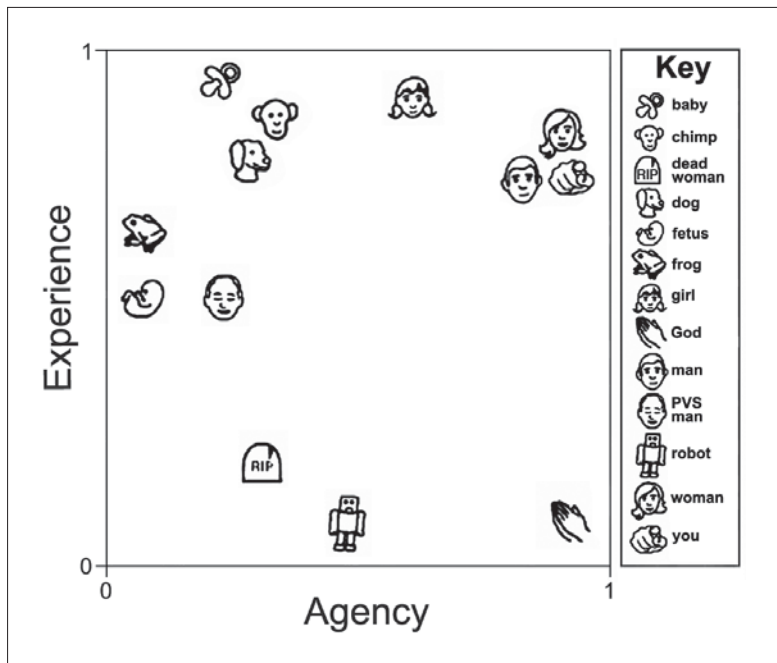




**Figure 1: The Turing Test**

You (on the bottom) must decide which of two texting entities is a computer and which is a fellow human being.



**Figure 2: The Map of Mind Perception**

Mind perception is measured on dimensions of agency and experience.

	<b>Moral Agent</b>	<b>Moral Patient</b>
<b>a.k.a.:</b>	Thinking Doer	Vulnerable Feeler
<b>with the capacity for:</b>	Agency	Experience
<b>and possessing:</b>	Moral Responsibility	Moral Rights
<b>for example:</b>	 <p>God</p>	 <p>Baby</p>

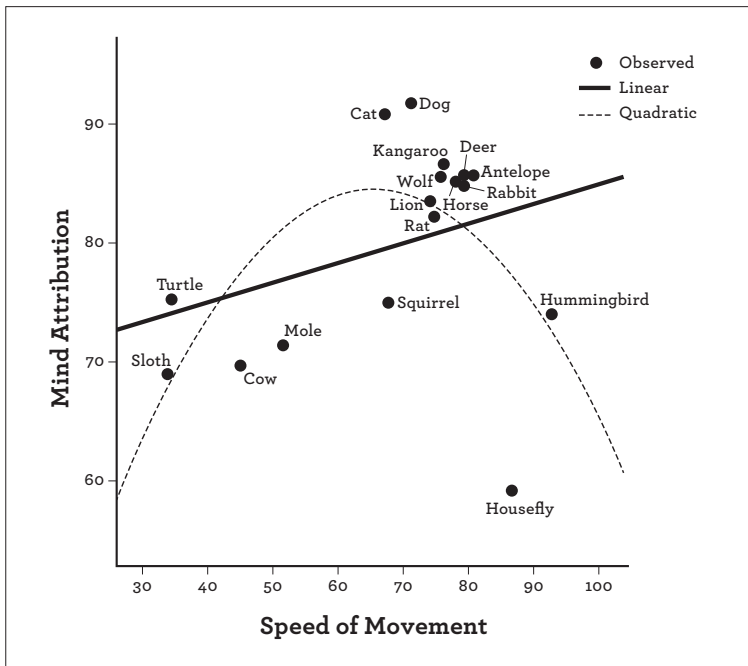
### Figure 3: Moral Agents and Patients

There are two kinds of perceived minds.



### **Figure 4: The Winged Demon**

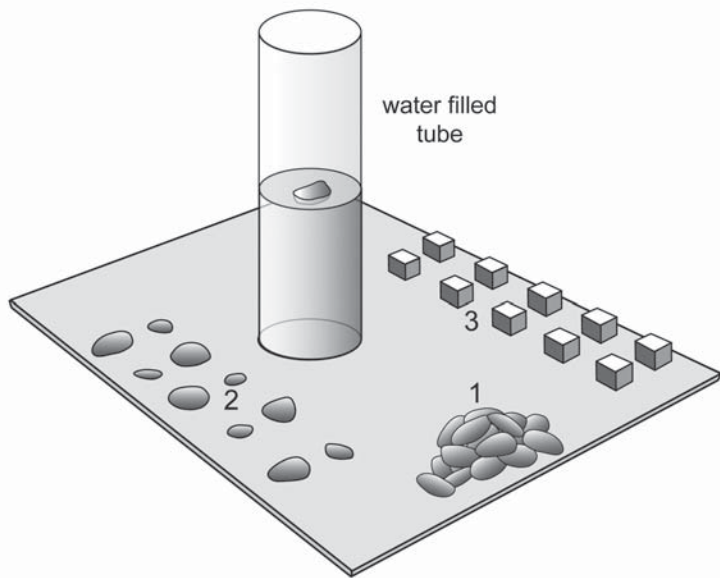
Immorality or evil (represented by the winged demon) emerges through the combination of both thinking agent (left) and vulnerable patient (right).



