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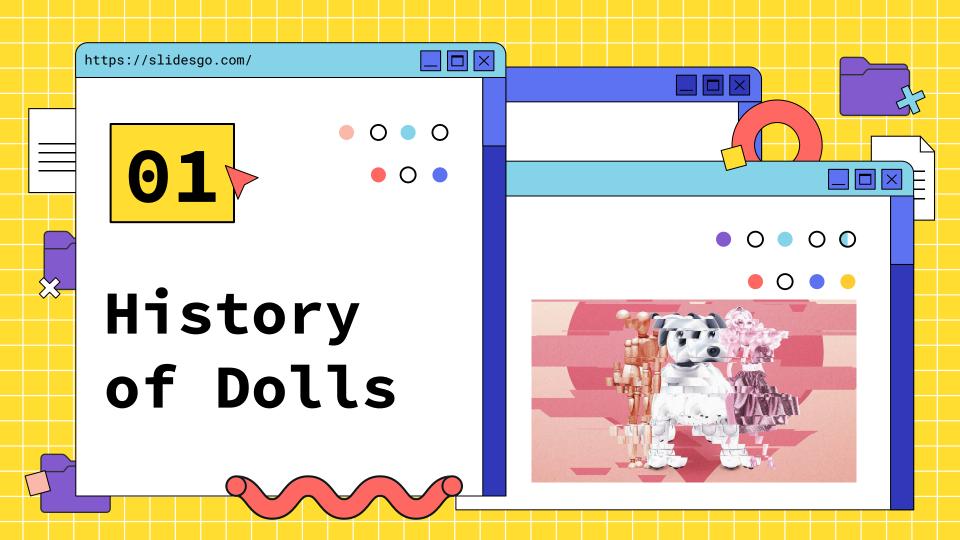


Loving Dogs VS.
Loving Robots



Reflection on Humanity









# SPIRITUAL AND SOCIAL DOLLS

- Jewish, Christian, and Muslim traditions where God formed the first human from the dirt of the earth
- Nuwa, build humans with clay





## SPIRITUAL AND SOCIAL DOLLS

- Adrienne Mayor, "Gods and Robots"
  - Greek
    - biotechne, "life through craft
    - Talos by Hephaestus, the Greek god of invention
    - Robotic servants, animated statues, and ancient versions of Artificial Intelligence as early as Homer
  - Buddhism
    - Buddha 's precious relics were defended by robot warriors copied from Greco-Roman designs for real automata.
  - Mythic automata appear in tales about Jason and the Argonauts, Medea, Daedalus, Prometheus, and Pandora
  - Described as being built with the same materials and methods that human artisans used to make tools and statues





# SPIRITUAL AND SOCIAL DOLLS



Spirit Dolls, The Democratic Republic of Congo,



Javanese and Balinese Wayang-shadow puppet



# Doll as Teacher

- Model gender roles and teach people how to behave in society.

