LTA 2014, Grammar Systems Applied to Parsing

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Grammar systems combine the simplicity of Context Free Grammars with the expresive power of more complex types of grammars. Grammar systems consist of n formal grammars (usually CFGs), that cooperate in some way to generate the desired language. There are two main types of grammar systems – *Parallel Computing (PC)* and *Cooperating Distributed (CD)* grammar systems. Both of those types will be briefly described in the first part of presentation.

In the second part of the presentation, a modified CD grammar system is presented. The main difference between a standard CD grammar system and the modified CD grammar system, is that the mode of derivation (the way in which the grammar system determines for how long each of the grammars work) is not predefined by some fixed values, but is based on the number of derivation steps made by some of the other grammars of the system.