## Figure 5: Anthropocentrism in Mind Perception

Things that move with a humanlike speed are perceived to have more mind.

C. K. MOREWEDGE, J. PRESTON, AND D. M. WEGNER, "TIMESCALE BIAS IN THE ATTRIBUTION OF MIND," *JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY* 93, NO. 1 (2007). REPRINTED WITH PERMISSION.



### Figure 6: The Crow and the Pitcher

To get the treat, the water level must be raised by dropping objects into the vase. On this and other tasks, crows show surprising ingenuity.

A. H. TAYLOR ET AL., "NEW CALEDONIAN CROWS LEARN THE FUNCTIONAL PROPERTIES OF NOVEL TOOL TYPES," *PLOS ONE* 6 (2011): E26887.



## **Figure 7: Pigheaded?**

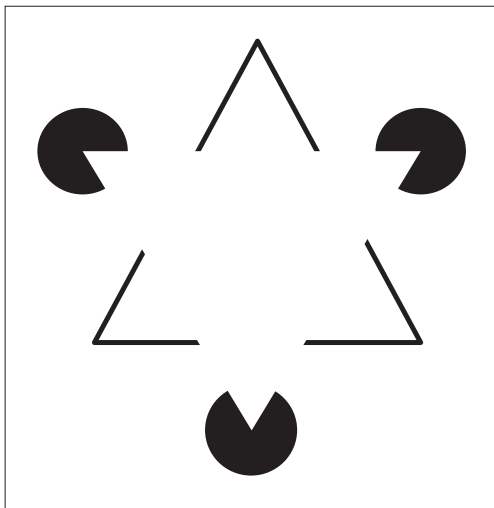
We feel more at ease at the idea of eating pigs than seals, even though pigs likely have richer inner lives.



**Figure 8: The Pig on Trial, as Illustrated in Robert Chambers's *Book of Days***

Through dyadic completion, we find a moral agent to blame.





### **Figure 9: Kanizsa Triangle**

Just as visual completion compels people to see a white triangle in the Kanizsa triangle, dyadic completion compels people to see agents to blame for a suffering patient.

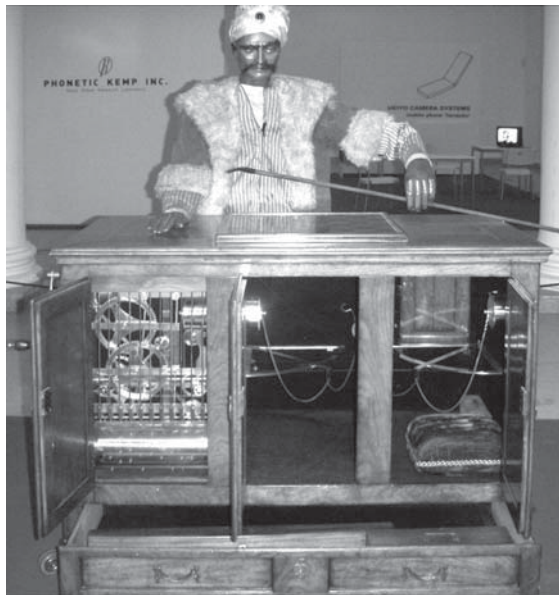


**Figure 10: “Roxanne”**  
A RealDoll with Face #11.

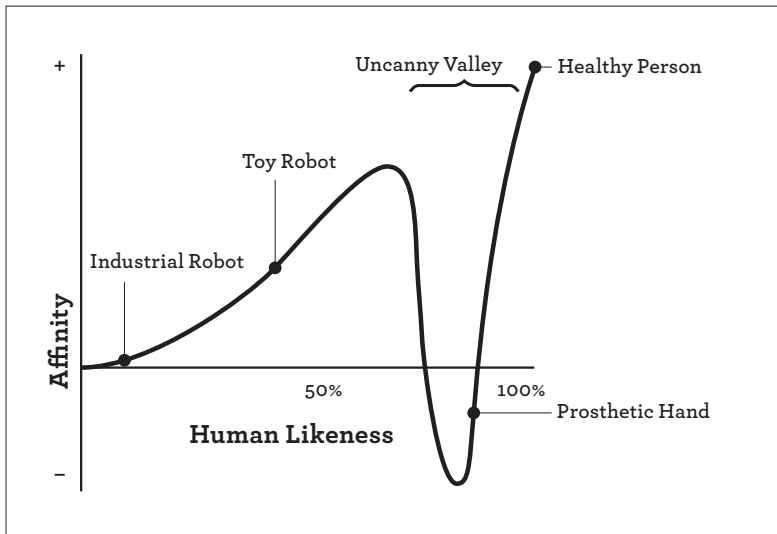


**Figure 11: Clocky**

The lonelier you are, the more mind you perceive in Clocky, the alarm clock that runs away from you.



**Figure 12: The Mechanical Turk**  
An early machine cryptomind.



### Figure 13: The Uncanny Valley

The least liked items are those that are similar to human, while maintaining an eerie nonhumanness.

M. MORI, K. F. MACDORMAN, AND N. KAGEKI, "THE UNCANNY VALLEY" (FROM THE FIELD), *ROBOTICS AND AUTOMATION MAGAZINE*, IEEE 19 (2012), 98-100. REPRINTED WITH PERMISSION.



