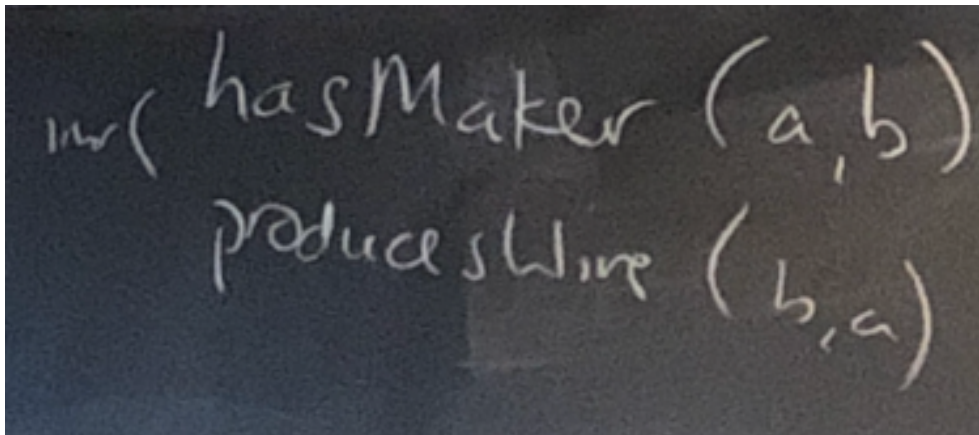
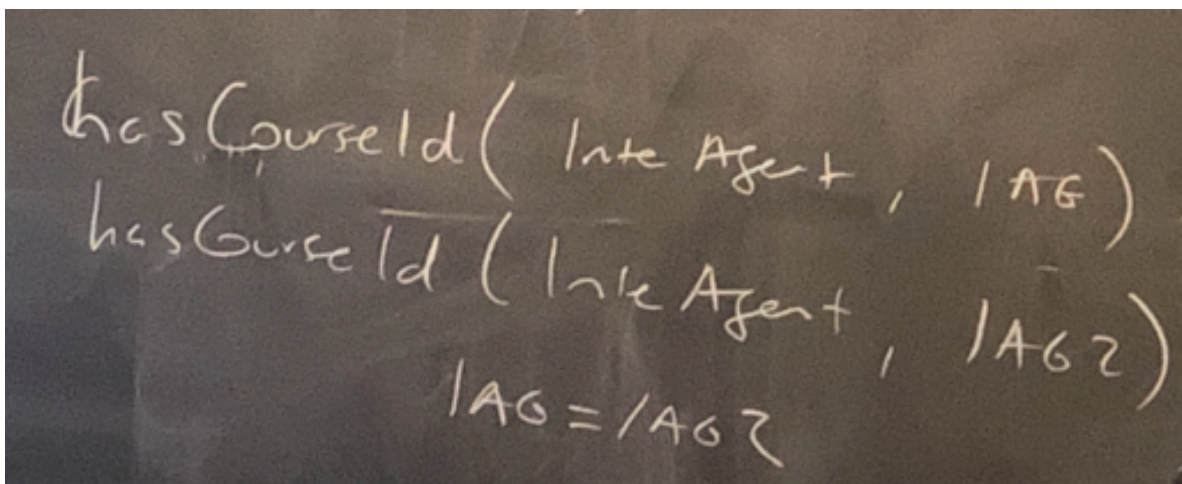


