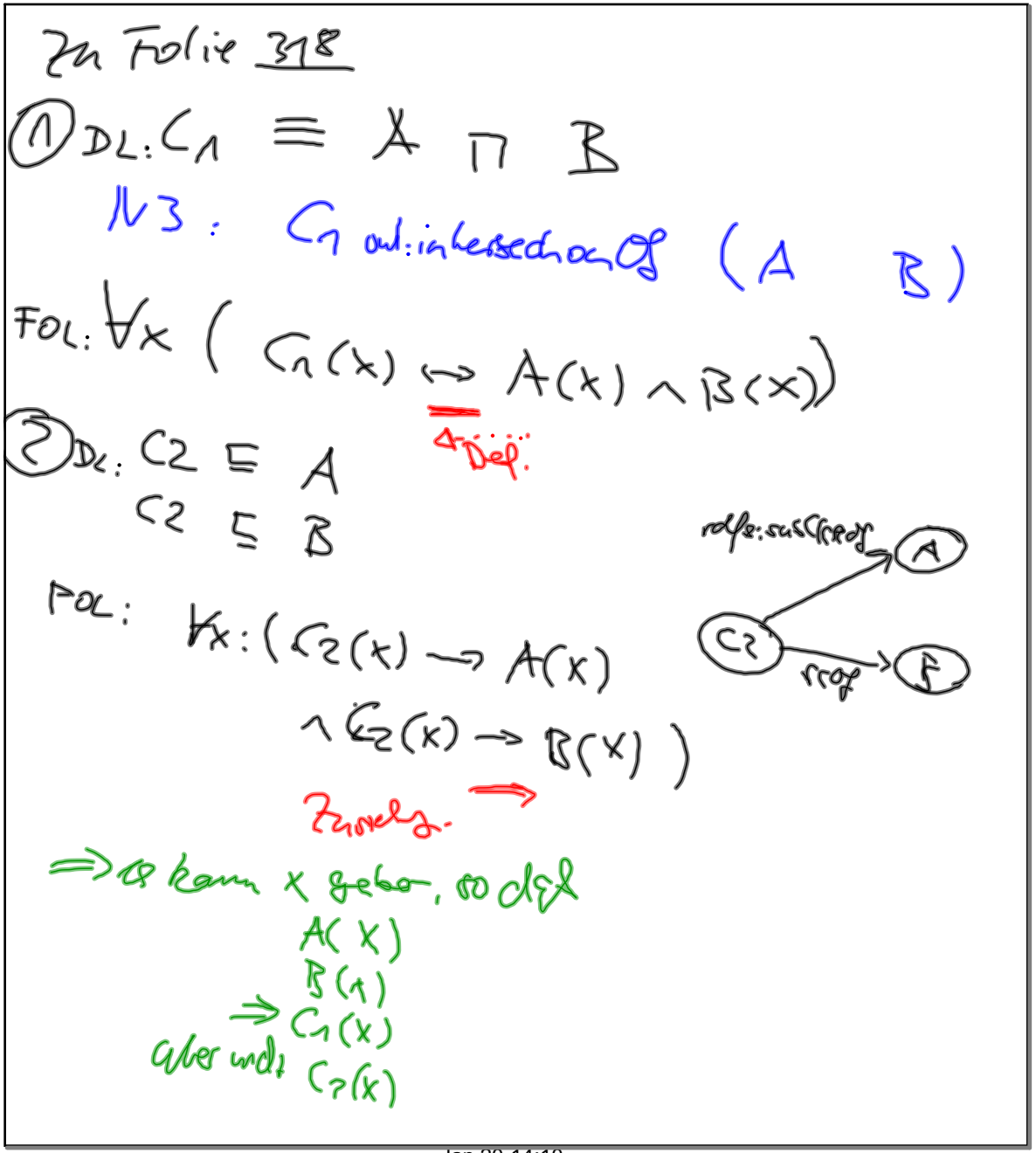
