



# ARTIFICIAL IN INTELLECT KNOWLEDGE DESCRIBE MODELS

Akmaljon Yuldashev Valijon son  
Namangan Institute of Engineering and Technology  
E-mail: akmaljonyuldashev7201@gmail.com

## Abstract

This in the article artificial in intellect knowledge describe models through new views are logical conclusions , knowledge describe language , thinking fields in general when knowledge base in formation different to views attention to give need about, the results branched models using to conclude such as intellects more development can In the real process event and circumstances each one to the details price gave without reasoning by doing to see that's it with together to the situation right approach get time from demand come out to approach forms this while a person in his life important foundation will be.

**Keywords:** Knowledge, subject, object, thinking areas (discussion area), expertise areas (expertise area), math logic (mathematical logic), knowledge describe language (knowledge representation language), structured models (structured models), formal models (formal models), informal models (informal models).

## Introduction

Description - this some kind of the concept figure , writing , language or in formal form acceptance to be done action is considered Knowledge theory subject (learner) and object between dependence learns Objective in a sense knowledge is from learning next received our knowledge.

Knowledge describe - this figures , inscriptions and languages based on genuine considerations is a formalization. us mainly receiving EHM understanding formalizations is interested. In memory of EHM knowledge describe, that is knowledge in describing languages and formalizations create about questions come comes out They are this our imaginations speech and image through, naturally language based on made up English or german language, formal language, algebra or logic, reasoning and etc. based on to EHM input and again work enable creates Formalization result programming of the language part organize doer instructions from the collection consists of to be need.

Knowledge to describe concerned many circumstances very limited to fields dependent will be, for example:

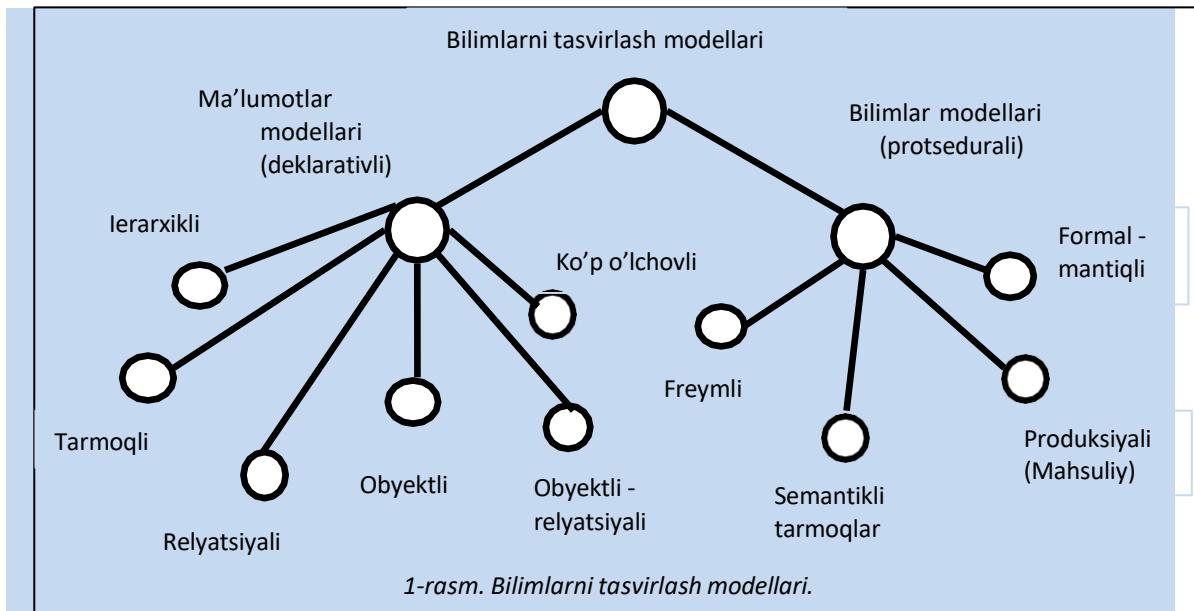
- in the game circumstances describe (for example, in chess of figures location);
- a person situation describing to give
- enterprise of workers location describe;
- the landscape describes

Which one of the field in the characteristic «Thinking fields » or "Expertise about the fields". is spoken . General without such describe numerous formation is not so much product it's not. On



the contrary, a mathematician logic language such as symbolic of the tongue use describe one of time it's simple in itself programming language as well to the language closer represents So, a mathematician logic received to knowledge based on without thought to conduct possibility creates, that is makes sense conclusions really mastered of knowledge new knowledge to get active operations being is considered

Knowledge describe many formal systems there is they are knowledge describe models or are called languages ( Fig. 1).



