



جامعة المستقبل
AL MUSTAQBAL UNIVERSITY

كلية العلوم قسم علوم الذكاء الاصطناعي

المحاضرة السابعة

المادة : *Knowledge representation*

المرحلة : الأولى

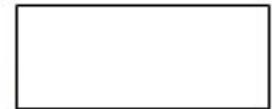
اسم الاستاذ: م.م. عبدالله فاضل شبر

4- Conceptual Graph

Conceptual Graph is a logical formalism that includes classes, relations, individuals and quantifiers. This formalism is based on semantic networks. The main feature is a standardized graphical representation that like in the case of semantic networks allows human to get a quick overview of what the graph means.

The **conceptual graph** is a bipartite oriented graph where concepts are represented as a rectangle and conceptual relations are represented as an ellipse. Oriented edges then link these vertices and denote the existence and orientation of relation. A relation can have more than one edge, in which case edges are numbered.

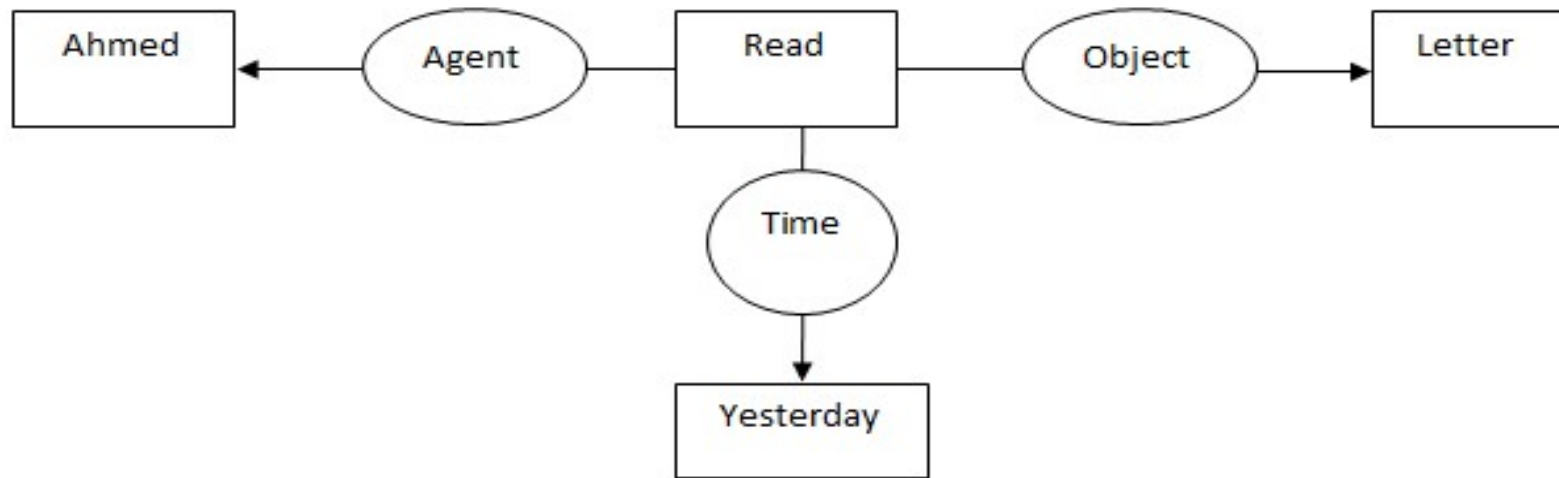
يستخدم لتمثيل الأسماء والصفات والأفعال والثوابت