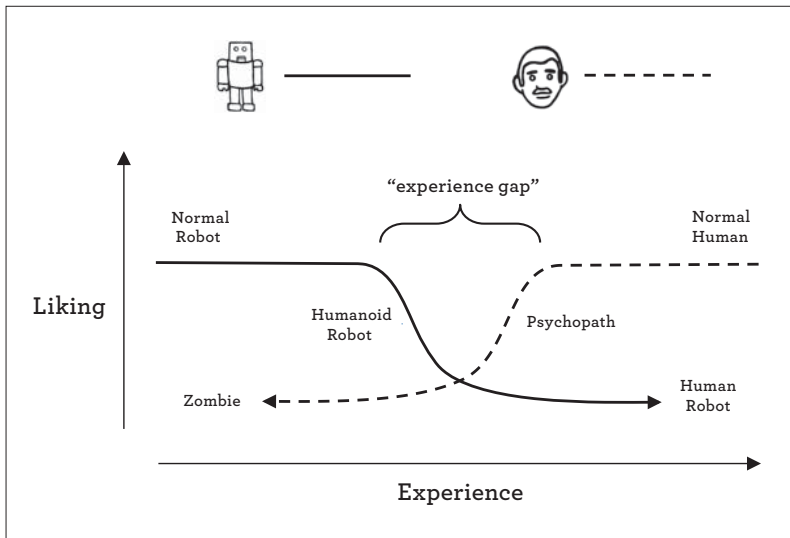
### **Figure 14: An Almost-Human Robot**

A designer at Human Emulation Robotics applies lipstick to a mechanical female. Such robots are creepy because of misplaced perceptions of experience.



**Figure 15: The Star-Nosed Mole**

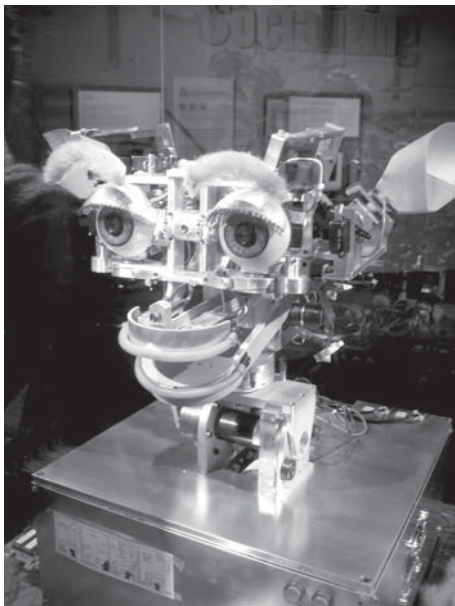
When something violates our fundamental expectations (i.e., animals should have faces), the result is unsettling.



## Figure 16: The Experience Gap

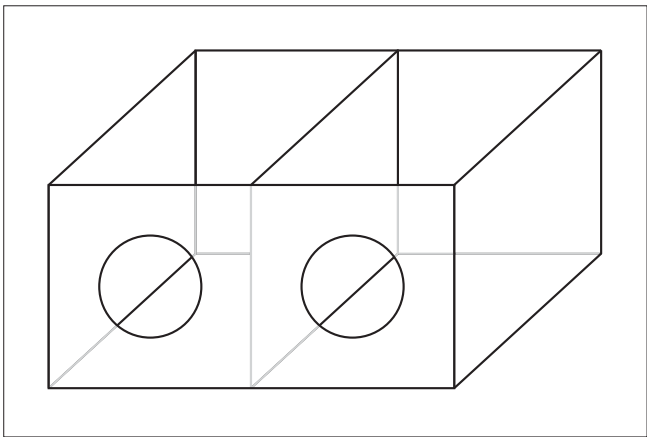
More accurately, the uncanny valley should be called an “experience gap”—people find creepy both machines with experience and humans without experience.





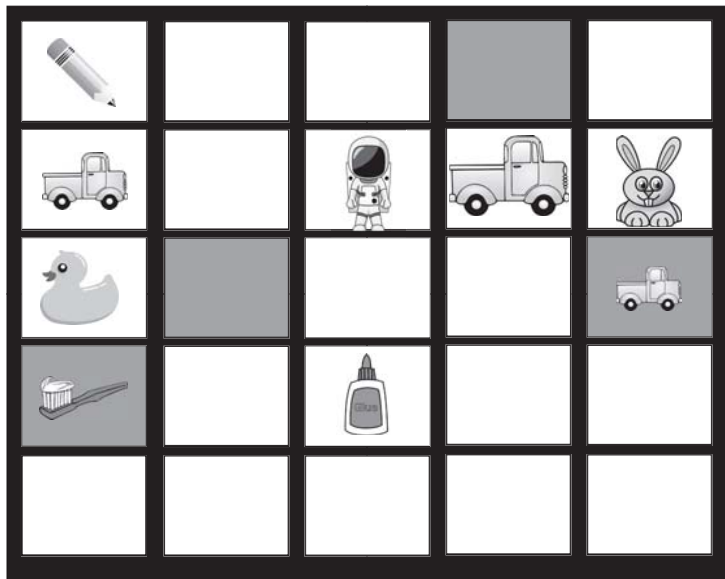
**Figure 17: Kismet**

The robot Kismet, now on display at the MIT Museum in Cambridge, MA.



### **Figure 18: Ramachandran's Mirror Box**

When a patient puts a healthy limb in the right side of box, their mind is tricked into perceiving two healthy limbs, alleviating phantom pains.