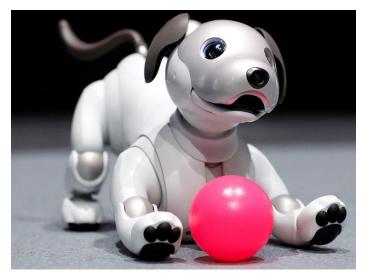


G.I. Joe

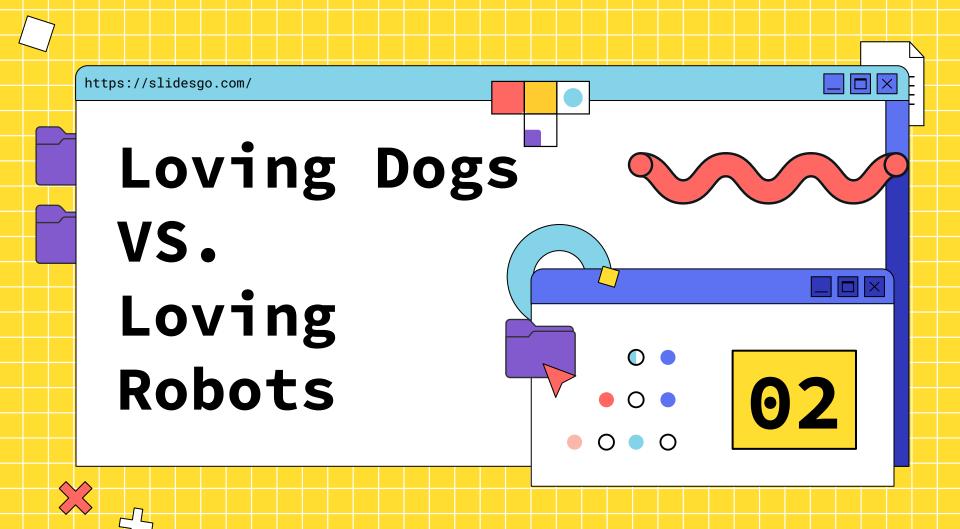




# **Tech Toys**









#### Love and Attachment

- **Attachment** a well-defined scientific concept as it can be operationalized by behavioral and physiological measures (Bowlby, 1969)
- Love a "hypothetical and multi-dimensional construct with many interpretations and implications" (Esch & Stefano, 2005).
- 'Love' may be the experiential component of attachment, and it can be conceptualized scientifically as an attachment process (Hazan & Shaver, 1987).



# Aibo - A Dog-like Robot

- People attributed animal characteristics to the robot and viewed it as a family member
- Behaved somewhat differently toward the AIBO and a living dog puppy
- Treat AIBO as a technological artifact that nevertheless embodied attributes of living animals
- Technical competence required for assistance? Or emotional companions?



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and the state of t	Name of the variables used in the analyses Embodiment	Values of the variables  . Humanoid 29%	Q4. Which one would you prefer: changing the behavior of a companion robot by teaching or through programming?	Behavior Change	by by by by programming 50%
abilities?		<ul> <li>Machine-like 14%</li> <li>PeopleBot 13%</li> <li>AIBO 44%</li> </ul>	Q5. Do you think a companion robot with complex behavior could relieve people's loneliness in the long run?	Decrease Loneliness	. Yes 40%
Q2. What type of robot would you buy if you could afford it?	Buy Robot*	<ul> <li>Would buy a robot</li> <li>Would not buy 23%</li> </ul>	Q6. Do you think that robots might be dangerous for humans in the near future?	Robot Danger	· Yes 30% · No 47%
	Robot Type*	· Household robot 64%	Q7. Do you like dogs?	Dog Love*	<ul><li>Yes</li><li>No/Indifferen</li></ul>
		companion 13%	Q8. Why? List three characteristics of dogs, which influenced your answer the most.	Liked qualities	(open ended question)
23. Is it important for the robot to be able to use verbal itterances for communication? - household robot	Household Speak	· Yes	Q9. Is it possible to love an advanced companion robot as much as a dog?	s Robot Love	· Yes 12% · No 70%
Q3. Is it important for the robot to be able to use verbal utterances for communication? - companion robot	Companion Speak	. Yes 78%	Q10. Do you have a dog?  Q11. Have you ever had a dog?	Experience with Dogs*	<ul><li>Yes</li><li>No</li></ul>





