

# Beaver Ears

# Beaver Ears

A juxtaposition of cultural  
history, contemporary thought,  
and classic proportion.

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## Introduction



## Reid

I've always had soft ears and floppy earlobes. I remember that, as a child riding on my father's shoulders, I was captivated by his strange, firm, and unpliant ears. My attempts to explore his ears were met with chastisement; it became clear to this young lad: ears are strange, unquestionable, and off-limits. I have never felt much of an urge to pierce my ears. Doing so would have net my parents' shame—my mom for the “unsociableness” and my dad for the “un-manliness” of it. Beyond the scorn of my parents, it was omnipresent that my ears are just... there. I have never been ashamed or embarrassed of these ears, nor really given them much thought. Unless I get a pimple or lots of earwax, I'm likely to ignore them for weeks. I have ears. They're floppy, My earlobes are not attached, They're kinda unique, But I could really care less— Who cares about ears, anyway?

The human body is a marvel—strong evidence of proportions exist in our form. Albrecht Dürer and Leonardo da Vinci are well known for their obsessive analysis of the human form. They found that our height and outstretched arms are roughly equal (a square) and our navel lies at the edge of a square inside the golden rectangle a human figure lies inside. The human head also possesses similar relationships; the eyes are in the middle of the head and the bottom of the nose is approximately halfway between the eyes and chin. Variations to this rule exist in each canon and definitely so in each person.

On the quest for information about the ear, it was discovered that this key sensory device lags severely behind the rest of the human body in a comparison of written volume. Anatomical books are overwhelmingly concerned with the complex inner structures and functions of this organ. Books focused on drawing the human body nearly neglect the ear altogether—merely sidelining it as a part of our head when hands, fingers, eyes, and lips all receive intense scrutiny. In text that specifically discusses the outer ear, however, you are likely to only see simple, expected formalities about anatomic names. If you dare to venture into unravelling your ear's influences—the genetics of its folds, earlobe attachments, convex and concave structures—things you may witness on others and desire to know about—it is likely you shall draw a blank.

Ears, for contemporary society, only draw significant interest for piercing, holding white earbud headphones,

supporting glasses, and nuzzling or whispering during intimacy. It is amazing, then, that an unassuming writer from Tennessee might be the one to bring forth the secrets of the ear for all to read. While recovering from back surgery, Michael Sims conceived the book *Adam's Navel*; this juxtaposition of culture, science, and nature was his outpouring of curiosity.

This book was conceived to explore the typographic relationships in the fibonacci sequence and the golden ratio because the human ear closely resembles the golden spiral. Of the participants in this book, Ashley's ear (pages 14-15) most closely resembles the golden rectangle.

You are invited to explore your own ears, recognize the traits of others, and just simply cherish the two little organs you might be taking for granted.

**THE EAR OF A THOUSAND LI**



## Kara

When I was a little kid I thought my ears stuck out on top. My sister used to pull them down to upset me because I thought that would make them stick out more. I really have no idea why I thought my ears stuck out, because they don't at all. My ears have a total of 7 piercings. Three in each ear lobe and one on the cartilage. I just got my cartilage pierced this summer and that was exciting because for whatever reason I find it thrilling to get piercings, and it was a piercing I've wanted for a really long time. I got my first holes when I was 8, my 2nd when I was 14, and my third when I was 15. I think I have a high tolerance to pain because getting my ears pierced barely hurt—even the cartilage. I have the kind of ear lobes that aren't connected, and I must say I think they look better than connected ones. No offense to those with connected ones, haha. Overall, I think my ears are pretty average looking. Lastly, it really tickles when someone licks my earlobes, ya don't ask...haha. THE END!

There is a hierarchy among the facial features. The eyes and mouth get all the glory. Like the nose, the ears are a body part with which many people express dissatisfaction. The story is told that, when Queen Elizabeth II viewed her newborn grandson William for the first time, at Princess Diana's bedside in 1982, she expressed the opinion of millions of observers when she said, "Thank goodness he hasn't got ears like his father." If the queen did not say it, she should have; Charles's pitcherlike ears are the delight of cartoonists. Nor is he alone in this distinction. Clark Gable actually went to the trouble of taping back his sizable ears in some films, and still they were prominent enough to be parodied in a Looney Tunes cartoon.