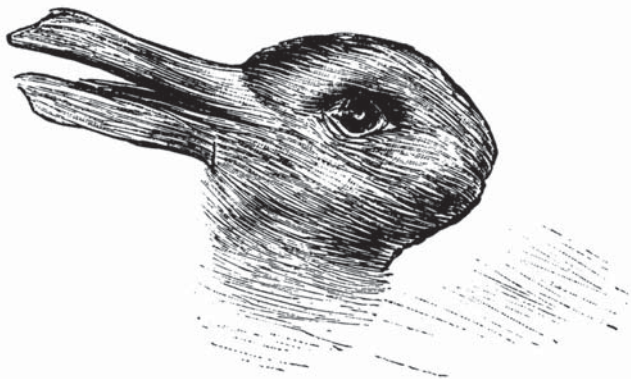
Worker's View

## Figure 19: A Test of Perspective Taking

The “small” car is different from the perspective of the worker and the foreman.

N. EPLEY, C. K. MOREWEDGE, AND B. KEYSAR, “PERSPECTIVE TAKING IN CHILDREN AND ADULTS: EQUIVALENT EGOCENTRISM BUT DIFFERENTIAL CORRECTION,” *JOURNAL OF EXPERIMENTAL SOCIAL PSYCHOLOGY* 40 (2004): 760–68.

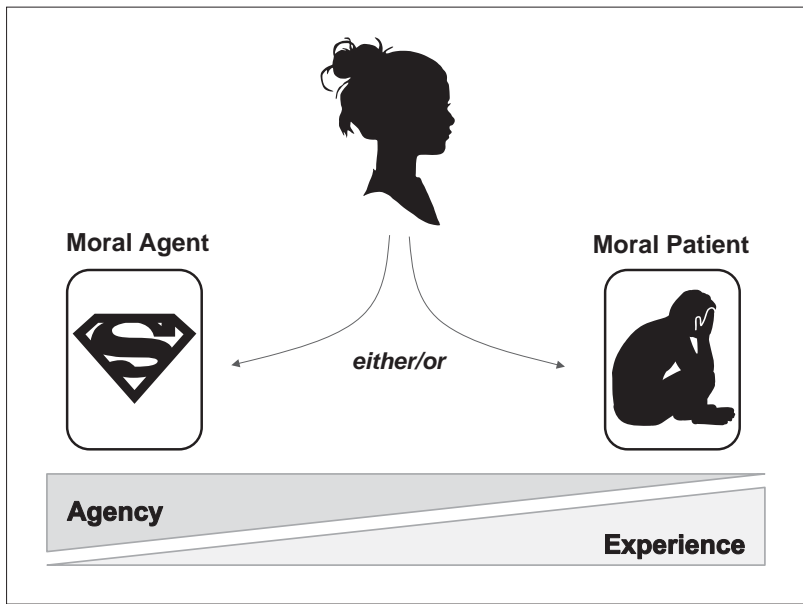
Welche Thiere gleichen ein-  
ander am meisten?



Kaninchen und Ente.

**Figure 20: Either Duck or Rabbit, but Not Both**

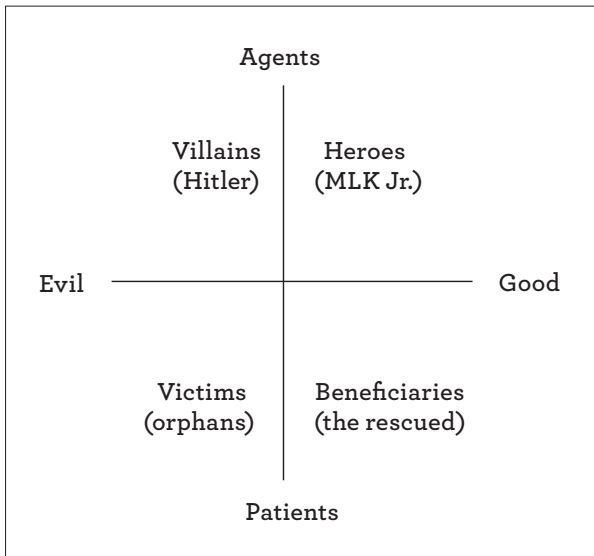
One can be a moral agent or moral patient, but not both.  
(Translation: Which animals are most like each other?  
Rabbit and duck.)



### Figure 21: Moral Typecasting

We see heroes and villains as insensitive to suffering and we see victims and beneficiaries as incapable of earning blame.

K. GRAY, L. YOUNG, AND A. WAYTZ, "MIND PERCEPTION IS THE ESSENCE OF MORALITY," *PSYCHOLOGICAL INQUIRY* 23 (2012): 101-24.



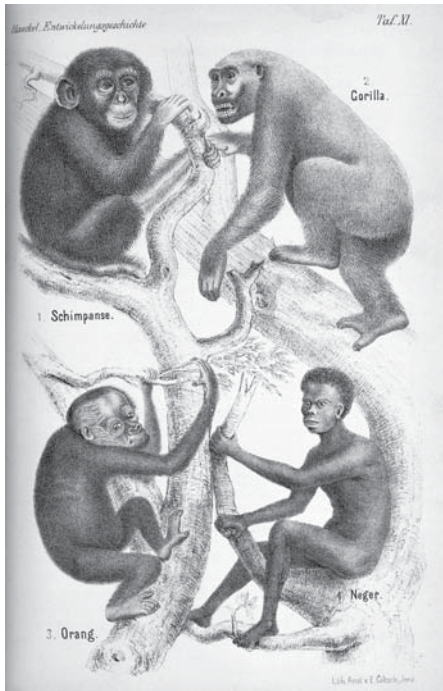
## Figure 22: The Moral Landscape

We often divide morality into good and evil, but typecasting suggests that whether someone is seen as a moral agent or patient can sometimes be even more important.