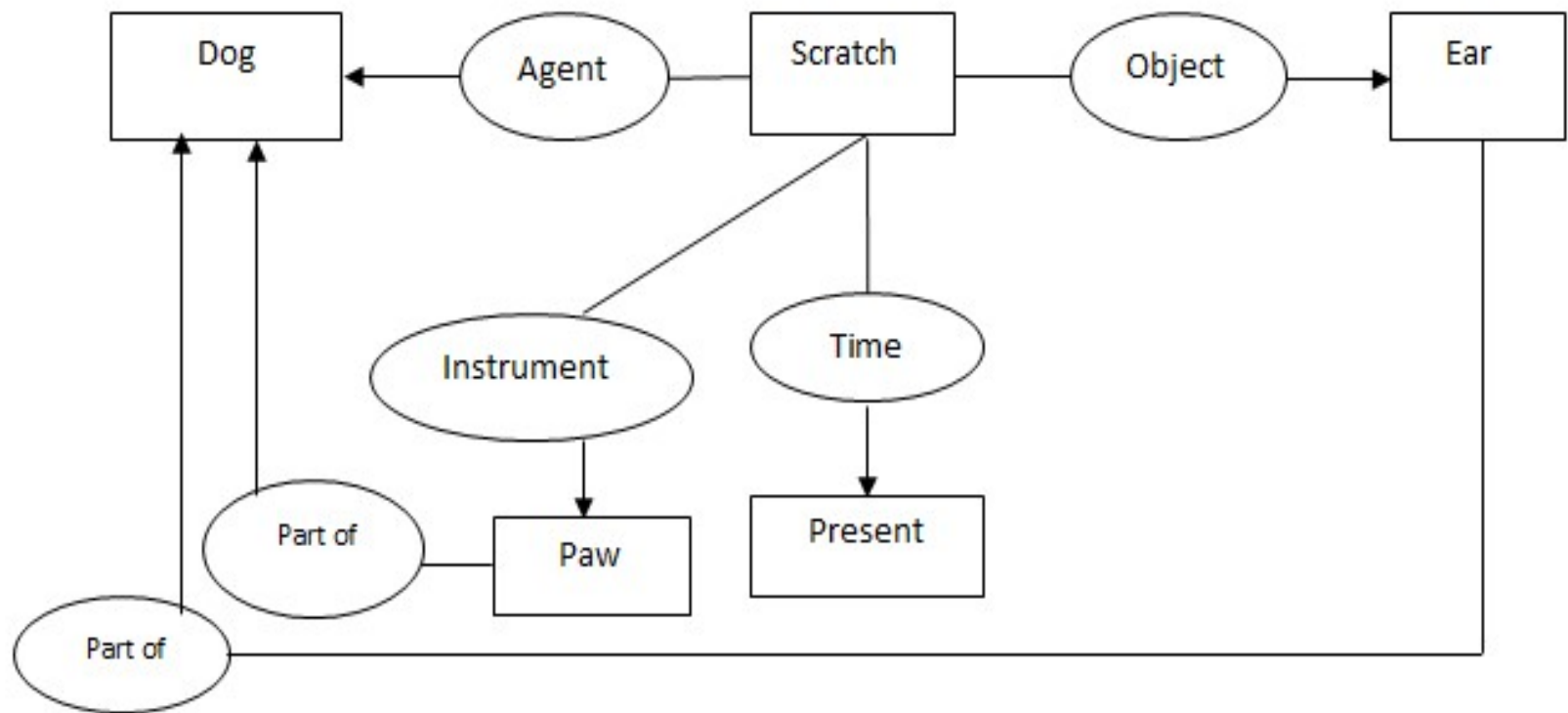
يستخدم لتمثيل أدوات التعريف والعلاقات