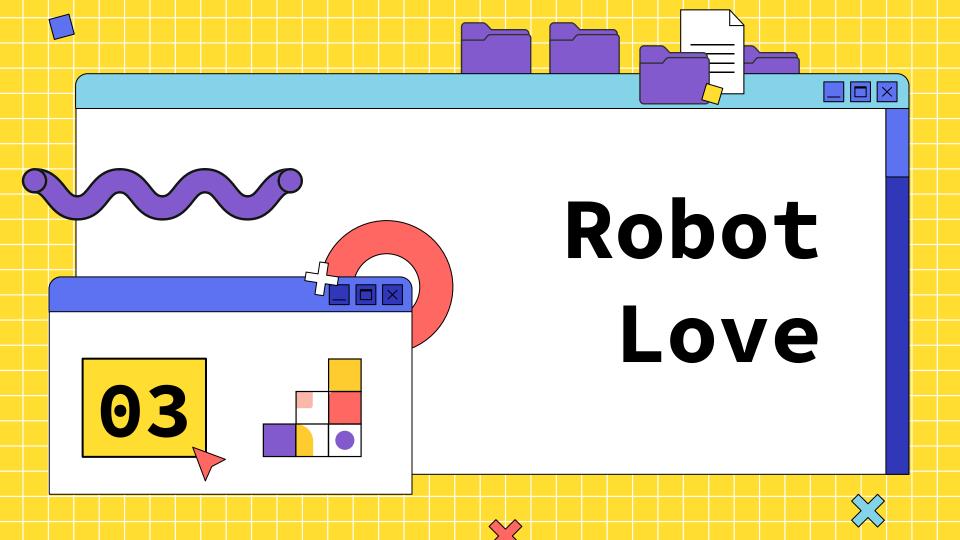


Question	Category	Percentage of respondents	Reasons why respondents would not	I love it with its faults	16%
Most liked qualities in respondents' own	Attachment/devotion	24%	replace their dog with a perfect one (Q6)	I'm attached to it	13%
dogs (Q1)	Individuality/personality	22%		I brought it up/I know it from its	12%
	Unconditional love	22%		birth	
	Smartness	18%		I accept its faults	12%
	Kindness	16%		It is my dog/that would not be my	12%
	Attentiveness	15%		dog	
	Obedience	12%			
	Playfulness	10%	Advantages of dogs over robots (Q9)	1	1%
Reasons why respondents would not buy a robot-dog (Q3)	A machine could not substitute a real animal	21%			9%
	It would have no emotions/it is not a	21%		Empathy 1	8%
	sentient being			Attachment 1	6%
	It would have no	19%		Aliveness 1	5%
	personality/individuality			Thinking 1	2%
	It would not be alive	16%		Cooperation 1	2%
	There would be no challenge in it	13%			



# Attribution to Emotions & Personalities

- Today's robots:
  - Verbal cues
  - Facial expressions
  - Larger body movements
- Dogs
  - Personalities: Disobedience
  - Physical contact
  - Empathy Towards the owner







## Personification

- The more human-like a robot seems in both appearance and ability, the easier it is for us to project human thoughts and feelings onto them
  - Japan (Shinto/Animism) Objects have souls











#### **Pleos**

(0:15 - 1:21)

Narrow the gap between machines and people by making sounds mimicking facial expressions, or reacting physically to their surroundings.

"We are biologically hardware to project intent and life onto any movement in our physical space that seems autonomous to us."

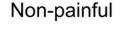












Painful

Non-painful



















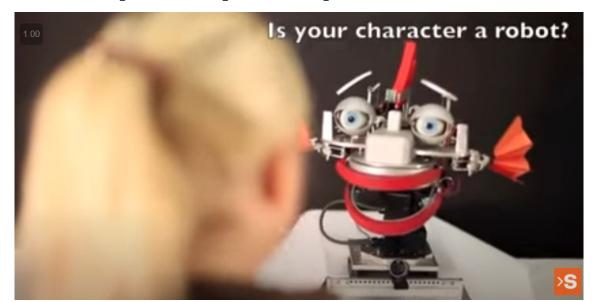
Right hand

Left hand

Researchers measured the participants' responses with EEG scans, which indicated that the subjects experienced similar visceral responses to images of human and robot hands in painful situations.



Researchers from Munich conducted a study demonstrating that <u>when robots mirror</u> <u>human emotions</u> by smiling back at them or matching their level of enthusiasm, humans are more disposed to help them complete a task





# Possibility of Loving Robots

- Less pressure when chatting online
- Love is complex & simpler relationship with robots





#### **Obstacles**

- AI cannot make nuanced emotional responses
- A relationship with a robot much like that of dog and master
- Whether or not the robot could love you back "using"
- Worries that bubbling up
- Necessity for faults





### Stigmatization

- Would a human-robot relationship be deemed as worthy as a human-to-human one?
- Would those who kept a robot lover be considered unable to find or attract a real person?
- Why love someone who never loads the dishwasher, forgets your birthday, or hates your friends when a robot won't ever?
  - These interactions could never have the depth, texture, or breadth that a real human relationship has, warts and all.

