



جامعة المستقبل
AL MUSTAQBAL UNIVERSITY

كلية العلوم قسم علوم الذكاء الاصطناعي

المحاضرة السادسة

المادة : *Knowledge representation*


المرحلة : الأولى

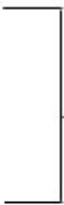


اسم الاستاذ: م.م. عبدالله فاضل شبر

3- Semantic Network

- The semantic network consists of a set of nodes and arrows; each node is represented as a rectangle to describe the objects, concepts and the events. The arrows are used to connect the nodes, these arrows are divided into three types:-

1- Is a  for objects types

2- Is  To define the object or describe it

3- Has a   To describe the properties of objects or the actions that the object can do
Can 



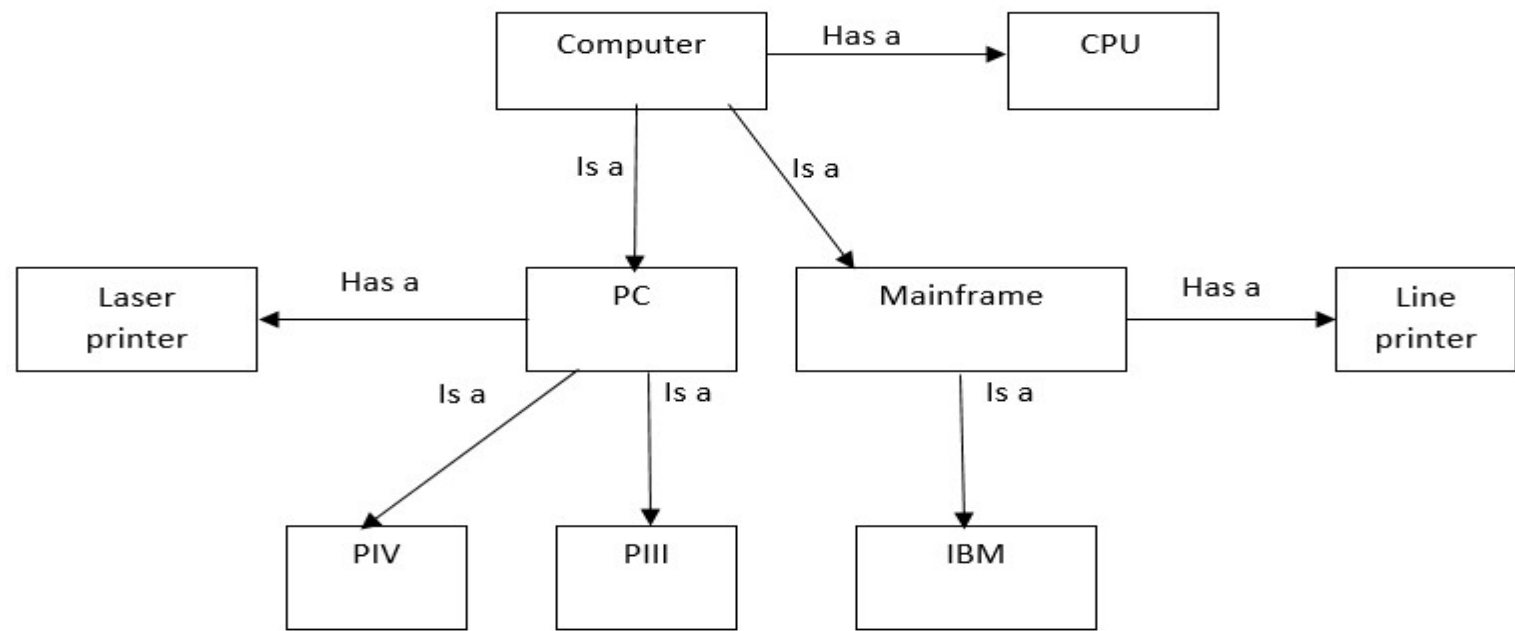
لتمثيل الأفعال والأحداث والكائنات



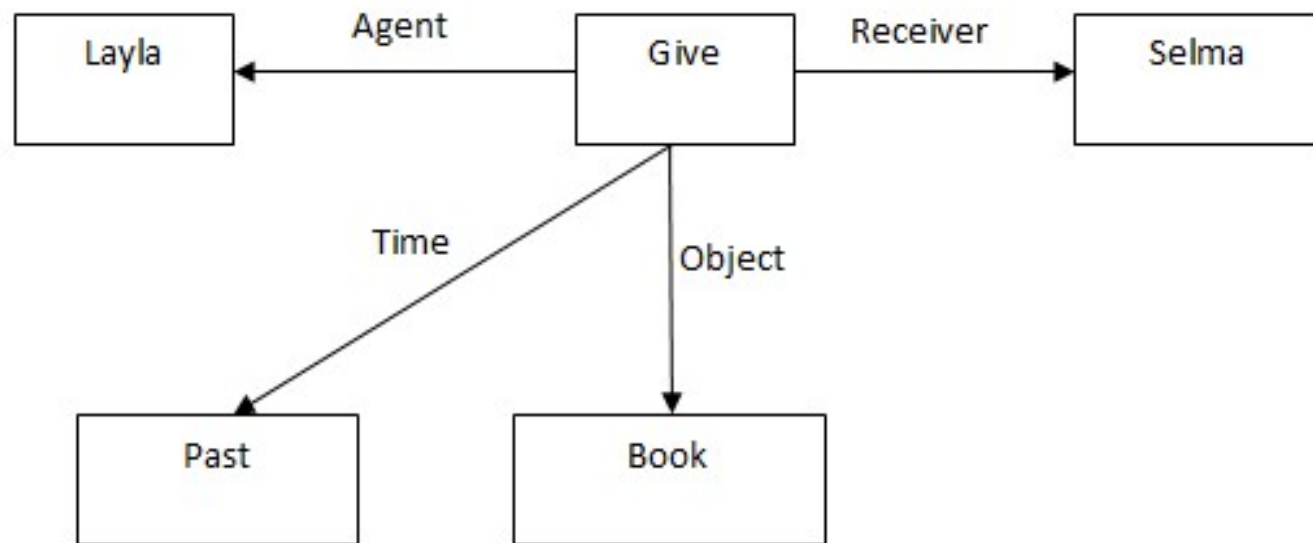
لتمثيل العلاقة بين الكائنات →

في وصف اللغات الطبيعية فان **arrows** تخرج من الفعل لتوضح او لتشير الى
الفاعل (**agent**) والمستقبل (**Receiver**) والكائن (**object**) كما تشير الى
وقت حدوث الفعل أي في الماضي , الحاضر او المستقبل.