In the late nineteenth century, the American architect Louis Henry Sullivan uttered an immortal line: "Form ever follows function." Absorbed into the zeitgeist, this maxim is now chanted everywhere from haberdashery to economics as the more alliterative "Form follows function." Sullivan—designer of skyscrapers, proponent of the aesthetic movement called functionalism—was not referring to nature. His pronouncement, however, applies so beautifully to evolution that it has long been co-opted by biologists. Evolution has curved our outer ears to gather sound waves from the air and funnel them inside the head. The medium was biology, but the sculptor was physics. Gustav Eckstein said it with his usual offhand lyricism: "It took a long time to evolve an ear, many a hot afternoon of primal labor, the earth younger then." Eckstein was referring to the sense of hearing, but his remark applies equally well to the shape of the visible ear. This showy

ornament on the human head is also called the *auricle*, from the Latin for ear, or the *pinna*, Latin for feather or wing, a term employed by biologists for everything from the winglike fins of walruses and seals (grouped under Pinnipedia) to the featherlike branching of pinnate leaves.

Nature had indeed been laboring a long time before it got to the showy ears of the chimpanzee and British royalty. The many shapes of ears in nature demonstrate the unique adaptations of our own. Always determined to be the most science-fictional creatures on the planet, insects wear their ears scattered all over their bodies. Moving up through the orders of animals, we find other variations older than our own ears. Amphibians and some reptiles are missing even the tunnel that leads from the eardrum to the outer surface of the head. Birds lack external ears; what look like ears on owls are actually mere tufts of feathers. Only mammals possess the seashell of cartilage and skin that constitutes the outer ear. Our comrades in this order certainly sport some stylish ones. To be impressed with the range of options available in the mammalian catalog, you need visualize only three: the jackrabbit, the African elephant, and the leaf-nosed bat. The elephant and jackrabbit have disproportionately large ears to facilitate heat loss in warm climates; bats generally have large ears to serve as better satellite dishes for receiving the echoes of their own sonar blips.

The shape and location of the ears of pachyderms and rodents evolved together, as did the shape and location of our own. Like our eyes, our ears demonstrate the body's tendency

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toward bilateral symmetry. This is elegant composition, but what is its purpose? The answer to this, too, comes from physics. As sound waves approach the head, inevitably they reach one ear before the other. Gathered by the outer ear, the differing sound waves pass down the ear canal to the middle and finally to the inner ear where they are turned into electrical impulses. The differences in the way the two ears receive a sound enable the brain to triangulate its location. This method is the aural equivalent of the overlapping fields of vision in our two eyes, whose teamwork provides us greater depth perception. The satellite-dish effect works particularly well with sounds that fall within the range of human speech, indicating that, of all the clamor around us, we are factory built to listen most to each other. The dual-receiver hearing system can detect differences of sound direction as small as 2 degrees. If you think of your head at the center of a 360-degree circle, you can imagine the fine-tuned hearing going on. You can hear a child walking barefoot across carpet and know from which direction she is approaching. You can hear a pin drop and, by the sound of its bounce, approach close enough to find it with your eyes. And finally there is also the matter of fail-safe redundancy. Like two eyes—and, for that matter, like our paired lungs and kidneys, hands and feet—dual ears provide insurance against mishaps in a busy world.

We demonstrate the curved-pinna principle every time we improve upon the ear's gathering abilities by turning toward a sound and cupping a hand behind the ear. It was also the rationale for the ear trumpet, in the days before electronic

hearing aids. Human beings perform the gesture with the cupped hand all over the world. A telling evocation of this act appears in illustrations from Chinese mythology. The Empress of Heaven is assisted by two aides who, with their enhanced senses, see and hear the incidents occurring throughout the whole vast world (much the way that Odin, in Norse mythology, sends out his ravens Hugin and Munin—Thought and Memory—to perform the same reconnaissance survey). These assistants are named Eye of a Thousand Li and Ear of a Thousand Li. A *li* is a unit of measure that, although of varying length in different areas of China, equals roughly a third of a mile; obviously this gentleman is equipped with a sound gathering array to rival the radiotelescopes at Arecibo. Just as Eye of a Thousand Li shades his eyes with his fiat hand, so Ear of a Thousand Li usually is shown with his hand cupped around his ear.

Although we are touring the outside of the body, let us glance inside the cavern of the ear, for as far as we can see with the naked eye. The tunnel framed by the shell of the ear and visible for an inch or so inside the head is called the *external auditory meatus*. A meatus is a passage or canal; it is also the term for the opening of the urethra in the tip of the penis. Besides channeling sound waves into the middle ear, where they activate the devices that do the actual hearing, the meatus serves as an obstacle course. Foreign objects trying to enter the ear must evade both the sentry hairs near the opening and the waxy secretions of the ceruminous glands. Few invaders penetrate into the dark interior.