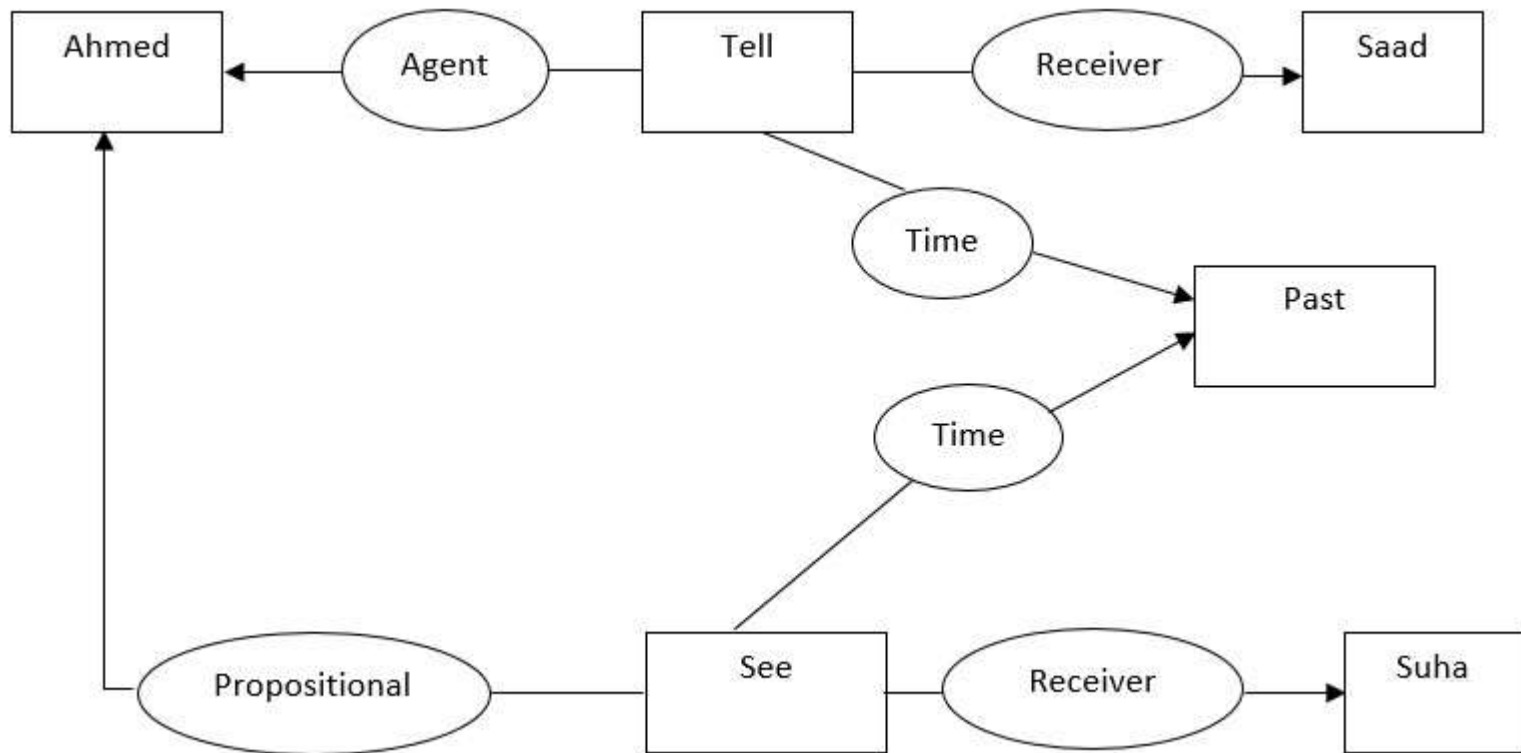
Example 1: Ahmed read a letter yesterday