**Figure 23: Chimps (left) and Bonobos (right)**

Increased resource competition means that chimps are more aggressive than bonobos, who often solve problems with sex.



## Figure 24: Historical Animalization

Anti-civil rights propaganda links African Americans to apes.

ILLUSTRATION FROM A NATIONAL STATES' RIGHTS PARTY PAMPHLET.





### **Figure 25: WWII Mechanizing Propaganda**

American propaganda implying that the Japanese are not only evil but—unlike Americans—will never feel the need for relaxation.



## Figure 26: Objectifying Women

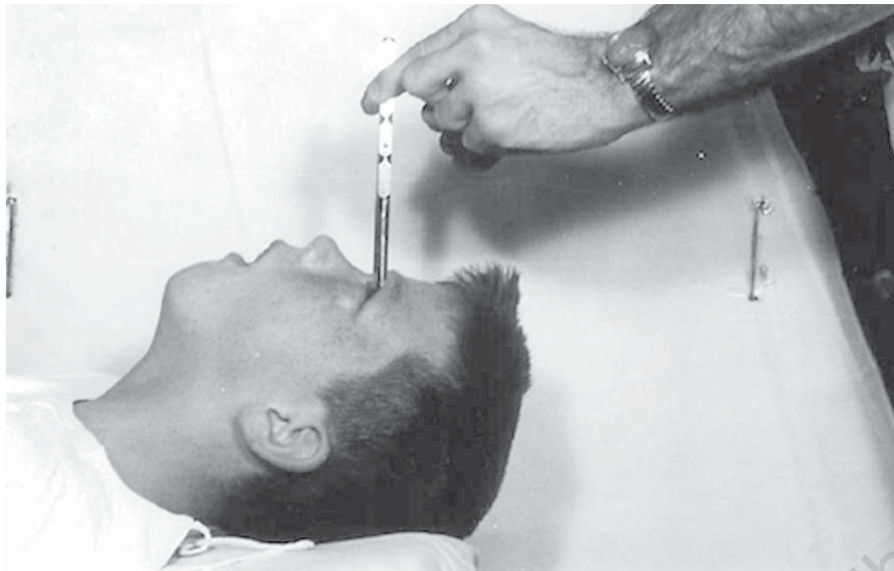
In advertising, women's bodies are often shown, whereas men are often depicted solely by their faces, a phenomenon called "face-ism."

CREDIT SHAWN DALEY.



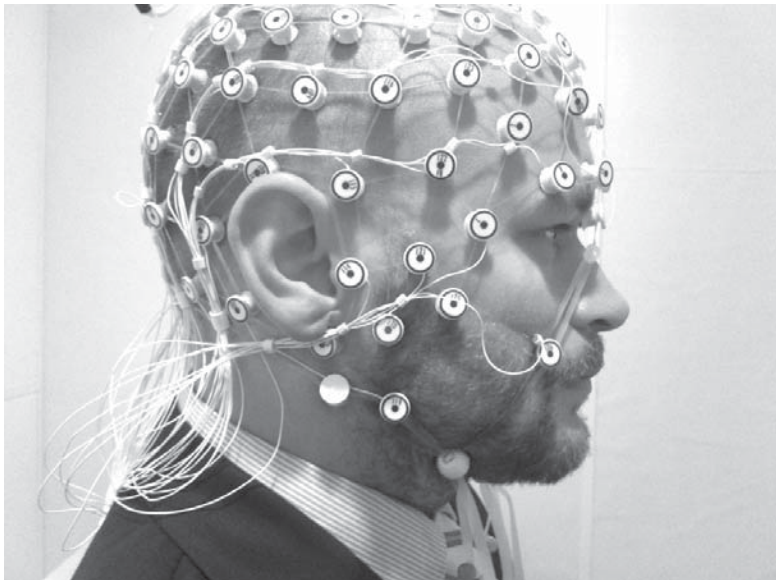
**Figure 27: An Image from the “Mind in the Eyes” Test**  
What is she feeling? Encouraging, sympathetic, or thoughtful?

S. BARON-COHEN ET AL., “THE ‘READING THE MIND IN THE EYES’ TEST REVISED VERSION: A STUDY WITH NORMAL ADULTS, AND ADULTS WITH ASPERGER SYNDROME OR HIGH-FUNCTIONING AUTISM,” *JOURNAL OF CHILD PSYCHOLOGY AND PSYCHIATRY* 42 (2001): 241-51.



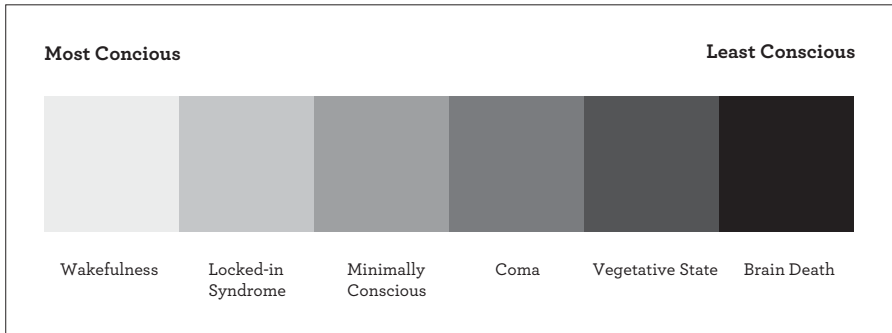
**Figure 28: Depiction of Lobotomy**

A twelve-year-old boy undergoes prefrontal lobotomy in 1960.



