

PARÉ'S MONSTERS

by [John H. Lienhard](#)

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Today, we go from monsters and marvels to modern medicine. The University of Houston's College of Engineering presents this series about the machines that make our civilization run, and the people whose ingenuity created them.



Ambroise Paré was an unlikely Renaissance man. Born in 1510, he trained as a barber-surgeon -- a grisly business. Then he went off to war. As he watched scholastic medicine trying to cope with gunpowder, he saw how far out of touch with human suffering it had drifted. So he went back to Paris and rewrote the practice of surgery. He combined clear vision with a new dimension of mercy. He put flesh and blood on the Renaissance belief that human learning should have a human center. Barber-surgeons stood outside formal medicine in the 16th century. But Paré's surgical brilliance

got him into the Royal College. He eventually became chief surgeon to Charles IX.

His talent for observation took him far beyond surgery. When he was 61 he turned to birth defects. He wrote a major book on the subject. He called it, *On Monsters and Marvels*. And here we see how science was starting to change. Paré's first pages aren't too promising. He lists the causes of birth defects. They are: The Glory of God; The Wrath of God; Too much seed; Too little seed; Corrupt seed; Mingling of seed; Indecent posture by the expectant mother; A narrow womb; A blow to the mother;

Demons; Devils; and finally, The mother's imagination.



The shape of two monstrous Twinnes, being but of one owely Sexe.



That done, he recounts a terrible gallery of case histories: Siamese twins, people born with missing or extra body parts, and more. He includes some of the stuff of fables: a man's head on a horse's body -- that sort of thing. But he always represents that as ancient hearsay. He does tend to assert,

without evidence, which of the causes begat the malformity. A two-headed child was the result of too much seed, and so on.

But a thread of clear vision weaves through the work. He includes sections on strange beasts -- whales, giraffes, elephants. He's circumspect about the unicorn. He only records one claim to a sighting of a unicorn-like animal.

Then he takes pains to debunk many monstrous birth defects as tricks used by beggars. When we're done, we realize that Paré has led us away from the style people expected of Medieval medicine. He's woven modern observation into a work that started out looking like ancient folklore. These old books can fool us. It's hard for 20th-century eyes to see the huge changes taking place under the cloak of an older, more fanciful, style.

There's a curious footnote to Paré's *Monsters and Marvels*. Three years after he published it, his wife of 32 years died. Two months later, he remarried. He was now 64, and he followed his work on birth defects by begetting six more children by the time he was 72. All of them, I'm pleased to report, were quite normal.

I'm John Lienhard at the University of Houston, where we're interested in the way inventive minds work.

(Theme music)

Paré, A., *On Monsters and Marvels*. (tr. and Intro. by Janis L. Pallister) Chicago: University of Chicago Press, 1982.

Images from *On Monsters and Marvels* courtesy of the Yale University, Harvey Cushing/John Hay Whitney Medical Library portrait collection

For more on Paré, see The Engines of Our Ingenuity Episode [No. 327](#).