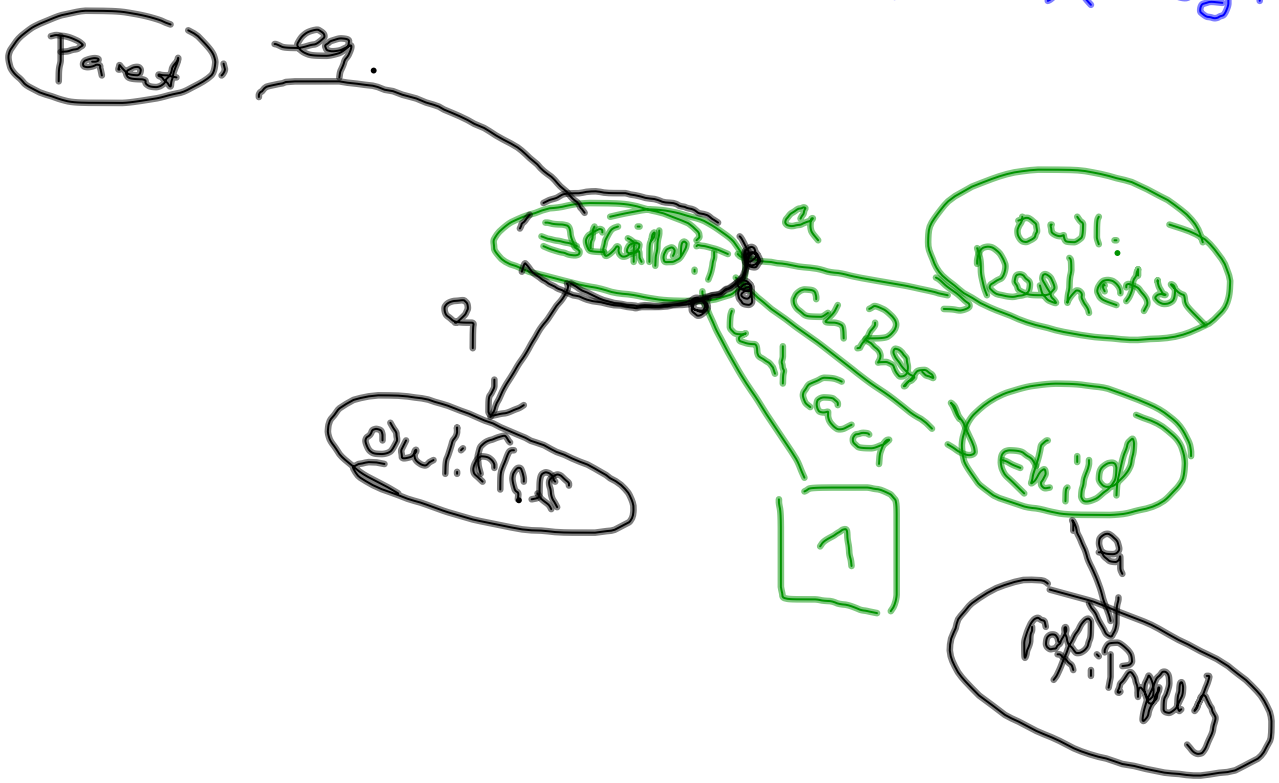