## Stephanie

I started out with two. I was fine with two and so were my parents.

But then I wanted more.

So I got two more. I was fine with four and so were my parents.

But then I wanted more.

So I got two more. I was fine with six and my parents objected.

But then I wanted more.

So I got one more. I was fine with seven and my parents protested.

But then I *craved* more.

I got two last piercings and then was discovered. My parents thought I was ruining my ears and unleashed all hell on me.

They threatened to stop paying my tuition.

They yelled. They said I was being a foolish teenager. Nevermind that my mom has four ear piercings or my younger sister has ten, my nine were hideous and foolish! My piercing crusade began as harmless fun and slowly became a mission of spite. I truly love and appreciate my parents—but their reaction fueled my fire.

I recognize that my act of 'defiance' is really just me being stubborn in trying to escape the overcontrolling nature of my parents. My spurt of disobedience was just enough for me to make my point. To each his own, n'est pas?





## Miki

My ears and I go way back. We've known each other since babies, even before that. We have gone through a lot together. My ears have been there for me when I've been sad, mad, in love, and scared. My ears were there to commemorate me becoming a big girl. I got my first set of holes pierced when I was in 5th grade. My second set of holes were pierced because I knew my parents would disapprove, and finally the most important piercing that I got done was after I broke up with my boyfriend. He expected me to be this loyal girlfriend that was sweet and innocent. When I finally broke free I wanted to liberate myself somehow. I'm too much of a coward to get a tattoo so I stuck with something that was still reversible, yet still I would get pain from. When I went to go get it done with my girlfriend I was so excited. I felt rebellious. I like accessorizing my ears depending on my mood. Not with just earrings, but with ear muffs or ear plugs. My ears are an important part of my life. I wouldn't know what I would do without them...

As a reminder of the significance that can lurk in humble themes, consider the grotty topic of earwax. The scientific term for this substance is *cerumen*, and there are two types. One is sticky, brown, and wet; the other, brittle and grayish or beige. In general, Africans and Europeans possess the former and Asians the latter. These distinctions are more important than you might guess. In the late 1990s, attentive scientists at the Nagasaki University School of Medicine noticed an odd correlation: Japanese breast cancer rates are higher in women whose ceruminous glands produce sticky earwax. This observation suggests that the earwax gene, or other genes connected with it in some way, influences the development of the disease. After all, the ceruminous glands are physiologically related to the apocrine glands that produce milk in the breasts. With swabs and notebooks in hand, the scientists went to work. They have found that wet wax is a dominant trait and dry recessive, but at the time of this writing the correlative gene still eludes researchers.

These outstanding accessories have assumed many guises in religious and artistic symbolism. In the beginning was the word, and there had to be an ear to hear it; so the ear became one of the receptacles of the breath of life. Egyptian mythology had the left ear receiving the "air of death" and the right ear the "air of life." In classical mythology snakes lick the ears of Cassandra, Hellenus, and Melampus, instilling in them the ability to foretell the future. Numerous symbols join forces in Christian iconography when the ear serves as a doorway into

the soul of the Virgin for a dove signifying the Holy Ghost. In some cases a ray of light from heaven enters Mary's ear, by which aural sex she conceives the Logos, the Word.

Chaldean diviners invented a whole framework of portents based upon abnormal births, and many of their signs concerned the ear. A small right ear or a wound below the right ear warned that the house of the father would be destroyed; both ears missing predicted mourning and a diminished country; and if both ears were merely deformed, it meant that the country would fall and its enemies rejoice.

An infant born with the Picassoesque condition of two ears on the same side of the head augured a calm reign and a prosperous nation. The rarity of these sports of nature may explain why calm and prosperity always seem so fleeting.

Even freed of mythological baggage, by virtue of its bodily importance the ear still gets to appear in many of the great scenes of literature. In *Paradise Lost* the angel whispers metaphysics into Adam's ear, just as the serpent hisses rebellion into Eve's. His father's ghost informs Hamlet that the incestuous, adulterate Claudius poured a toxic substance into the porches of his ears while he was sleeping. The dead king has a quick vocabulary: *porch* derives from the Latin word for a passage or entrance, and the ear has represented the gateway to the brain, the heart, and even the soul.