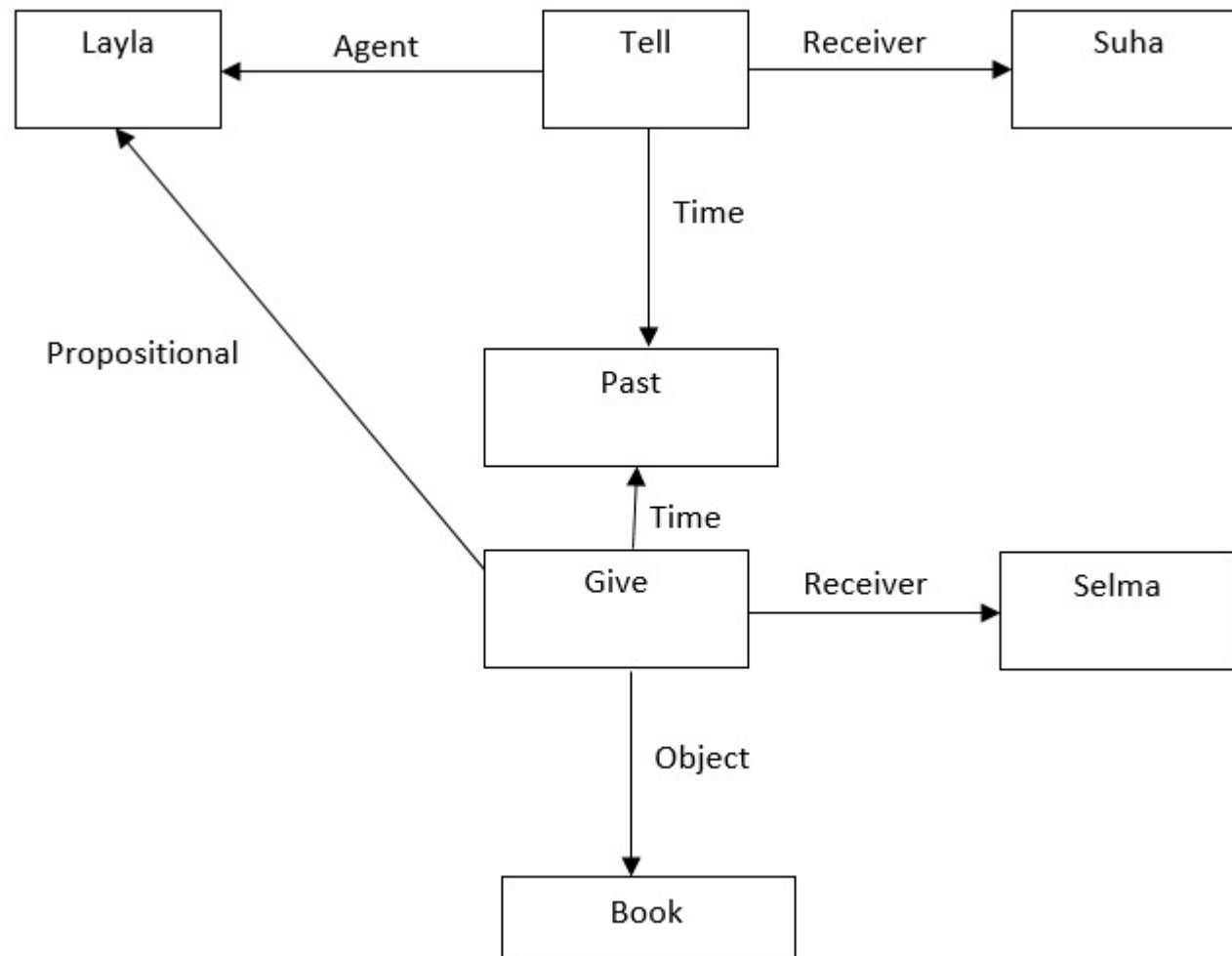
Example 1: Computer has many parts like a CPU and the computer divided into two types, the first one is the mainframe and the second is the personal computer. Mainframe has a line printer with large sheet but the personal computer has a laser printer. IBM as example to the mainframe but PIII and PIV as examples to the personal computer.



