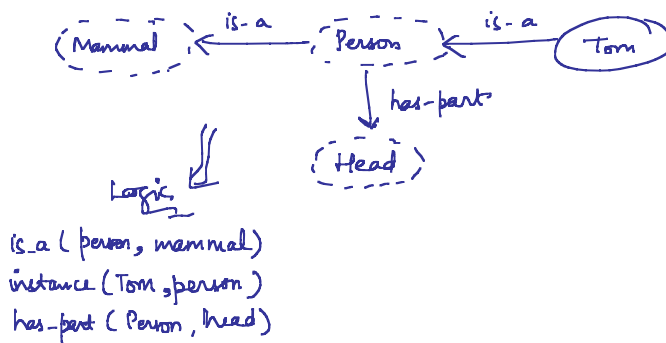


→ A semantic network is a structure for representing knowledge as a pattern of interconnected nodes and arcs.

Nodes:- represent concepts, entities, attributes, events, values.

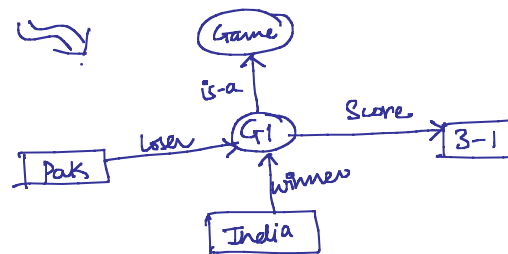
Arcs:- relationships between concepts.

→ Semantics lies not in the structure alone but also requires the relations.

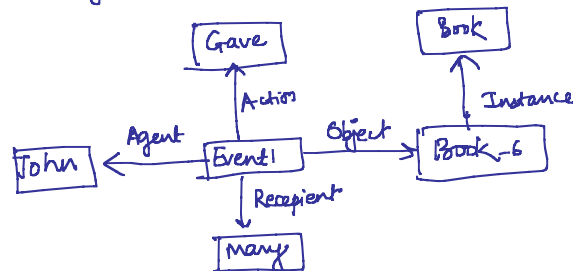


I want to represent the below predicate

Score (India, Pak, 3-1)

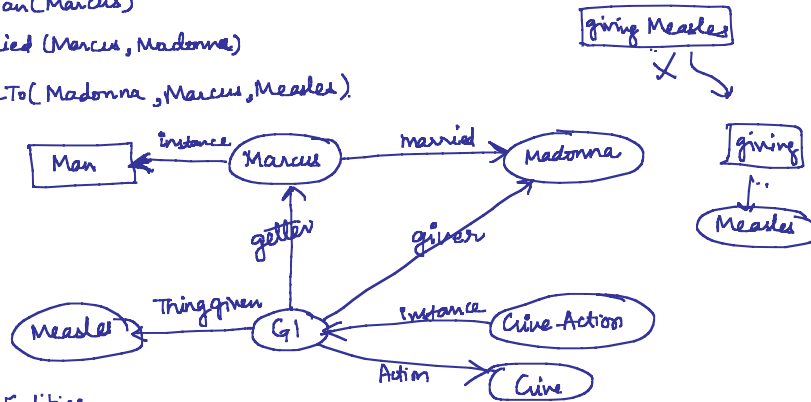


"John gave Mary the book"

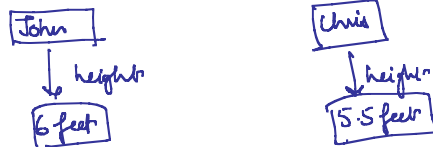


Build a Semantic Net that represents the following knowledge:

Man(Marcus)
 married (Marcus, Madonna)
 GaveTo (Madonna, Marcus, Measles).

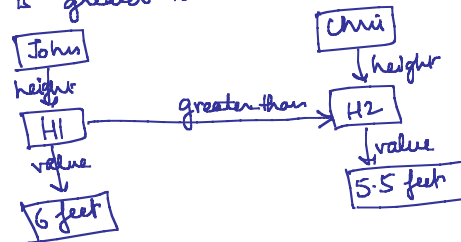


Relating Entities



John is taller than Chris.

John's height is greater than Chris.



Inheritance

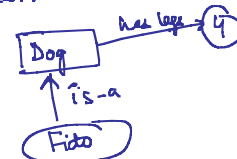
→ Specialised inferring technique

→ represented by is-a relation between two classes in semantic net.

e.g. Fido is a dog.

Dog has 4 legs

Fido has 4 legs.



Nellie has head?

Yes

Default v/s Generic Properties

• Generic properties are always inherited.

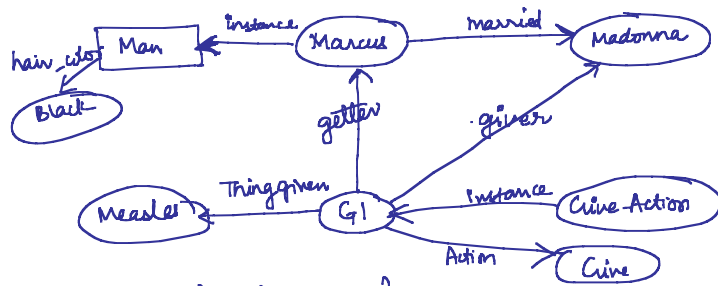
Fido is a dog.
 Dog is a animal.
 Hence Fido is a animal.

• Default properties inherit if nothing is known to the contrary.

Fido is a dog

Dog has part tail

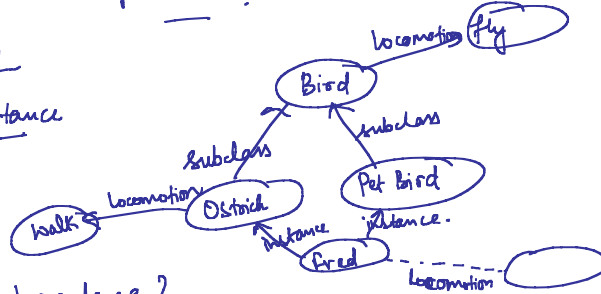
If we don't have any info like Fido's tail has been chopped off. then Fido has part tail.



What is the haircolor of Marcus?

Black

Multiple Inheritance



Which class takes precedence?

↳ More specific class.
inferential distance (path length).

Is Rita confident or shaky?