Thomas Carlyle said that he was persuaded to stop smoking by a "long hairy-eared jackass" of a physician. Why do hairy ears seem uncouth? They are a common sight. As men lose the hairs on their heads, the foyer of the ear provides a site

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for new ones to sprout as a further affront to dignity. Hairs grow inside the ear throughout our lives. In later life, like hardy weeds, they expand their range to the very porch of the meatus and even climb the curves of the pinna itself. Indeed, an often overlooked part of the ear is named for some of these hairs. The little lip of cartilage at the front of the ear, which seems like a half-open door guarding the entrance, is called the *tragus*. It is not unique to human beings. In many bats, such as the long-eared and the leaf-nosed and the pallid, the *tragus* is greatly enlarged. Apparently its increased size assists in the reception of sound waves coming from the side rather than from the direction in which the ear is pointed. It is the door of the *tragus* that we push in to seal our ears against unwanted advice and the enticements of sirens. The *tragus*'s name derives from the hairs behind it; the Greek *tragos* meant literally “he-goat.”

Like most other body parts, the ears have been measured and analyzed as possible clues to character. Anthropometry, the measurement of the proportions of the human body, did not disregard the ears. Alphonse Bertillon, a criminologist in nineteenth-century Paris, attempted to incorporate ear measurements into his system of anthropometric identification. Like our fingerprints—and like more obscure signature patterns, including facial heat emission—our ear patterns are unique. Unfortunately, they are not distinctive in ways that are as easy to sort and file as are fingerprints, and they are also less cooperative in providing prints of their contours. The curves of the ears do fall into several

categories, but no correlation between those categories and behavior has ever been established. Yet apparently this idea survives. In John Irvin's 1995 film *A Month by the Lake*, Vanessa Redgrave's character repeatedly tells an attractive man that she judges people by their ears. She is attempting to deduce character from generalizations about shape.

Although neglected in porn films, the ear is an erogenous zone for many human beings. Seldom do we allow others to touch our ears, and sexual foreplay is one of those occasions. For some people a whisper in the ear can be as erotic as a kiss on the lips. Cultural history has not ignored the ears' power to inflame. Once upon a time, the female ear was considered a near obscene imitation of the female genitals, its coils slyly imitating the labia, its channel dangerously reminiscent of a different orifice. The idea also materializes in ancient mythology, in which birth from the ear is an occasional theme. This method was how Karma, offspring of the Hindu sun god Surya, entered the world. “Grotesque” is a mild term for this concept, until you realize that birth from a seashell was also a common theme. Spiraling, folded inward, both ear and shell seemed visually reminiscent of the vulva—and therefore symbolic of both sexual intercourse and birth. As a result, through sympathetic magic, seashells have sometimes been considered charms to aid in delivery of a child. In a reversal of this imagery, nineteenth century slang dubbed the vulva “the ear between the legs.”

## Esther

I wasn't born with extraordinary ears. They're not too big like my brother's, and they stay close to my head, not seeking any attention for themselves. They're the usual shape, and people wouldn't pay much attention to them otherwise. I started piercing them when I was 12. For the first time they had a reason to be noticed. And my ears enjoyed that. They enjoyed being decorated and having a reason to stand out. In some brief moments of empowerment I pierced them again, this time using a sewing needle, ice, and a good helping of nerve. In Ireland, St. Patrick used the shamrock to teach the Irish about the Trinity. And so in honor of a patron saint, I gave my ears a touch of the divine with a third set of holes. While traveling in the Bahamas I saw women wearing small shells in their earrings. One woman said that she could hear the ocean in them. When I got home I hung some from my own, wanting to be close to the sound that always brings me so much peace. I've made my ears unique. They stand out now and enjoy being noticed.





## Ashley

I have never given any serious thought to my ears until recently; this summer I was told that my hearing was rapidly declining and I would have five-to-ten years left before total hearing loss—I will soon be completely deaf. The doctor attempted to explain to me in full detail what was going on with my ears, but I really didn't care to listen to him—I was focusing on the sounds I would soon not be able to hear. The doctors tried to convince my parents to send me to a college for the deaf so I could “learn their ways,” but I refused to go. I don't think I have ever been so proud of a decision I made before. My ears will soon serve little purpose besides decoration but I believe they are something more than that. They have piercings commemorating birthdays, a goodbye to a friend, and flat out rebellion from my parents. I also have a notch in my right ear I developed from being in utero with my twin that passed away soon after birth. My ears may soon do little to aide in my hearing, but they help me remember my past and feel close to someone when I feel sweet whispers or soft kisses against my ear.

Whether created in the image of God or not, ears had to be covered to mask their vulgar allusions and shield our innocent youth from corruption. This prohibition applied only to female ears, although male ears were identically shaped. Why the creator of the universe would bother to place visual-pun erotic sculptures on the sides of the head was a topic seldom addressed. Perhaps it was the same artistic flourish, an indulgence of divine whim, that resulted in some human beings' sporting little points on their ears.