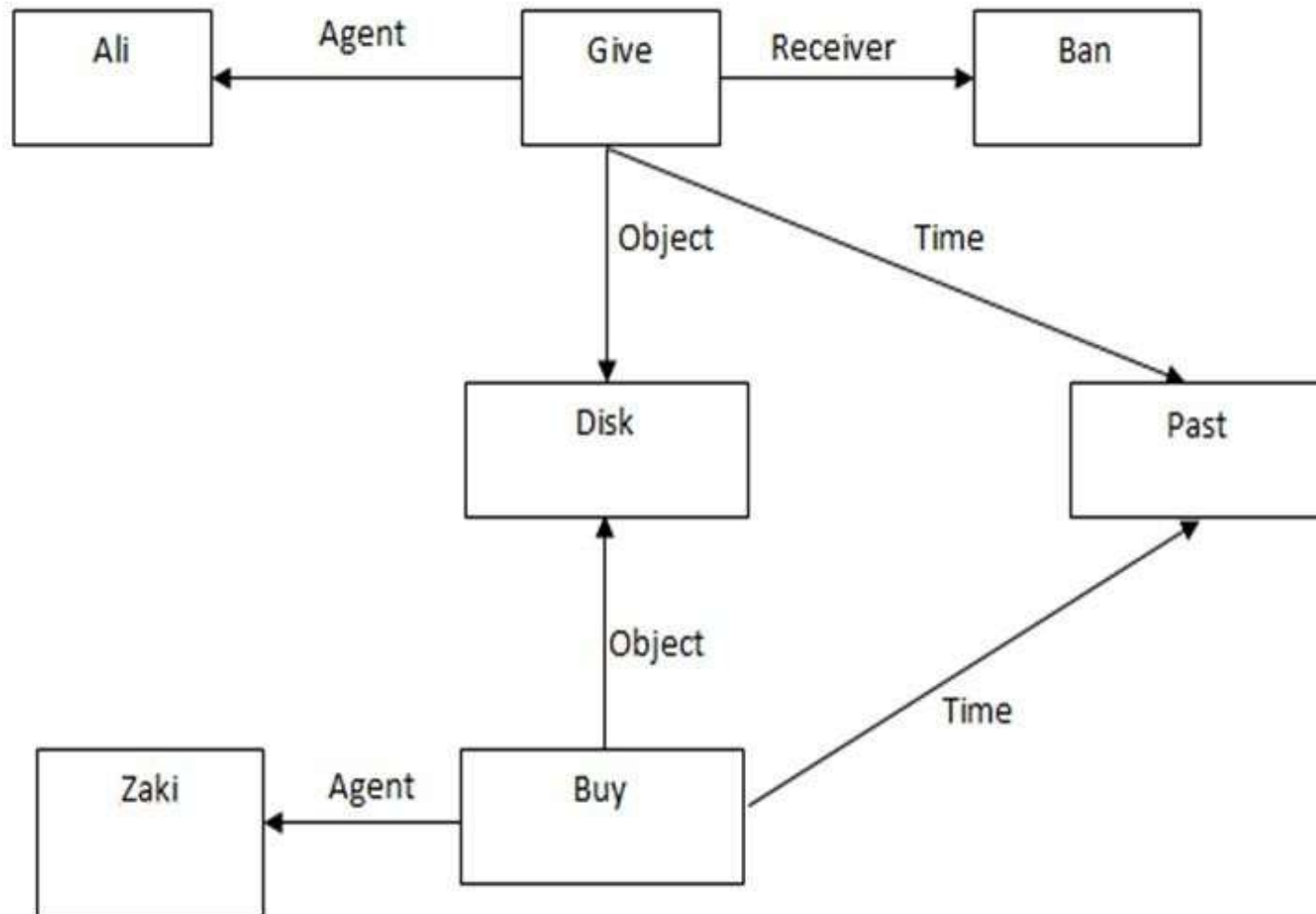
Example 2: Layla gave Selma a book



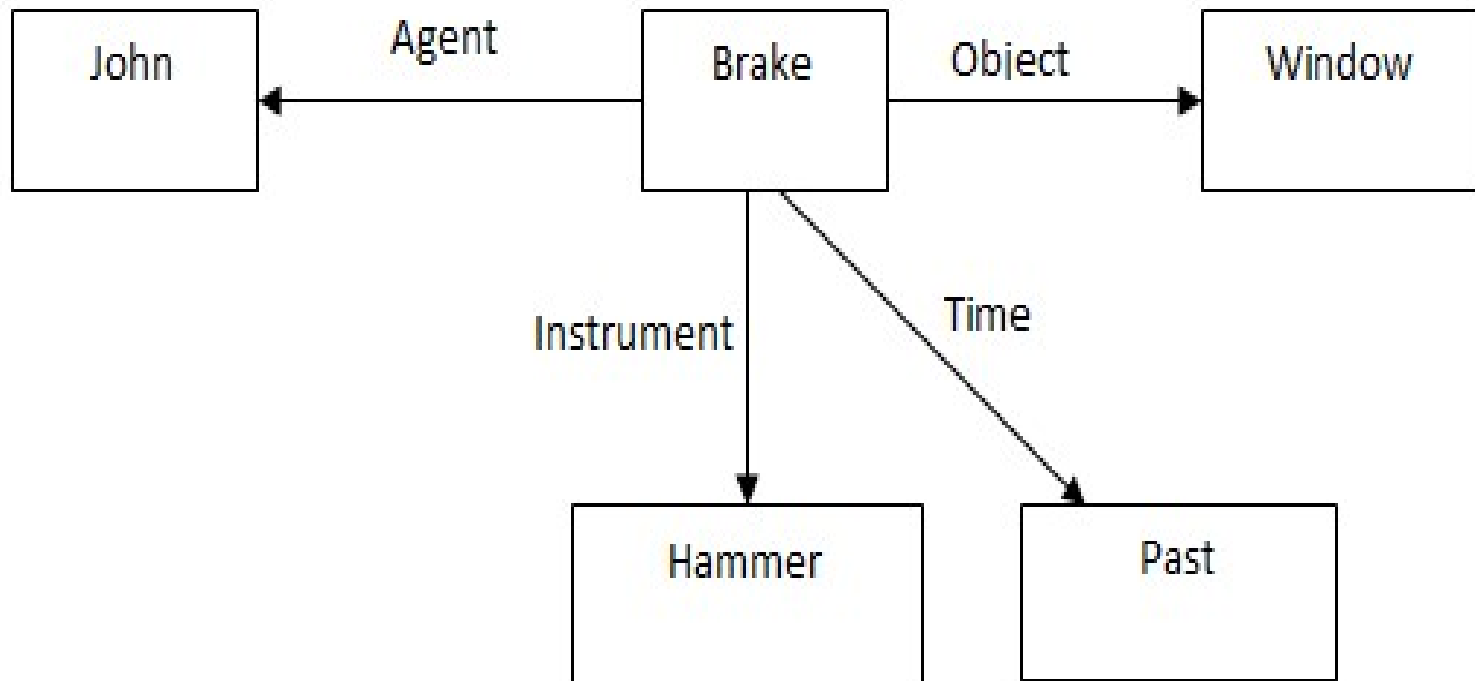