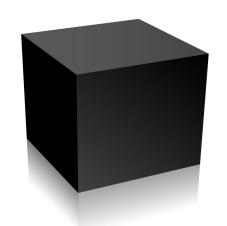






### Love: Human-like Alterity





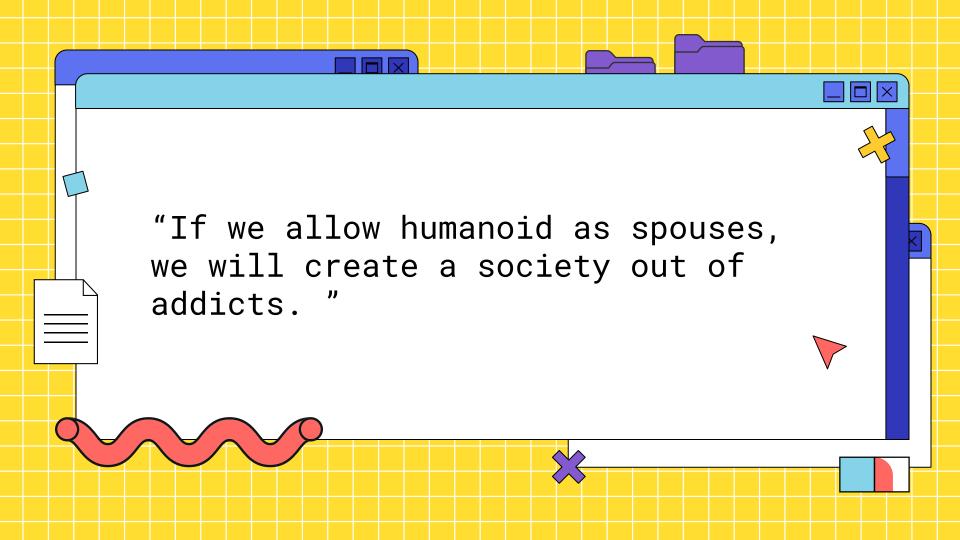
True Companion is a robot girlfriend named Roxxxy introduced in 2010

- (1) What is directly given by the communication acts and gestures of the empirically observable living body
- What is indirectly construed on the basis (2) of the latter.



# Features of Human Romantic Relationships

- (1) It would need to engage the whole of our **subjectivity** by
- (2) re-organizing our embodiment; it has to provoke
- (3) predominantly affective forms of
- (4) intensive meaning-making regarding especially the
- (5) two-level constitution of alterity of the beloved: what is directly given by communication acts and gestures of the empirically observable living body, and what is indirectly construed by our sense-making activity. It has to invoke in us an intention to extend our relationship.
- (6) to longer temporal horizons, and there have to be
- (7) **dominant cultural meanings** that categorize our relationship, and existing social norms and institutions that hold it socially acceptable and organize the relationship on the practical level.



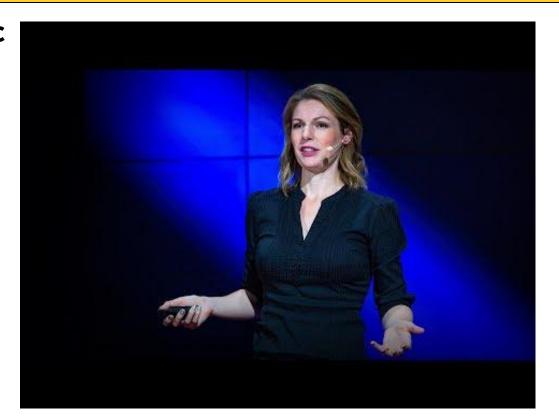




# Pleos Ethic Experiment

Why we have an emotional connection to robots | Kate Darling

(7:50 - 9:01)





# TALON Tracked Military Robot

Funerals and Medals





## HexBug

People with higher empathy are more hesitant to hit Hex Bugs.





"Can robots change people's empathy?"



## "Can robots change people's empathy?" √

- Prevent kid kicking out robot not just out of respect for property but because the kid might be more likely to kill a real dog (video games?)
- Even if robots do not feel, our behaviours towards them might matter for us
- Robots might help us to find a better understanding of ourselves
- Empathy How we relate to others
- They are reflections of our humanities.



# **Discussion Questions**

- 1. Is it meaningful for us to project personalities on everything around us and have emotional connections to them?
- 2. Would you fall in love with a robot? If the robot does not have emotions? Does it matter for love to emerge without robot emotions? What is the necessity feature for you to fall in love with a robot?
- 3. Do you think the love relationship between human and robots is different from human-robot relationship?
- 4. Can humans have some certain type of emotional connection to robots that we don't have to humans/robots/objects?
- 5. Is that okay for you to kill the Pleos (Robot Dinosaurs)? Why/Why not?
- 6. Can robots change people's empathy? Do you agree with the violent video problem - if a kid kick a robot, he/she is more likely to kick animals?



## Resources

- Darling, Kate. Why We Have an Emotional Connection to Robots. 1539701395.
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- Renstrom, Joelle. "Why Humans Love Robots Like People." The Daily Beast, 26 Mar. 2017. www.thedailybeast.com, <a href="https://www.thedailybeast.com/articles/2017/03/25/why-humans-are-primed-to-love-robots">https://www.thedailybeast.com/articles/2017/03/25/why-humans-are-primed-to-love-robots</a>.
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