## DARWIN'S POINTS AND HOUDINI'S WIGGLE



## Jon

In high school I asked myself the question that every growing boy ponders at some time or another: “How can I make my ears look sexier?” I considered different hairstyles and even hats or other cranium apparel. Alas, it was the piercings that I ultimately decided would best increase my ears’ beauty. I saved up funds for a few weeks and headed right on down to the mall kiosk. I didn’t want just any piercing; if my ears were going to really maximize their attracting potential, I would need something unique—bigger holes in the lobes. The ladies flocked! I soon discovered a correlation between my ears’ sexiness and the size of the holes in them. I stretched my ear lobes for larger, more extravagant jewelry—no bling, but jewelry that really allowed me to explore my sexual prowess. Five years passed and my ears have earned me a long term relationship, right as I reached a size 6 and stopped stretching. I see people who have stretched their ears to sizes far beyond what I would have been willing to for affection and sexual satisfaction. Perhaps they are needy or compensating for a lack in good looks. Whatever the reasons may be, I hope they are able to find the satisfaction I have from tearing gaping holes into my otherwise plain flesh.

In his 1871 masterpiece *The Descent of Man*, Charles Darwin credited the sculptor Thomas Woolner with bringing to his attention what Darwin called “one little peculiarity in the external ear.” While sculpting Puck with pointed ears, Woolner realized that many human ears have a small rounded point projecting from the upper edge of the helix, the inward-folded margin—the curved outer lip—of the external ear. Woolner examined the ears of various human beings and then the ears of some of our simian cousins. In time he communicated his discoveries to Darwin.

As the great biologist described them in the *Descent*,

These points not only project inwards towards the centre of the ear, but often a little outwards from its plane, so as to be visible when the head is viewed from directly in front or behind. They are variable in size, and somewhat in position, standing either a little higher or lower; and they sometimes occur on one ear and not on the other.

It was not difficult to find evidence of this peculiarity among apes and even among the more distantly related monkeys. Darwin theorized that the helix was the folded-in former margin of the ear. Next he speculated that the folding was in some way related to our external ears’ being, for whatever reason, flattened against the sides of our head. He cited incidents of seemingly atavistic ears whose outer edge was not curved inward to form a lip but instead flattened

and pointed like that of a quadruped. He concluded, “If, in these two cases, the margin had been folded inwards in the normal manner, an inward projection must have been formed.” Diligently quoting the objection of a colleague that these results were “mere variability,” Darwin nonetheless maintained his own view that “the points are vestiges of the tips of formerly erect and pointed ears.” To this day the protuberance on the edge of the helix is called “Darwin’s point” or “Darwin’s tubercle.” It is now known to be a dominant trait that is inherited in a simple Mendelian manner. Unlike, say, height, the shape of Darwin’s point is not influenced by environment but determined entirely by the combination of genetic factors.

It is interesting to follow the progression of Darwin’s description of the primitive ear. Five years after the *Descent*, the Italian criminologist Cesare Lombroso published the first edition of his *L’Uomo Delinquente* (Criminal Man). Lombroso argued that most criminal behavior is atavistic, a reversion to evolutionarily primitive actions. This early manifestation of social Darwinism was founded in the same sort of thinking on heredity that led an American authority on prisons to pontificate, “Good seed generates sound and healthy fruit, and imperfect parentage can only yield defective offspring.” Lombroso based his theories largely upon unsubstantiated data and his own limited group of subjects, which consisted mainly of Sicilian prisoners. He argued that criminals in general are born, not made—and, like most of us, he was adept at seeing what he wanted to see. For example, Lombroso flatly declared that criminal personalities have

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larger jaws and cheekbones than do the virtuous masses. Admitting that this trait might not be atavistic, Lombroso speculated that it could result from “the setting of the teeth or tension of the muscles of the mouth, which accompany violent muscular efforts and are natural to men who form energetic or violent resolves and meditate plans of revenge.” He casually threw around statistics that at best we might describe as questionable: “Prognathism, the projection of the lower portion of the face beyond the forehead, is found in 45.7% of criminals.”