Example 3: Layla told Suha that she gave Selma a book



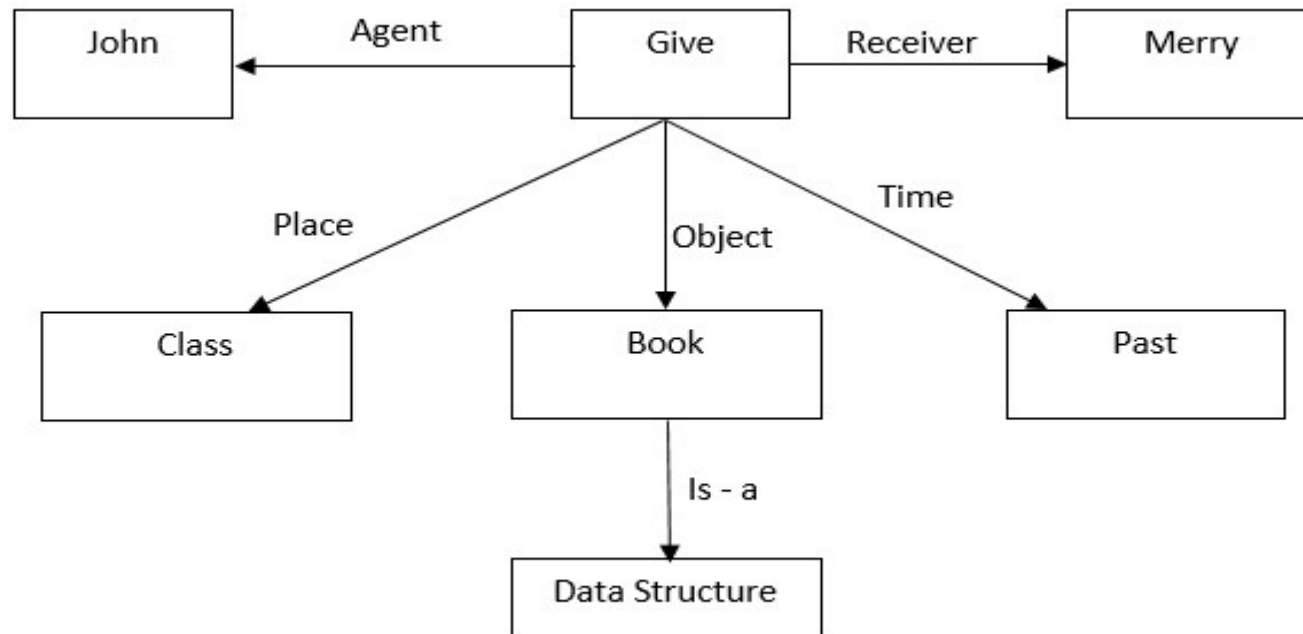
Example 4: Ali gave Ban a disk which is Zaki bought



