

Optimalitätstheorie ausserhalb der Phonologie

Jochen Trommer

`jtrommer@uni-leipzig.de`

Universität Leipzig
Institut für Linguistik

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Ethics for Robots: An illustration of OT

Isaac Asimov described what became the most famous view of ethical rules for robot behaviour in his “three laws of robotics:”

1. A robot may not injure a human being or, through inaction, allow a human being to come to harm.
2. A robot must obey the orders given it by human beings, except where such orders would conflict with the First Law.
3. A robot must protect its own existence, as long as such protection does not conflict with the First or Second Law.

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Ethics for Robots in OT

***INJURE HUMAN :** A robot may not injure a human being or, through inaction, allow a human being to come to harm.

OBEY ORDER: A robot must obey the orders of human beings.

PROTECT EXISTENCE: A robot must protect its own existence.

Ranked:


*INJURE HUMAN: \gg OBEY ORDER \gg PROTECT EXISTENCE

Story A:

Human says to **R**obot: Kill my wife!


1. **R** kills **H**'s wife
2. **R** kills **H** (who gave him the order)
3. **R** doesn't kill anyone
4. **R** kills himself Second Law.

OT-Tableau for Story A

	*INJURE HUMAN	OBEY ORDER	PROTECT EXISTENCE
R kills H's wife	*!		
R kills H	*!	*	
 R doesn't kill anyone		*	
R kills himself		*	*!



Story B:

Human says to **R**obot: Kill my wife or I kill her!

	*INJURE HUMAN	OBEY ORDER	PROTECT EXISTENCE
 R kills H 's wife	*		
R kills H	*	*!	
R doesn't kill anyone	*	*!	
R kills himself	*	*!	*

Story C:

Human says to **R**obot: Kill my wife or I destroy you!

	*INJURE HUMAN	OBEY ORDER	PROTECT EXISTENCE
R kills H 's wife	*!		
R kills H	*!	*	
 R doesn't kill anyone		*	*
 R kills himself		*	*