### **Figure 29: An EEG Electrode Cap**

EEG offers the ability to record “brain waves.”



**Figure 30: Chart of Disordered Conscious States**

Each state involves different EEG patterns.

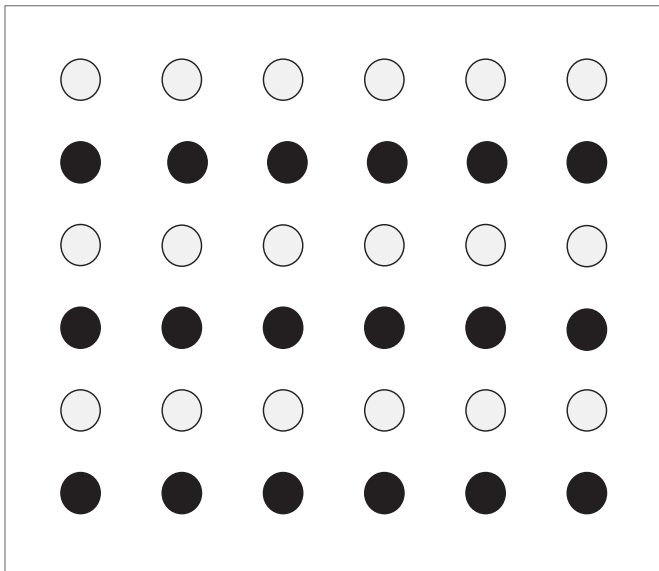


**Figure 31: Fetal Development**  
When does the mind start?



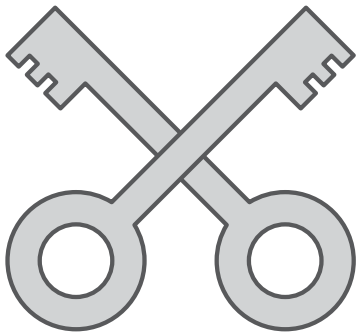
**Figure 32: Triveni Sangam**





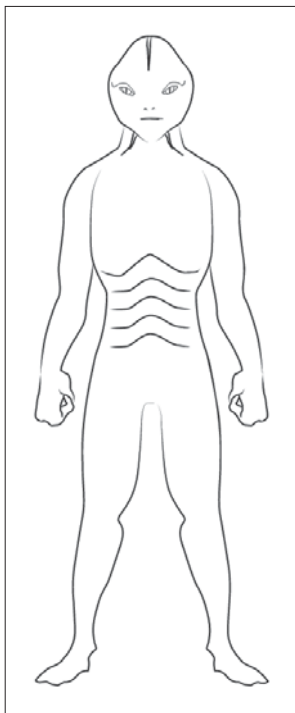
**Figure 33: How Do You Group These Dots?**

Following the Gestalt principle of similarity, we organize the dots into rows of similar color—not into columns of alternating color.



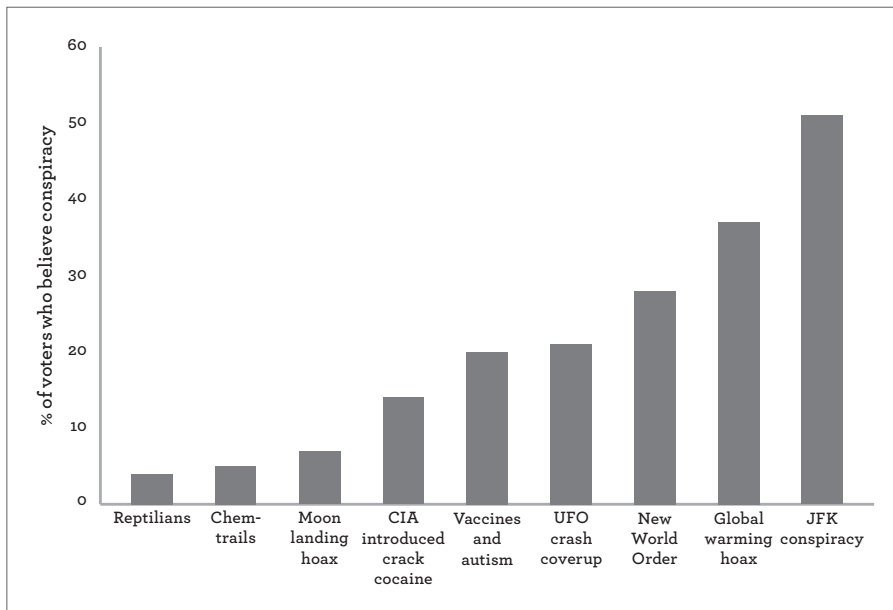
### **Figure 34: Continuity in Shapes**

The bottom key continues even after it is obscured by the crossing over of the top key.



