Brief Article

The Author

Variable 1 (U) $U\,:\,Type$.

Definition 1 (Ensemble) $Ensemble\,:=\,U\,\Rightarrow\,Prop$.

Definition 2 (In) $In\,(A : Ensemble)\,(x : U) :=\,A\,x$.

Notation 1 (”x) $"x\,\in\,A" := \,(In\,A\,x)\,(at\,level\,10)$.

Definition 3 (Included) $Included\,(B\,C\;:\;Ensemble)\;:\;Prop\;:=\;\forall\,x\;:\;U,\,x \in B\,\Rightarrow\,x\,\in\,C$.

Notation 2 (”A) $"A\,\subseteq\,B" := \,(Included\,A\,B)(at\,level\,10)$.

Definition 4 (Union) $Union\,(B\,C\;:\;Ensemble)\;:\;Ensemble\;:=\;fun\,x\;:\;U\;=>\;(x \in B)\,\vee\,(x \in C)$.

Notation 3 (”A) $"A\,\cup\,B" := \,(Union\,A\,B)(at\,level\,8)$.

Definition 5 (Intersection) $Intersection\,(B\,C : Ensemble)\,:\,Ensemble\,:= fun\,x : U\;=>\;(x \in B)\,\wedge(x \in C)$.

Notation 4 (”A) $"A\,\cap\,B"\;:=\,(Intersection\,A\,B)\,(at\,level\,10)$.

Variable 2 (Beings:Set.) $Beings : Set$.

Variables 1 (Babies) $Babies\,Illogical\,ManageCroc\,Despised : \,Beings \Rightarrow Prop$.

Notation 5 (”x) $"x\,'is'\,'a'\,'Baby'" := (Babies\,x)\,(at\,level\,10)$.

Notation 6 (”x) $"x\,'is'\,'illogical'" := (Illogical\,x)\,(at\,level\,10)$.

Notation 7 (”x) $"x\,'is'\,'despised'" := (Despised\,x)\,(at\,level\,10)$.

Notation 8 (”x) $''x\,'can'\,'manage'\,'crocodiles'''$:= $(ManageCroc\,x)\,(at\,level\,10)$.

Axiom 1 (BI:) $BI : \forall\,x,\; x\,is\,a\,Baby \;\Rightarrow\; x\,is\,illogical.$

Axiom 2 (MND) $MND\; : \forall\,x,\; x\,can\,manage\,crocodiles \;\Rightarrow\; not\,(x\,is\,despised).$

Axiom 3 (ID:) $ID : \forall\,x,\; x\,is\,illogical \;\Rightarrow\; x\,is\,despised.$

Lemma 1 (LcBabies) $LcBabies : \forall\,x,\; x\,is\,a\,Baby \;\Rightarrow\; not\,(x\,can\,manage\,crocodiles).$

Proof: In order to show $\forall x : Beings, (xisaBaby) \Rightarrow (not(xcanmanagecrocodiles))$ we pick an arbitrary

$$x$$

and show

$$(xisaBaby) \Rightarrow (not(xcanmanagecrocodiles)).$$

We will assume

$$Hyp : xisaBaby$$

and show

$$not(xcanmanagecrocodiles).$$

Using the definition not, our conclusion becomes

$$(xcanmanagecrocodiles) \Rightarrow False.$$

We will assume

$$Hyp0 : xcanmanagecrocodiles$$

and show

$$False.$$

Claim

$$xisillogical.$$

Let us prove prove that.

By BI, in order to prove $xisillogical$ it suffices to prove

$$xisaBaby.$$

$xisaBaby$ follows trivially from the assumptions.

and therefore we have proved x is illogical $.H$ and (IDx) imply

$$H0 : xisdespised.$$

$Hyp0$ and $(MNDx)$ imply

$$H1 : not(xisdespised).$$

By $H1$, in order to prove $False$ it suffices to prove

$$xisdespised.$$

$xisdespised$ follows trivially from the assumptions.

We have showed that if

$$Hyp0 : xcanmanagecrocodiles$$

then

$$False$$

a proof of $(xcanmanagecrocodiles) \Rightarrow False$.

Therefore we have showed

$$(xcanmanagecrocodiles) \Rightarrow False$$

and so $not(xcanmanagecrocodiles)$.

We have showed that if

$$Hyp : xisaBaby$$

then

$$not(xcanmanagecrocodiles)$$

a proof of $(xisaBaby) \Rightarrow (not(xcanmanagecrocodiles))$.

Since

$$x$$

was arbitrary this shows $\forall x : Beings, (xisaBaby) \Rightarrow (not(xcanmanagecrocodiles))$.This is done