Lombroso insisted that ears, like so much of the rest of the body, exhibit outward clues to degenerate personalities. In this contention, too, his evidence was less than overwhelming. He said that in criminals the ear was “often” larger but “occasionally” smaller. “Twenty-eight per cent of criminals,” he recited, “have handle-shaped ears standing out from the face as in the chimpanzee”; and then he added, with no visible embarrassment, “in other cases they are placed at different levels.” Confident of the generalities resulting from his biased data, Lombroso continued his parade of statistics that nowadays strike us as patently self-refuting. All along, maligning this supposed atavism, he was playing into the fear of our animal nature exemplified throughout mythology, in which one of the bestial attributes of satyrs is their pointed ears.

Eventually Lombroso got around to Darwin’s point in the *Descent*:

Frequently too, we find misshapen, flattened ears, devoid of helix, tragus, and anti-tragus, and with a protuberance on the upper part of the posterior margin (Darwin’s tubercule), a relic of the pointed ear characteristic of apes. Anomalies are also found in the lobe, which in some cases adheres too closely to the face, or is of huge size as in the ancient Egyptians; in other cases, the lobe is entirely absent, or is atrophied till the ear assumes a form like that common to apes.

The Lombrosan worldview thrived in fiction, its native habitat. In 1897 Bram Stoker employed the entire catalog of degenerate characteristics when he described his very embodiment of evil, Dracula. Along with teeth that protrude over his lips, a lofty forehead, and eyebrows that almost meet over his nose, the count’s “ears were pale, and at the tops extremely pointed.”

Human ears differ in another interesting way from those of other creatures. Rabbits, dogs, horses—they can move their ears, turning them automatically in the direction of sounds. This talent does more than amuse their fellows; it is essential in tracking the sound waves produced by approaching predators or fleeing prey. Even nocturnal prosimians flaunt

## Andrea

My ears are pretty much all that exists of the old me. I guess you could say they are a statement of my personal evolution but maybe just the evolution of my personal expression. My mom pierced them when I was five with an old antique piercing gun from her mom’s beauty shop. One at night and the other the next morning—I wouldn’t let her go anywhere near the second one for an entire day. It’s strange, but I’ve kind of taken pleasure in knowing that they disgust some people and just plain confuse others. Be it for reason, or just the mere idea of it all when I show them off, people generally stare. In any other context I’d hate people even looking at me. But for some reason I’ve always seen them to be an accomplishment, an achievement that many people wouldn’t even consider attempting. It’s oddly entertaining to know that someone is looking at you, staring intently, trying to figure you out—or at least your ears. It’s even more entertaining when they cringe as they realize they can see straight through to the other side.





## Dan

They had always been my worst enemy; they stuck out a bit as a kid and even warranted the name “Dumbo” from my sister. Fortunate was I that my head grew to balance out my ears. In high school I wrestled amidst the ever-present threat of califlower ear. I was one of the only kids who wrestled with headgear in practice. 3 other kids on team got cauliflower ears but mine were saved and I was extremely happy. When senior year of high school rolled around all of my friends had pierced ears but I stood alone—I’m deathly afraid of needles. In college and feeling brave, I went with 4 friends to the piercing shop where I got them pierced at a size 14. Flash forward about 3 years they are now a size 2—about the diameter of a bic pen. I got my ears pierced and stretched because I believe my body is a temple—I am just decorating mine. My grandma’s friend threatened to pick me some pantyhose and high heels to match my earrings. I told him that unless they make high heels to accompany my giant, manly holes he shouldn’t waste his time. I hate when people I don’t know or don’t like touch my ears, it drives me crazy. For fun, I happily take the plugs out to show-off the holes in my ears from decorating my temple.

this enviable trick. However, like other diurnal primates with smallish sound gatherers pinned to the sides of their heads, we have lost the ability to turn our ears. A few people can wiggle theirs, but seldom impressively.

In *The Expression of the Emotions in Man and Animals*, Darwin cited many examples of the ways that other creatures move their ears. Horses, boars, even rabbits pull back their ears prior to attacking, yet sheep, cattle, and goats do not. Darwin even distinguished between a horse that was turning its ears toward a sound and one laying its ears back in anger. He then went on to examine the various ways that animals raise their ears and turn them toward sounds. “The head being raised,” he added, “with erected ears and eyes directed forward, gives an unmistakable expression of close attention...”

Because we have other options, human beings manage attentive expressions without drafting our ears to help.

Darwin addressed the human loss of ear movement in another work, *The Descent of Man*. He pointed out that the extrinsic muscles that move the external ear are rudimentary and vary in the degree of their development: “I have seen one man who could draw the whole ear forwards; other men can draw it upwards; another who could draw it backwards; and... it is probable that most of us, by often touching our ears, and thus directing our attention towards them, could recover some power of movement by repeated trials.” As far as utility is concerned, this trait has all but vanished in *Homo sapiens*. Acknowledging the usefulness of mobile ears to animals,

Darwin argued that in human beings the “whole external shell may be considered a rudiment, together with the various folds and prominences (helix and anti-helix, tragus and anti-tragus) which in the lower animals strengthen and support the ear when erect, without adding much to its weight.”