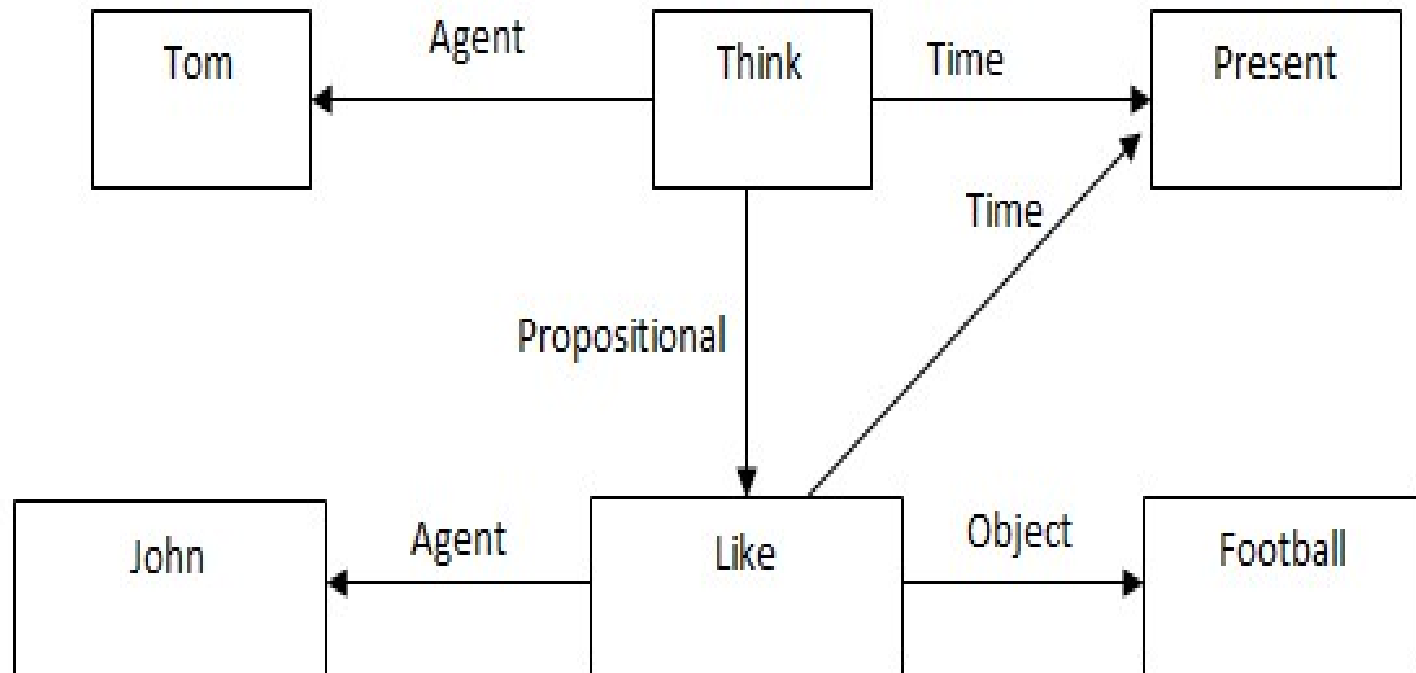
Example 5: John broke the window with the hammer



