 1960s, several attempts were made to design Chomsky's groundbreaking grammars to make able to parse natural language. Moving on to the 1970s and 1980s, parsers were designed throughout the 2000s based on more complex grammar formalisms that appeared almost one after the other, in fact, throughout all those decades. These parsers were linguistically motivated and developed in frameworks such as Lexical Functional Grammar (Bresnan & Kaplan, 1982), Functional Unification Grammar (Kay, 1984), Generalized Phrase Structure Grammar (Gazdar, 1985), Head-Driven Phrase Structure Grammar (Pollard & Sag, 1994), Combinatory Categorical Grammar (Steedman, 2000) and Tree-Adjoining Grammar (Joshi & Schabes, 1997). The structures and parsers communicated with linguistics have the chief assumption that determining the syntactic structure is not a self-sufficient function and it necessitates determining the semantic structure.

With the aid of psychology and reasoning, computational linguistics grew as a continuum between linguistics and computer science. It utilizes devices to facilitate the treatment of linguistic problems. It is regarded as a component of both informatics and linguistics. However, the collaboration is between computer science and linguistics. The article aims to highlight the digital linguistic field and its linguistic-focused skills for computer uses and its relevance in teaching and the scenario of today's teachers against electronic era students.

Many instances of positive co-development of analytical and theoretical linguistics over the years have been the analysis of the structure and the production of language as well as the important convergence with other fields of linguistics