Other scientists, as Darwin himself pointed out, disagreed. Some, for example, suspected that the outer ear’s cartilage transmitted sound waves to the “acoustic nerve.” What Darwin could not solve was the question of why our cousins, as well as our progenitors, had lost the ability to raise or turn their ears. It is not a loss that we go around lamenting, because our flexible necks allow us to turn our entire head toward incoming sound waves. In the long run, this method actually may be more efficient.

Aware of the mobile ears of our fellow creatures, to this day we say of ourselves that an interesting comment makes us prick up our ears. Yet two millennia ago Pliny the Elder was stating flatly in his *Historia Naturalis*, “Only man has ears that do not move and this is the origin of the nickname ‘flap-eared.’” Actually, Pliny used the term *flaccus*, a word that translates as “hanging down.” He also quoted his contemporary and fellow encyclopedist, Pompeius Trogus, who thought that humans exhibited several external signs of character, including this helpful observation: “Large ears are a sign of one who talks too much and is silly.” Even the usually gullible Pliny is forced to mutter in a stage whisper worthy of Groucho Marx, “So much for Trogus.”

Now and then someone possesses an atavistic ear-wiggling talent. In 1898, in his first known publication in a magazine about conjuring, a twenty-four-year-old Ehrich Weiss—already officially known as Harry Houdini—explained various subtle methods he employed to communicate to his assistant whatever information a member of the audience was writing on a pad or slate. “I have even,” he boasted in the article, “trained my right ear to move up and down to thus give my assistant the tip.”

## **NOR THE EAR FILLED WITH HEARING**



## Brooke

Being comfortable in your own skin is one thing, but being comfortable in your own ears is another, especially since ears come in all shapes and sizes. My ears are just your average, typical, everyday ear. As a kid, I was never made fun of for ears that stick out, or seem too large. But aside from appearance, my ears are sensitive. They ache when it's cold, and tickle when they are kissed. I think that is my favorite feature. I'm obsessed with q-tips after the shower, it makes my ears feel clean! I have my tragus pierced, on my left ear. It was quite the impulsive experience; I just decided I wanted it done. I've never passed out from a piercing before, but this was like none other. After the needle was forced through, I arose from the table and passed out, all from a little piercing in my ear. I couldn't believe what I had just done, and thought I was never going to be able to touch my ear again. For the next few days, when I cleaned my ears out, I felt nauseous. Call me a wuss, I don't care.

Some parts of the body started out with one purpose and in time moved on to another, as if they had been hired for a certain job and later promoted or reassigned. Just as etymology demonstrates that history lies fossilized in our every utterance, so does the body preserve a record of the past in its structure and behavior. "Evolution never starts from a clean drawing board," says the English biologist Richard Dawkins. "It has to start from what is already there." In doing so it preserves aspects of each organ's previous function.

The ears are a perfect example of this phenomenon. Because our hearing apparatus evolved from organs that had a previous role, it was not free to develop in just any old way. Inside the skull, between the satellite dishes on each side of the head, lie the real hearing devices, which double as organs maintaining equilibrium. Guarded by the strongest bones we possess, deep within the innermost spirals of the cochlea, the inner ear carries a drop of the primordial sea in which our distant aquatic ancestors evolved. Like its antecedent organ, the ear responds to pressure changes in the surrounding fluids. However, now those fluids are contained and are responding to subtle vibrations from sound waves. Our ears are so brilliantly attuned to hearing that the organ of Corti is insulated against the faint sound that blood makes when moving through capillaries.

Astronauts on the moon and instruments on Mars express a consensus about those places: They are as silent as the grave. On the moon we played like children, but only in mime, because the airless atmosphere refused to carry our laughter.

In contrast Earth is a noisy planet. For inconceivable millennia before we pulled ourselves upright and began to flirt and lie, water rushed, birds sang, wind howled, trees fell, and snow crunched under the feet of animals. At this instant there are millions of living beings out there making noises at each other and at us. Guided by these sounds, we have hunted prey and dodged predators and slowly evolved our complex cultures.