**Figure 35: Reptilian**

An artist's interpretation of a Reptilian leader of the New World Order,

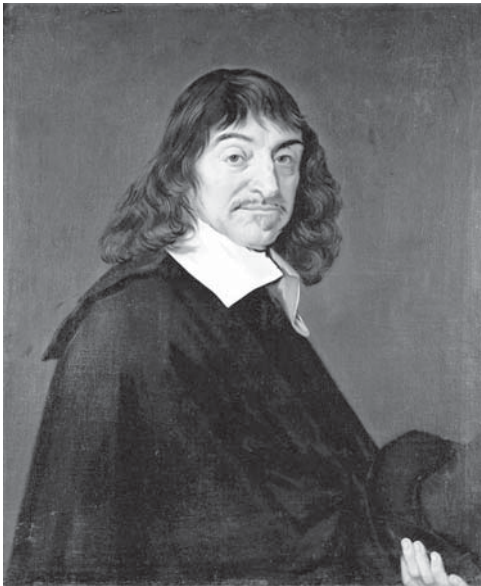


**Figure 36: Belief in Various Conspiracy Theories**

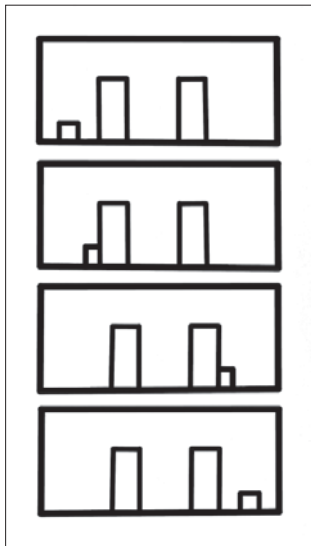
BASED ON T. JENSEN, "DEMOCRATS AND REPUBLICANS DIFFER ON CONSPIRACY THEORY BELIEFS"  
(PUBLIC POLICY POLLING, 2013).



**Figure 37: Anonymous Protesters**  
Anonymity increases cruel behavior.



**Figure 38: Rene Descartes, Dualist Philosopher**



**Figure 39: Teleportation of an Object in the Discontinuous Condition**

When a human appears to teleport across the stage, infants are not surprised. When an object appears to teleport across the stage, this violates babies' expectations.

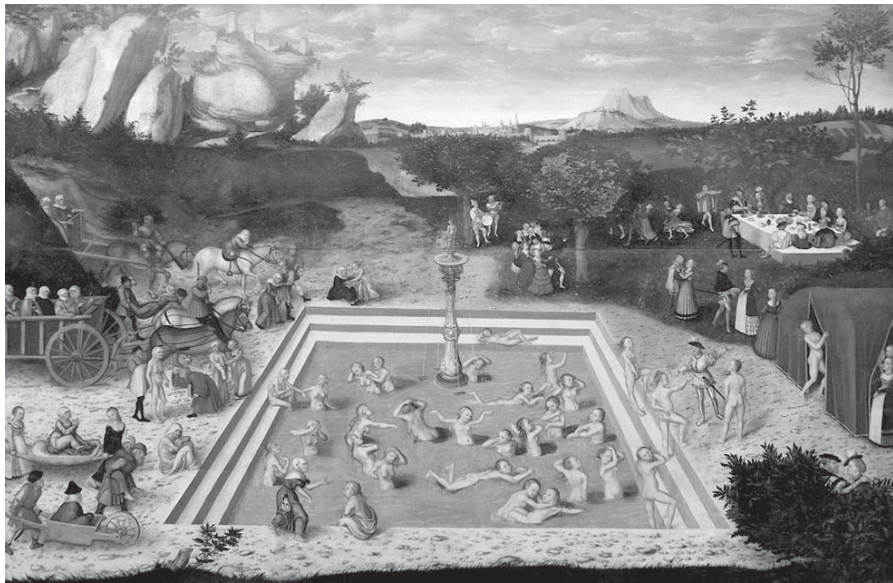


**Figure 40: *Ascent of the Blessed* by Hieronymus Bosch**

Some describe this painting of the saved entering heaven as the first depiction of an NDE, with its light at the end of the tunnel.

H. BOSCH, *ASCENT OF THE BLESSED*, 1490,  
[HTTP://UPLOAD.WIKIMEDIA.ORG/WIKIPEDIA/  
COMMONS/THUMB/1/16/HIERONYMUS  
\\_BOSCH\\_013.JPG/262PX-HIERONYMUS  
\\_BOSCH\\_013.JPG](http://upload.wikimedia.org/wikipedia/commons/thumb/1/16/Hieronymus_Bosch_013.JPG/262px-Hieronymus_Bosch_013.JPG).





**Figure 41: Literal Immortality**

*The Fountain of Youth*, as depicted by Lucas Cranach the Elder (1472–1553).







**Figure 42: An Alcor “Dewar”**

An insulated storage unit for vitrified patients.

	God does not exist	God exists
Believe in God	-80	$+\infty$
Do not believe in God	+80	$-\infty$

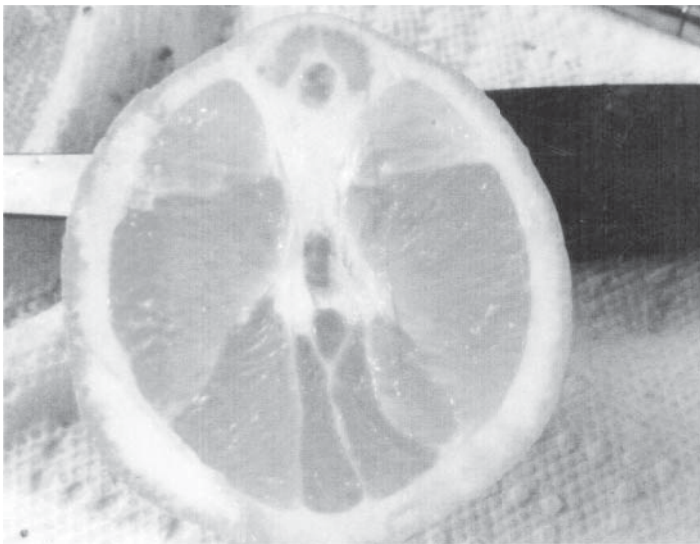
### Figure 43: Pascal's Wager

The numbers count the good or bad years of a decision to believe (or not) given whether God exists (or not).