Knowledge describe languages between structured and unstructured data models separate possible.

Quoted both model too formal language certain systems based on will be built

This models from each other as follows difference does:

1. Formalizable knowledge storage with
2. Formalized of knowledge usability or intellectual of the system specification with
3. Formalization technology with.

Unstructured data about knowledge formalization two from the stage consists:

1. Knowledge natural language certain systems based on formalization. For example, various from genres texts harvest to do
2. Texts indexing rubric (page) and dictionary make up

Unstructured data models as of indexing formal languages is considered.

Structured data ( declarative knowledge ) information in the base storage for a lot cases hierarchical , network , relational , object , object-relational and a lot measured from the models is used.

Procedural knowledge describe for formal- logical, production, frame and semantic networks from the models is used.

General without knowledge describe two type models there is:

1. Formal models;
2. Informal ( semantic , relational ) models.



Formal models strictly to mathematics is based on In formal models makes sense to conclude strictly axiomatic to the rules is based on Informal models strictly to mathematics not justified and they are sure one subject field for intended will be Informal in the models to conclude most of the time researcher by is determined.

If you count passed conditions if done , then system formal theory requirements is considered satisfactory . Him formal system (FT) is also called . Formal theory based on built system axiomatic system also called So a formal theory the following satisfaction should : some axiomatic the system which determines each how

$$F = (A, W, W, R)$$

formal theory as follows is characterized:

A - of the alphabet availability ;

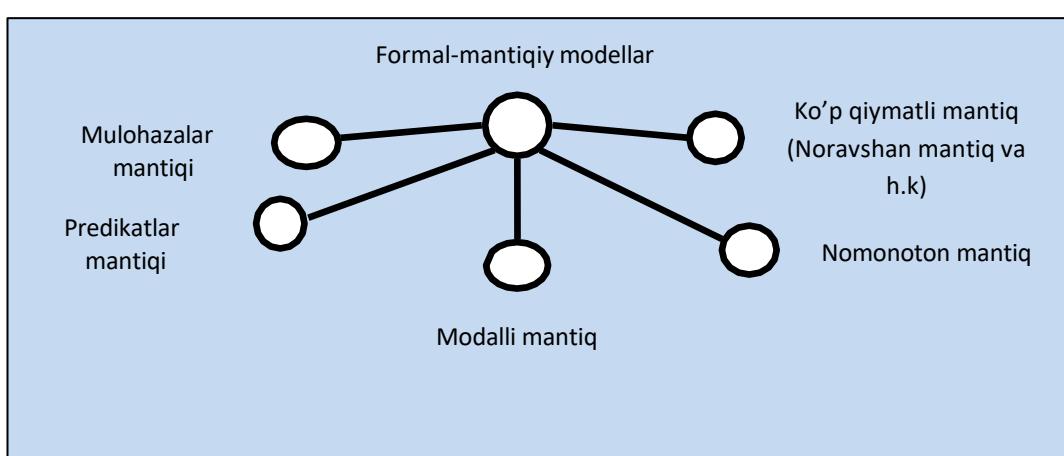
V - syntactic the rules collection ;

W - n Azaria based on lying down axioms collection ;

R - x ulosa rules collection

Considerations account and predicates account axiomatic of systems classic examples is considered These are formal systems good research done and good work issued makes sense conclusion models - in IT main to the metaprocedure have

Formal - makes sense of models common structure In Figure 2 given.



### Makes sense models

Knowledge in SI differently in describing mathematician logic the basis organize is enough Makes sense description used in SI another for imaging ( such as " band " and " objective " ). support is considered

This type models based on a formal system lies This is the system species four with is given [1, 4-6]:

$$M = (T, P, A, B)$$

T collection different different in nature basic elements collection is , for example , some limited in the dictionary the word is something to the collection entering children constructor details and etc. T collection for optional of the element this to the collection belonging or belongs to that it is not to determine some kind of method existence important is considered.

P collection syntactic the rules collection is considered They are using T collection from the



elements syntactic right complexes is formed. For example limited in the dictionary from words syntactic right expressions will be built, guys constructor bolt and in the details nuts using new constructions will be built. Limited in the thigh from the steps after «X complex syntactic right » said to the question answer get possible was P ( P ) of the procedure existence announcement will be done.

Syntactic right complexes in the collection some kind of A part collection is separated.

A collection elements axiom is called

B collection conclusion rules is a set them A collection to the elements support new right syntactic complexes get possible and to them again B in the rules use can So by doing in this formal system removable complexes collection is formed. This thing exactly conclusion rules of the formal system the most complicated organize doer that shows.

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