

20162874 02월 7주 14주

HC $\text{American}(x) \wedge \text{Weapon}(y) \wedge \text{Sells}(x, y, z) \wedge \text{Hostile}(z) \Rightarrow \text{Criminal}(x)$

CNF $\neg \text{American}(x) \vee \neg \text{Weapon}(y) \vee \neg \text{Sells}(x, y, z) \vee \neg \text{Hostile}(z) \vee \text{Criminal}(x)$

HC $\text{Owns}(\text{Nono}, \text{M1})$

CNF $\text{Owns}(\text{Nono}, \text{M1})$

HC $\text{Missiles}(\text{M1})$

CNF $\text{Missiles}(\text{M1})$

HC $\forall x \text{ Missiles}(x) \wedge \text{Owns}(\text{Nono}, x) \Rightarrow \text{Sells}(\text{West}, x, \text{Nono})$

CNF $\neg \text{Missiles}(x) \vee \neg \text{Owns}(\text{Nono}, x) \vee \text{Sells}(\text{West}, x, \text{Nono})$

HC $\text{Missiles}(x) \Rightarrow \text{Weapon}(x)$

CNF $\neg \text{Missiles}(x) \vee \text{Weapon}(x)$

HC $\text{Enemy}(x, \text{America}) \Rightarrow \text{Hostile}(x)$

CNF $\neg \text{Enemy}(x, \text{America}) \vee \text{Hostile}(x)$

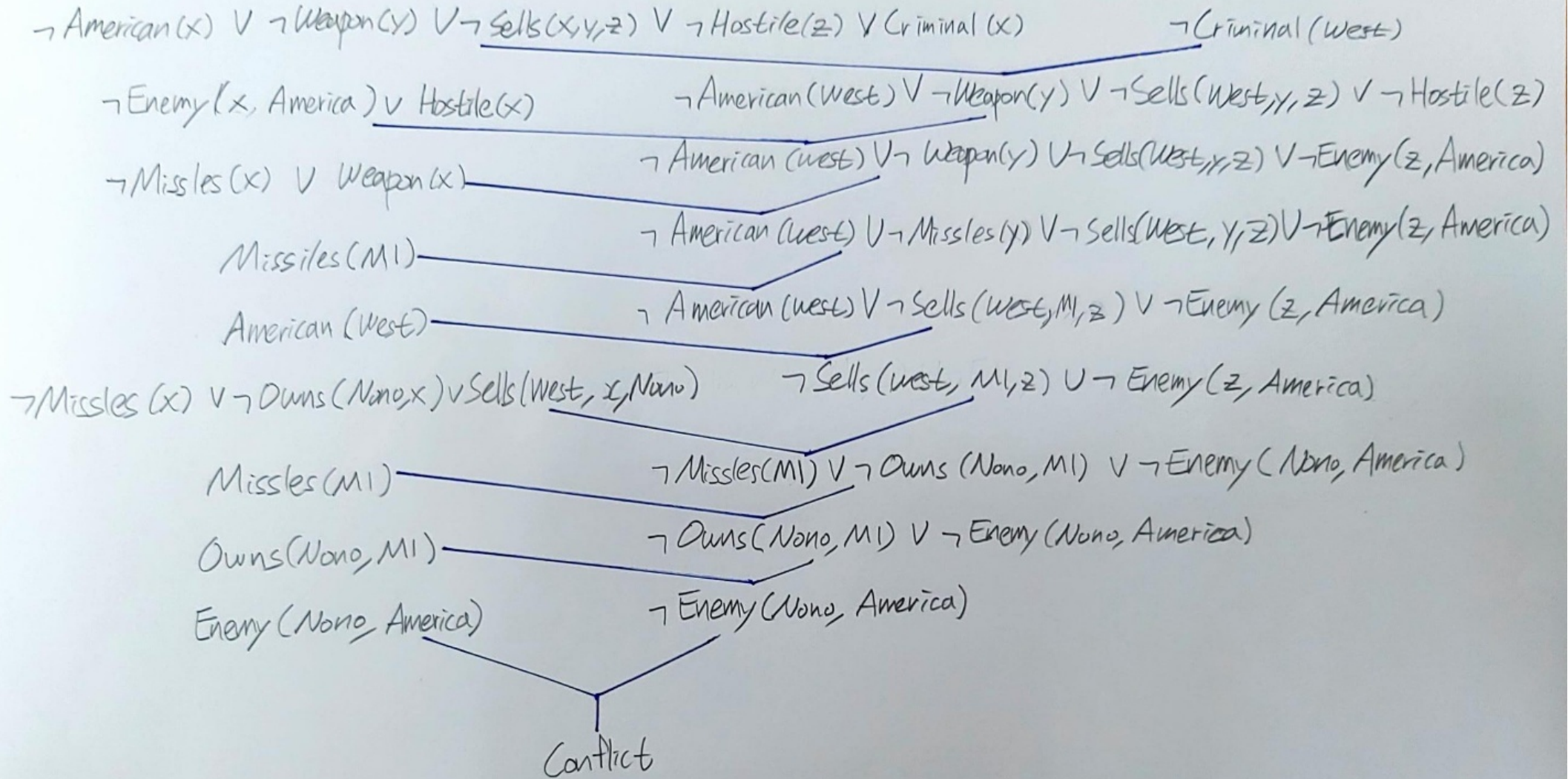
HC $\text{America}(\text{West})$

CNF $\text{America}(\text{West})$

HC $\text{Enemy}(\text{Nono}, \text{America})$

CNF $\text{Enemy}(\text{Nono}, \text{America})$

Resolution



\therefore Colonel West는 Criminal이다.

West가 Criminal임을 부인했을 때 모순이 발생하므로 Proof by Contradiction에 의하여 West는 Criminal이다.