L5 OWL continues

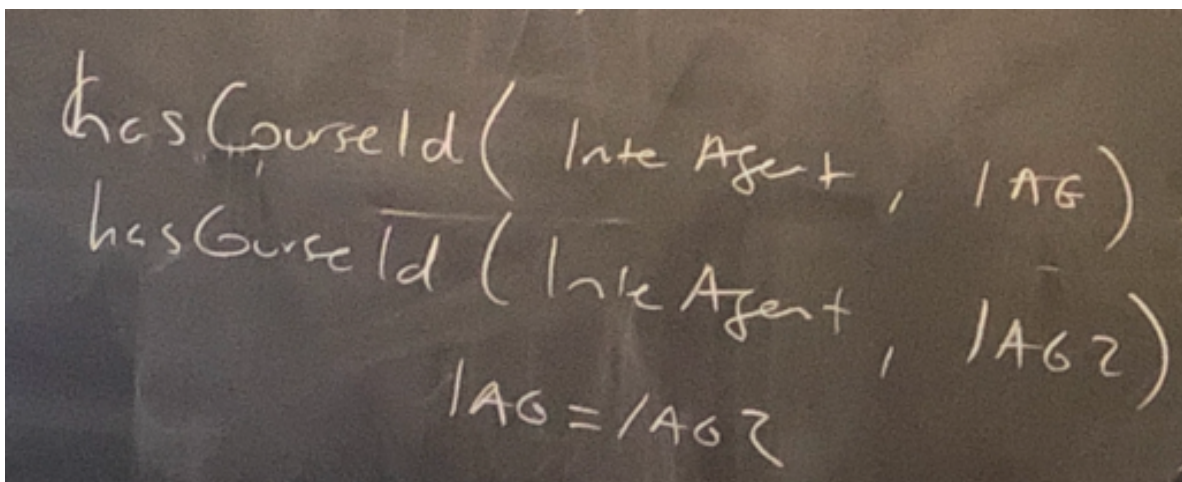
Transitive property



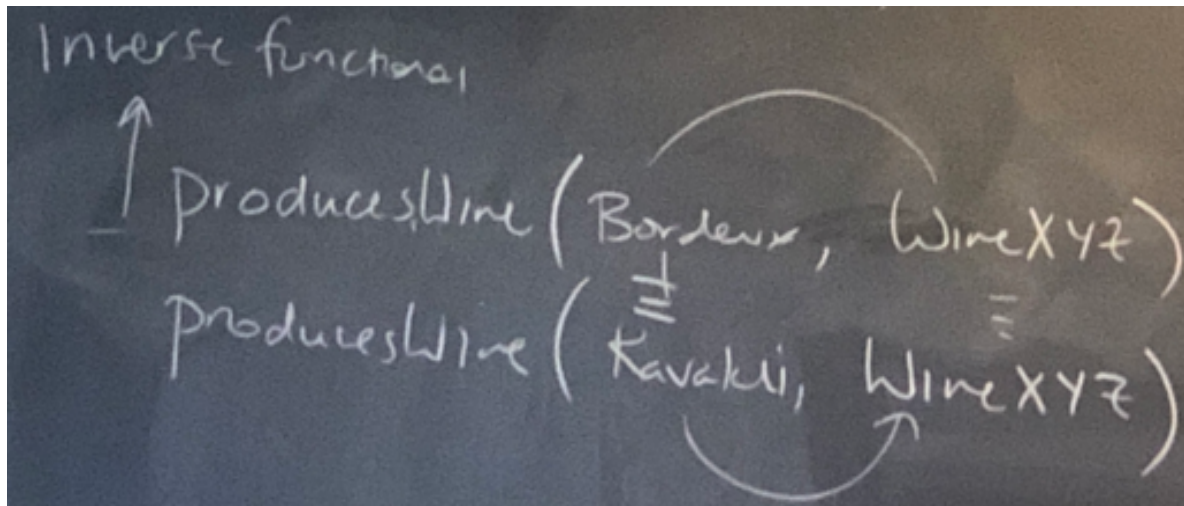
Symmetric property



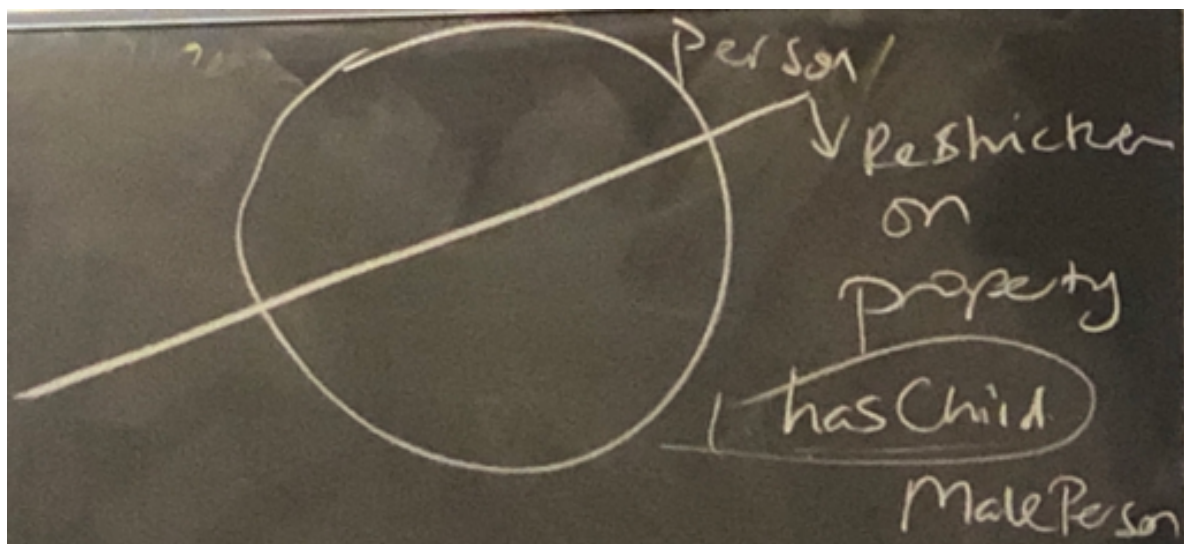
Functional property



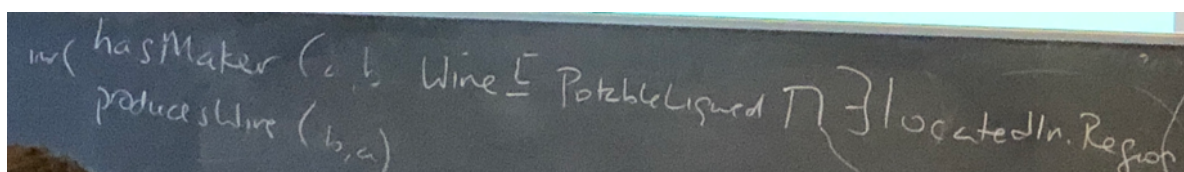
Inverse functional property



Restriction



Restriction example



Example: White wine

(curly brackets as "White" is not a class, we are enumerating a set with the curly brackets and "White" is the only element in that set in this example; also, set has to be always defined, be it a class or not)

$$\text{WhiteWine} \equiv \text{Wine} \cap \forall \text{hasColor} \{ \text{White} \}$$

Example: All wines

$$\text{Wine} \subseteq \forall \text{hasColor} \{ \text{White} \}$$

Example: Non-sweet white wine

$$\text{WhiteNonSweetWine} \equiv \text{WhiteWine} \cap \forall \text{hasSugar} \{ \text{Dry}, \text{OTDry} \}$$

Example: Zinfandel

Made from 1 grape from set of (zinfandelgrape)

$$\text{Wine} \cap \leq 1 \text{ madeFromGrape} \{ \text{ZinfandelGrape} \}$$

I left the lecture at this point so no more pictures for L5