	No Lion	Lion
Run	 <p>Well, that was embarrassing. But you're alive! Your genes may still be passed on.</p>	 <p>Close call, but you made it! Your genes may still be passed on.</p>
Don't run	 <p>Everything is a-ok. Your genes may still be passed on.</p>	 <p>Bad choice, you've ended up lion chow! It's the end of the line for your genetic code.</p>

**Figure 44: Pascal's Logic Applied to the "Mystery of the Rustling Grass"**

It makes sense to generally assume the presence of an agent.



## **Figure 45: Vitamin D and Divinity**

Do you see Jesus and Mary in this orange?

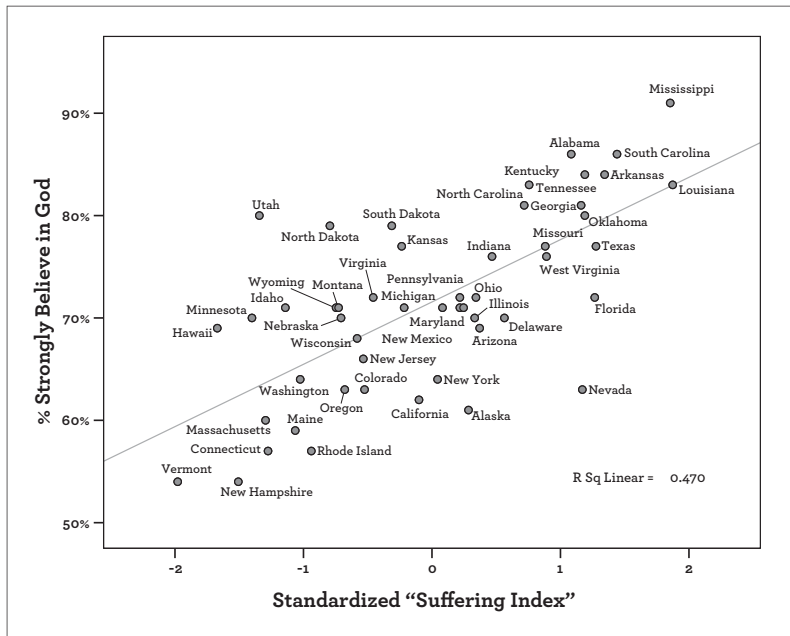
PAUL KULNISZEWSKI

Dis



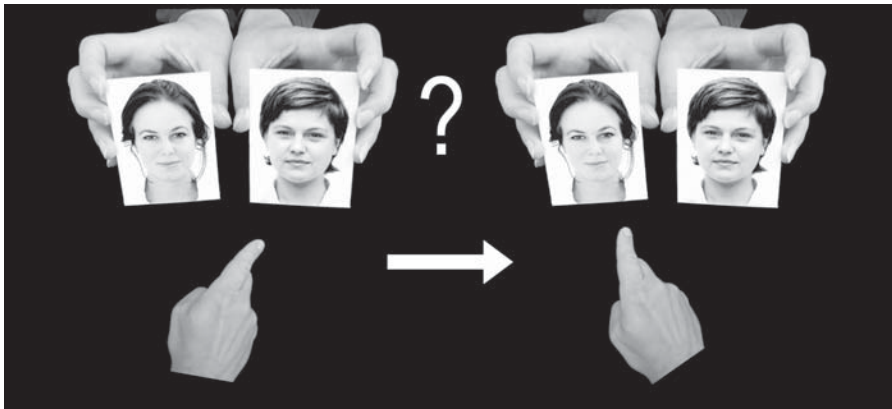
**Figure 46: Supernatural Communication**

A child receives Princess Alice's message and changes his choice.



**Figure 47: Scatterplot of U.S. States—Mean Belief in God by Suffering Index.**

K. GRAY AND D. M. WEGNER, "BLAMING GOD FOR OUR PAIN: HUMAN SUFFERING AND THE DIVINE MIND," *PERSONALITY AND SOCIAL PSYCHOLOGY REVIEW* 14 (2010): 7-16.



## Figure 48: Choice Blindness

Participants demonstrate choice blindness when they describe why they liked the face they didn't actually prefer.

P. JOHANSSON, L. HALL, B. TÄRNING, S. SIKSTRÖM, AND N. CHATER, "CHOICE BLINDNESS AND PREFERENCE CHANGE: YOU WILL LIKE THIS PAPER BETTER IF YOU (BELIEVE YOU) CHOSE TO READ IT," *JOURNAL OF BEHAVIORAL DECISION MAKING* 27 (2014): 281-89.



### Free Will Version:



Time W

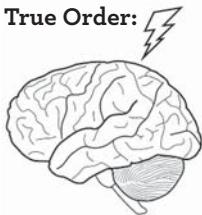


Time B



Time M

### The True Order:



Time B



Time W



Time M

**Figure 49: Two Possibilities for the Timing of Movement**

Free will suggests that conscious choice precedes brain activation, but it instead follows it.