Zu Folie 318
① DL: $C_1 \equiv A \sqcap B$
N3: C_1 owl:intersectionOf (A B)
FOL: $\forall x \, (C_1(x) \leftrightarrow A(x) \wedge B(x))$
Def.
② DL: $C_2 \sqsubseteq A$
$C_2 \sqsubseteq B$
FOL: $\forall x: (C_2(x) \rightarrow A(x) \wedge C_2(x) \rightarrow B(x))$
Zusatz.
⇒ falls x gebo, so dgl
A(x)
B(x)
⇒ $C_1(x)$
aber auch $C_2(x)$
rdfs:subClassOf
A
C_2
rdfs:
B

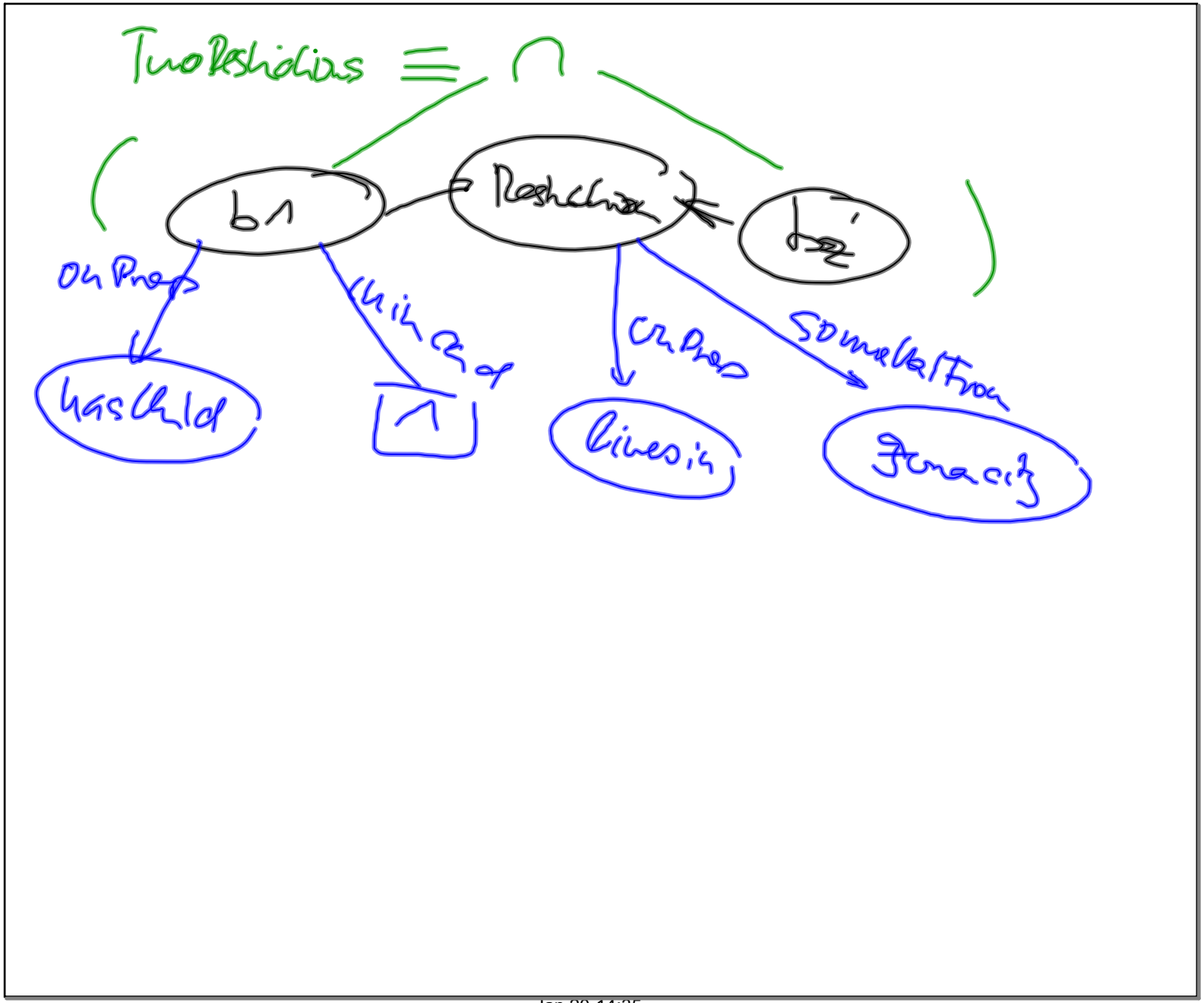
Parent ≡

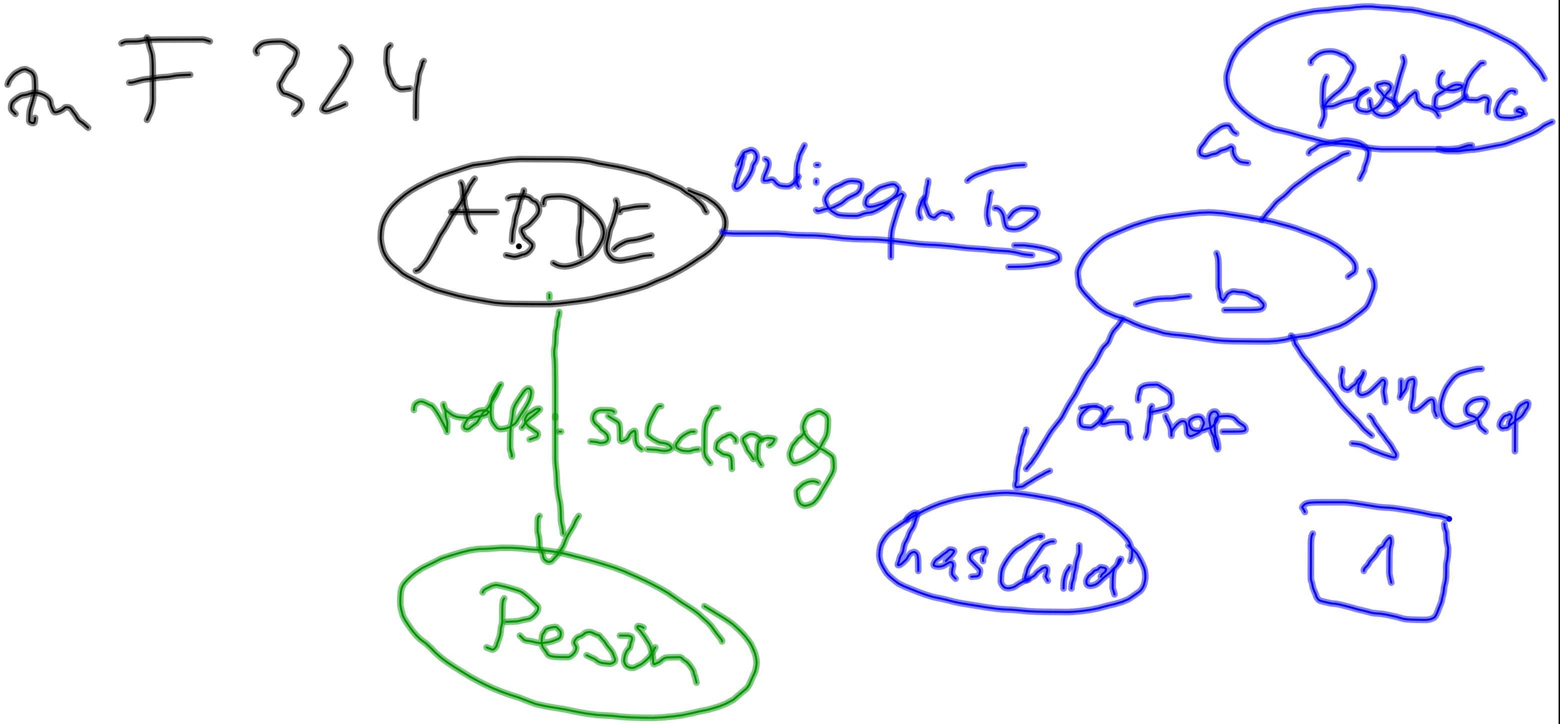
DL: Person ⊓ ∃child.⊤

FOL: ∀x (Parent(x)

⟺ Person(x) ∧ ∃y : child(x,y))



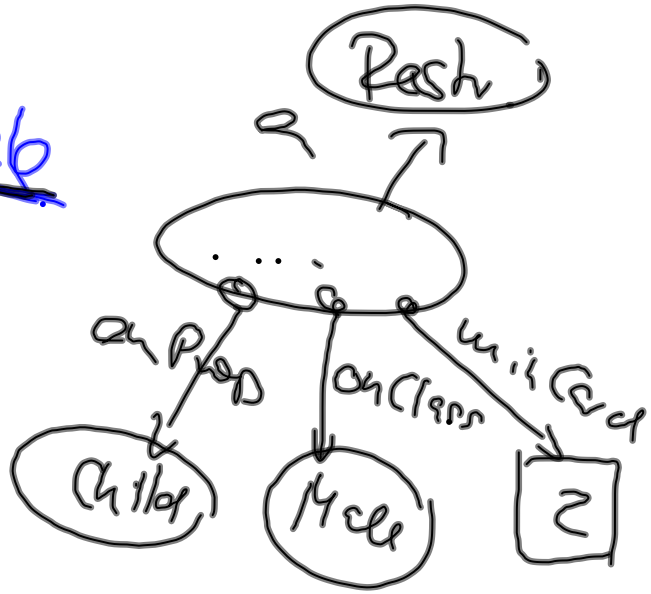

TwoRestrictions ≡ ∩
b1
Restriction
b2
onProp
hasChild
hasValue
1
onProp
livesIn
someValuesFrom
France