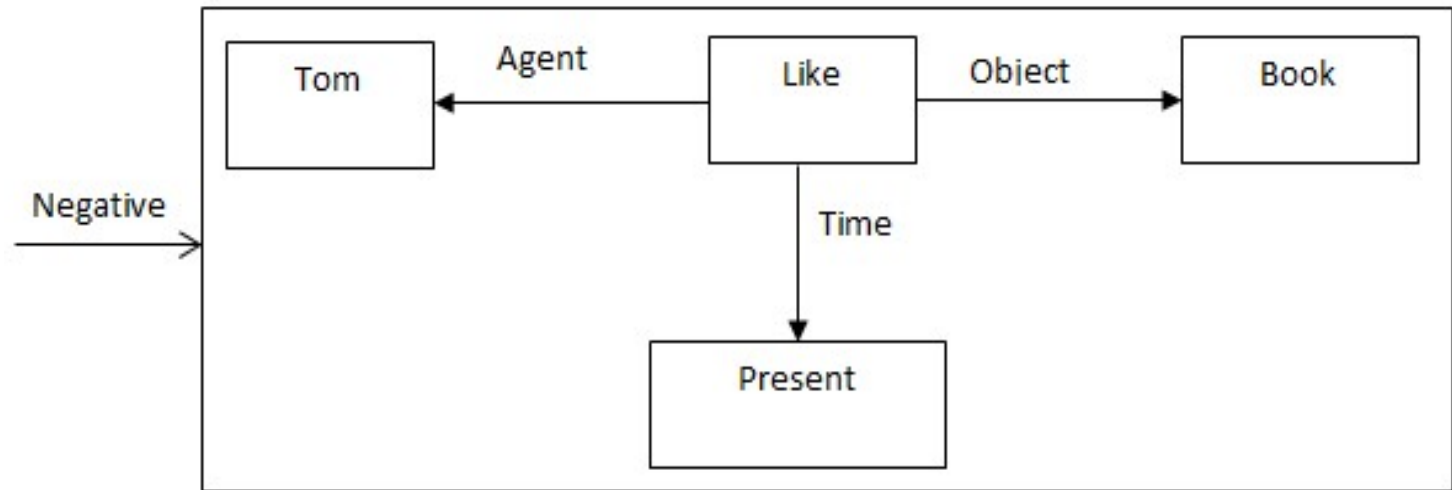
Example 6: John gave merry a book of data structure in the class.



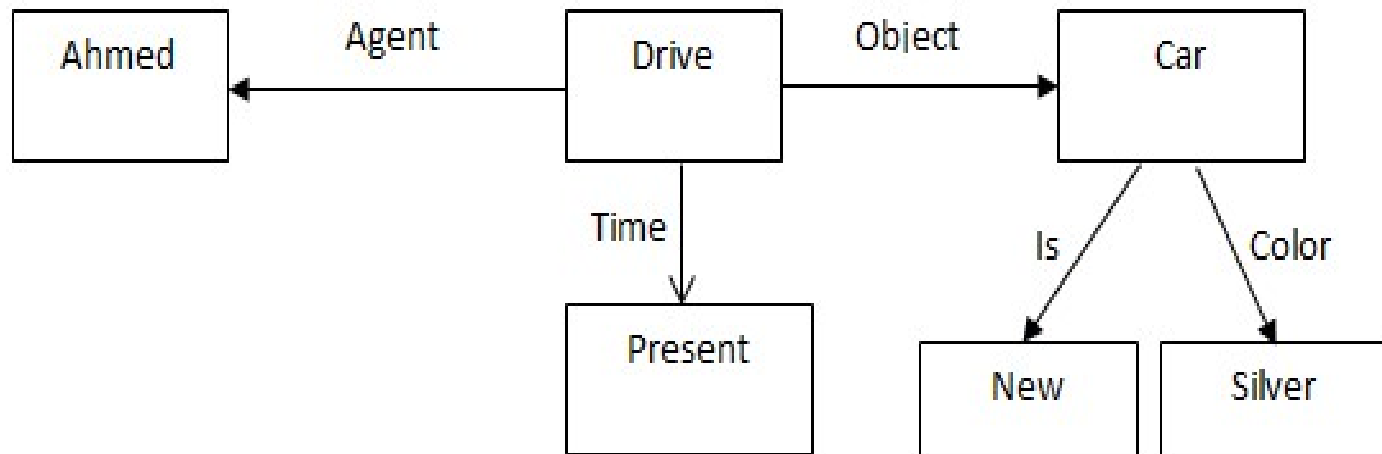
Example 7: Tom thinks that John likes football.