Nowadays, armed with our flexible, durable, comical, seashell-shaped protuberances, we still face toward the invisible sound waves that the world aims at us every day. Seemingly without effort, the brain processes these signals into meaningful communication. It happens everywhere, constantly, to every human being who is not dead. Thanks to the atmosphere's ability to carry sound waves, creatures evolved mechanisms with which to perceive them, and we are allowed to rejoice in Sidney Bechet's clarinet and Annie Sellick's voice. Henry Thoreau once noted in his journal the surprising way that we are moved by sounds: "A slight sound at evening lifts me up by the ears, and makes life seem inexpressibly serene and grand."

The most impressive talent of the ear is its ability to distinguish between a surprisingly wide range of sounds, stretching across 130 decibels. It is easy to throw around this kind of statistic, but we ought to take a moment and examine it. The term *bel*, which is used also in measurements of voltage and power, measures changes in the intensity of a sound; normally, however, we use a decibel (dB), a tenth of a bel. Like the Richter scale for tracking earthquake intensity,

## Beaver Ears

the measurement of decibels is logarithmic. With the lower threshold of human hearing labeled 0, an increase in sound of 10 dB would be ten times as loud, but 20 dB would be ten times ten or a hundred times as loud. A logarithmic scale spanning 130 decibels means that the human ear at its best can accommodate a 10 trillionfold difference in loudness.

Of course, this kind of range has no point unless we can remember the distinctions. Scientists estimate that on average the brain can distinguish among four hundred thousand sounds on file in the wet gray database between the ears. We recognize an immense array of sounds produced by inanimate and animate nature, not to mention the many awful and beautiful sounds that we make on our own. The Roman poet Virgil reminds us of a more urgent message unspoken behind the noises hurrying daily into our ancient pinnae: "Death twitches my ear. 'Live,' he says; 'I am coming.'" Until death twitches our ears, we can enjoy an aspect of hearing described in the Book of Ecclesiastes. Following the famous verse "All the rivers run into the sea; yet the sea is not full," the Preacher continues this line of thought: "The eye is not satisfied with seeing, nor the ear filled with hearing." Just as our hardworking eyes never overflow with the world's insistent visibility, so do our glorious ears never fill up with sound.

## Maggie

I still remember my mom denying me when I asked to get my ears pierced as a child. She would not let me do it until I was twelve despite all the other girls having them. I have since developed a rather strong feeling of femininity, independence, and courage towards my ears and their piercings along with respect towards others. Due to the obvious pain involved in the process, I have a strong respect for those that have multiple ear piercings. I also find it to be a beautiful feature on people when they have their ears pierced. There is a point where it can become too much, but there is certainly a beauty to someone (male or female) that has their ear(s) half full of earrings. I can't pin point what it is, though. As far as the feminine quality I associate with piercings on women, it connects with my feelings that real women are independent. Tome, piercings are always different, especially since ears are all different. So to emphasize and draw attention to your ears and all the adventures they have been through (the pain), is to exude independence!



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Typeset by Reid Parham, this book uses ITC Franklin Gothic Std for the body text and Egyptienne F LT Std for the titlings, folios, and headings.

Franklin Gothic, one of the most popular sans serif types ever produced, was designed by Morris Fuller Benton in 1902 for American Type Founders. In 1979, under license with ATF, Vic Caruso began work on more weights of the design for ITC. This version adheres closely to the subtle thick and thin pattern of the original design; the slightly enlarged x-height and condensed proportions of the new version result in greater economy of space. This typeface is a standard choice for use in newspapers and advertising. In 1991, David Berlow completed the family for ITC by creating compressed and condensed weights. ITC Franklin Gothic Compressed is designed especially to solve impossibly tight copyfitting problems, while maintaining high legibility standards. ITC Franklin Condensed provides medium weights of narrow proportions. It is frequently seen in newspapers, advertisements, posters, and anyplace with space restrictions.

Designed in 1956 by Adrian Frutiger, this slab serif typeface was the first text typeface created expressly for photocomposition and printing by offset lithography. Egyptienne F has a large x-height and is legible for varied text settings such as announcements, newspapers, and brochures.

This book was printed by an Epson Stylus Photo 1280 digital inkjet printer on 110lb, smooth, white, acid-free, and 30% post-consumer Index paper from Unisource Worldwide, Inc.

This book was hand-bound by Reid Parham under the keen instructions of Law Alsobrook.

Photographs were taken on a Canon Digital Rebel XT. 55mm, f5.6, at 400 ISO. Minimal post-capture processing was performed in Adobe Photoshop on an Apple Macintosh 1ghz G4 PowerBook to normalize exposure, contrast, and color. The camera was graciously provided by Chris Richard.