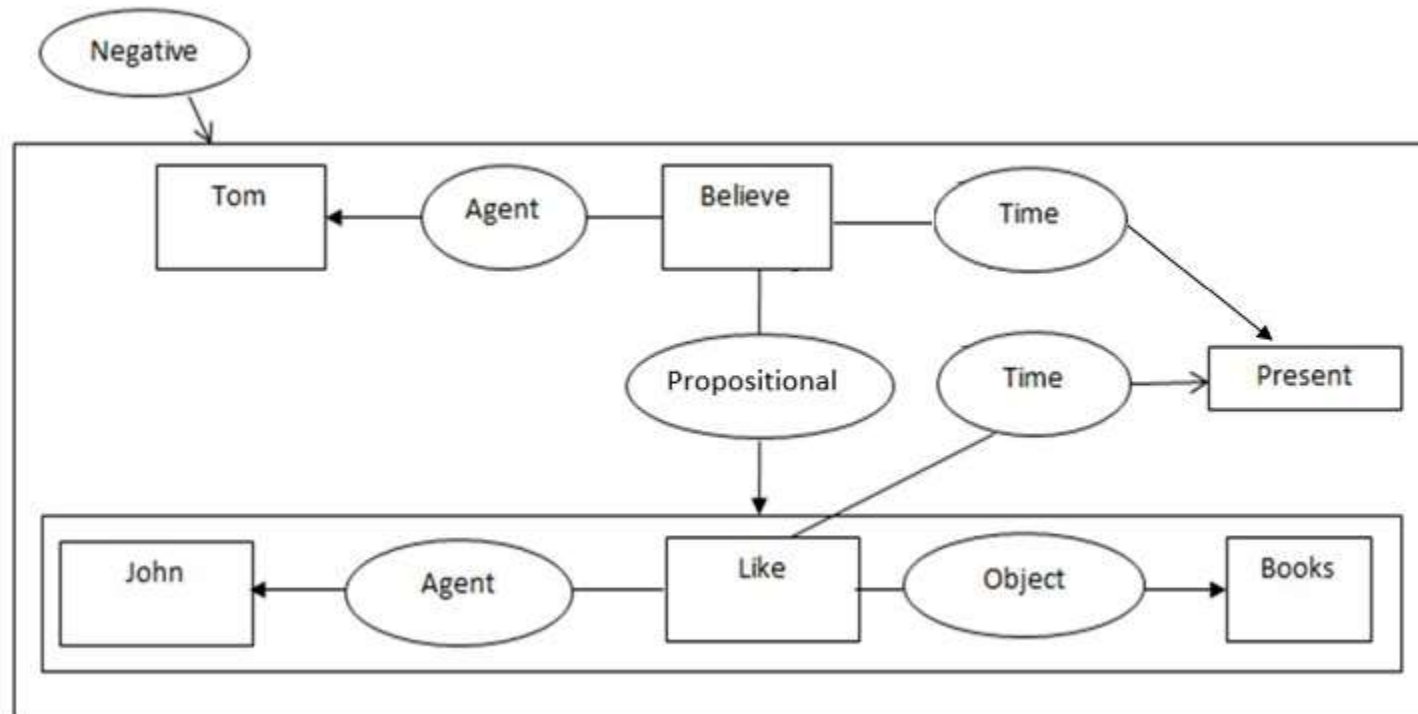
Example 2: The dog scratches its ear with its paw



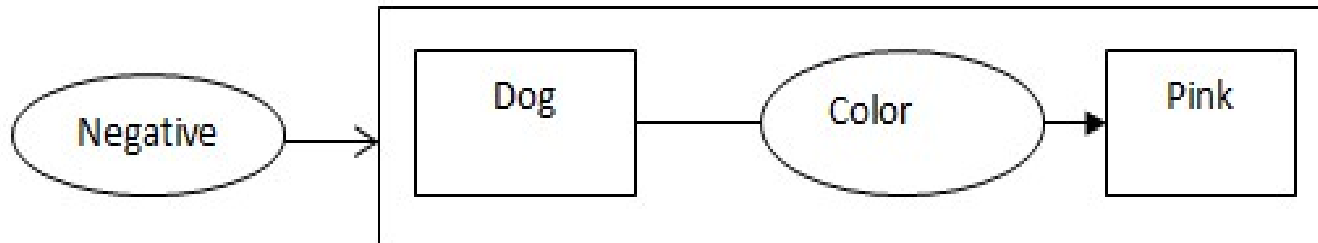
Example 3: Ahmed told Saad that he saw Suha



Example 4: Tom doesn't believe that John likes books



Example 5: There are no pink dogs



Example 6: The dog has brown color.



Example 7: Ahmed and Ali like books.

