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### AN ALGORITHM FOR CONSTRUCTING LOGICO-LINGUISTIC MODEL OF TEXT DOCUMENT

**Abstract.** *The study analyzes the current problems of electronic text processing and linguistic analysis singled out as one of the most difficult methodological problems. Logic and linguistic model of text is proposed to be the formal model of knowledge representation of text information. Based on the identification of patterns of logical relationships in electronic texts it was created an algorithm for constructing logic and linguistic model of text document.*

**Keywords:** *linguistic analysis, semantic structure, logic and linguistic model, natural language, means of cohesive, logical relationships*

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[2].

[2],

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[3].

[4]. Dirk Geeraerts, Rene  
 Dirven [5] V. Evans, M. Green [6]

[7]. Dan  
 Jurafsky Christopher Manning

( [8].

[9].

[10]:

$$t = \langle C, F, B, A \rangle, \tag{1}$$

$t \in T$  -

$C = \{c_1, \dots, c_i, \dots, c_n\}$  -  
 $i = \overline{1, n}, n$  -

$F = \{f_1, \dots, f_j, \dots, f_m\}$  –

,  $j = \overline{1, m}$ ,  $m$  –

$B$  –

2.  $A = \{a_1, \dots, a_k, \dots, a_q\}$  –

,  $k = \overline{1, q}$ ,  $q$  –

$B = \langle K, SJ, D \rangle$ ,

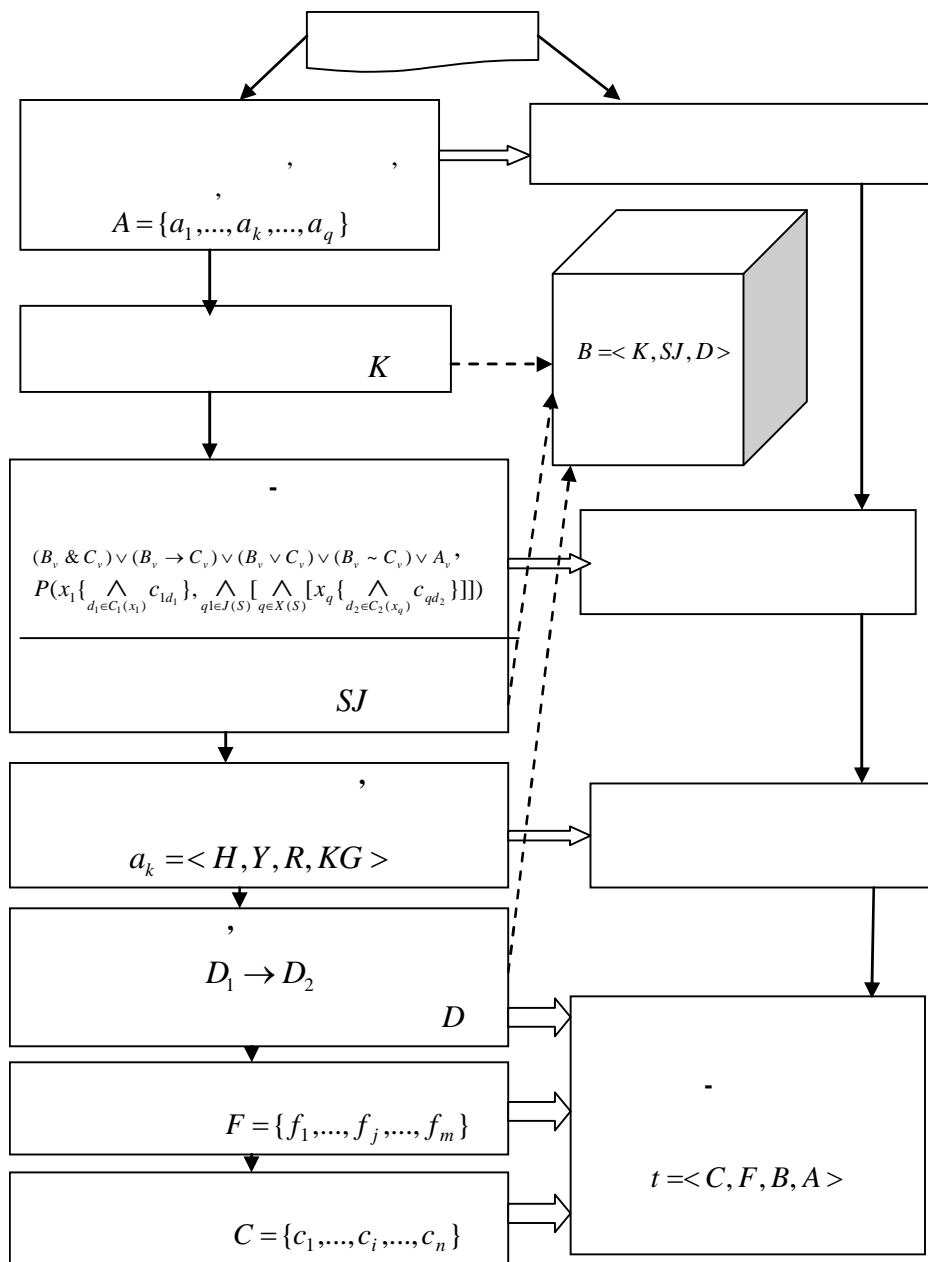
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1.

$K$  –

;  $SJ$  –

$S_j, j = \overline{1, m}$ ;  $D$  –



. 1.

3.

[11].

4.

$$a_k \in A.$$

$$a_k \in A, k = \overline{1, q}.$$

[13]

$$a_k = \langle H, Y, R, KG \rangle,$$

$$H = \{1, 2\}$$

$$Y = \{1, 2, 3, 4, 5\}$$

$$R = \{1, 2, 3, 4, 5, 6, 7\}$$

$$a_k \in A;$$

$$a_k \in A; KG -$$

[10].

5.

$D_1 \rightarrow D_2,$   
 $a_k \in A,$   
 $a_{k+1} \in A, k = \overline{1, q}.$   
 $f_j \in F, F = \{f_1, \dots, f_j, \dots, f_m\}.$   
 $c_i \in C, C = \{c_1, \dots, c_i, \dots, c_n\}$   
 $, i = \overline{1, n},$   
 $A = \{a_1, a_2\}.$   
 $a_1 = \langle 1, 1, 6, \{ \dots \} \rangle$   
 » [4].

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 $a_2 = \langle 1, 1, 1, \{ \text{---} \} \rangle$  6%  
 $a_1 \quad 2$  ,  
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