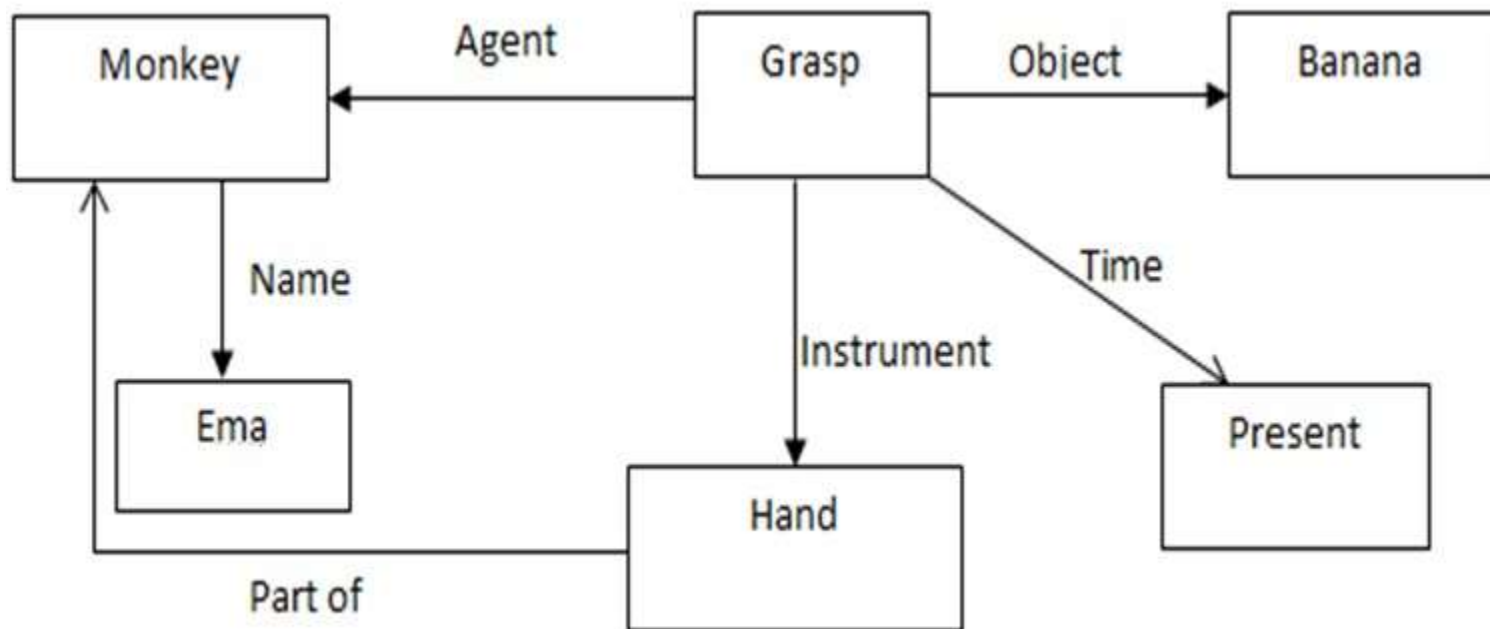
Example 8: Tom doesn't like a book.



Example 9: Ahmed drives a new silver car.



Example 10: Monkey Ema grasps the banana with hand



Example 11: The CD is between book and magazine.