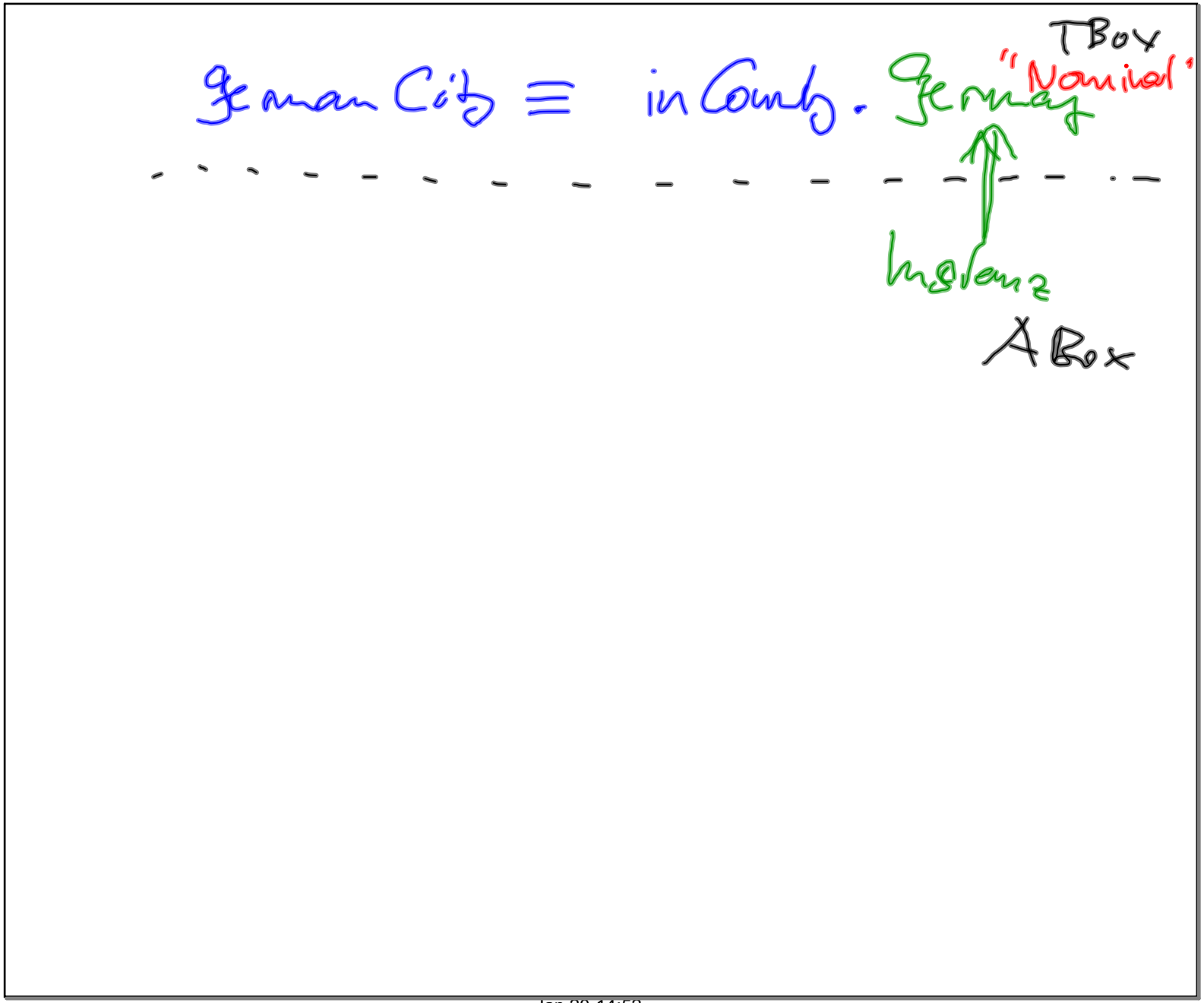

ABDE
Person
_b
onProp
hasChild
1

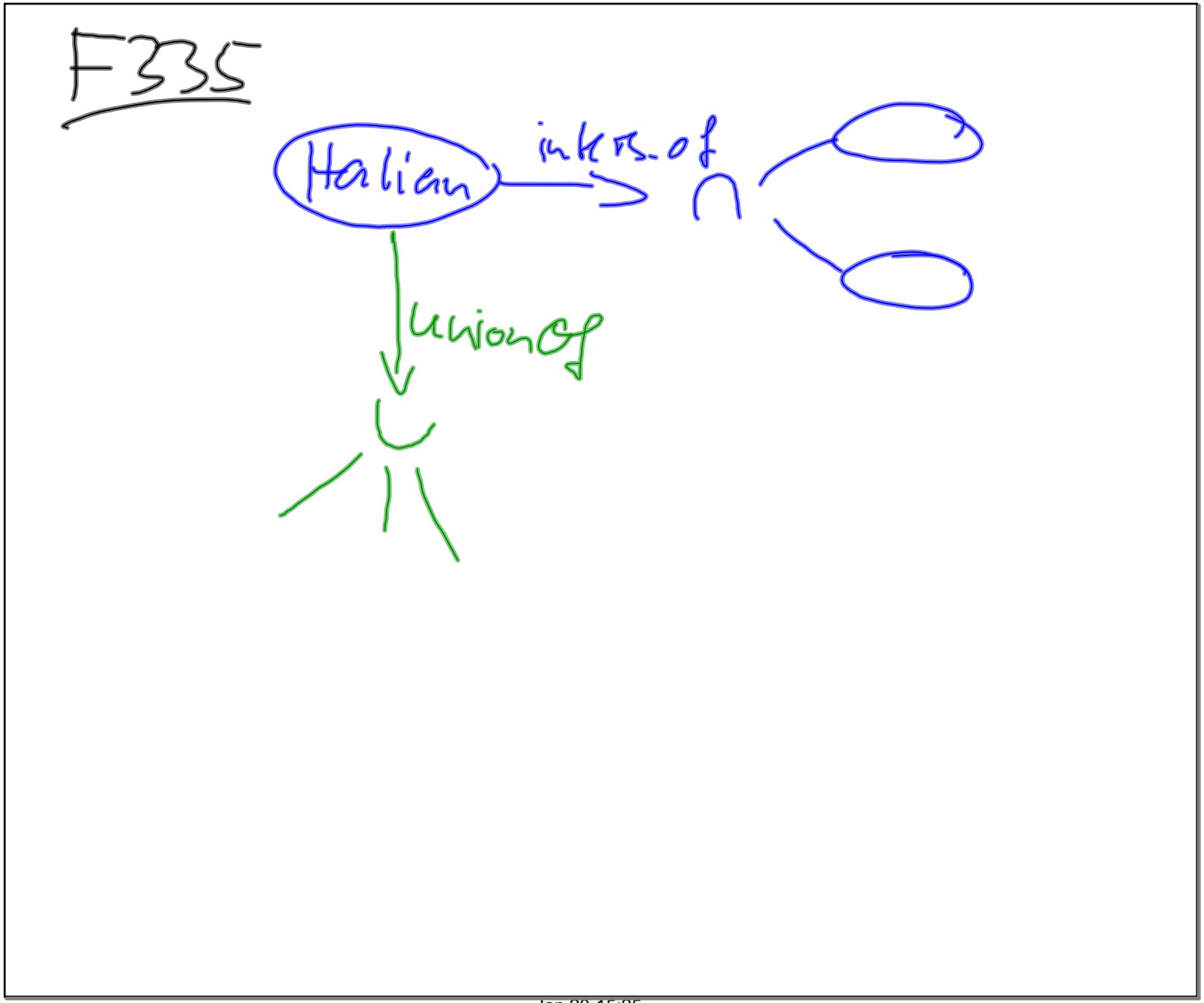
$(\exists child.Male) \sqcap (\exists \geq 2\ child.\top)$

vs.

$\exists \geq 2\ child.Male$




TBox
German City ≡ inCountry. {Germany}
"Nominal"
Instance
ABox


F335
Italian
intrs. of
union of