

# How the Chair Conquered The World

*The chair is one of those everyday objects whose function seems at once so obvious and necessary that we rarely, if ever, pause to consider its existence. But, as our author explains, the chair's creation and popularity were anything but preordained.*

by Edward Tenner

Pull up a chair. And take a good look at it. It forms our bodies. It shapes our thinking. It's one of the first technologies an American or European child encounters. No sooner has a child been weaned than it learns to eat in an elevated model. And even before, it is (by law) strapped into a special molded minichair for automobile transportation, and indeed is sometimes carried by hand in the same little seat. At school, the chair is one of the most common objects in the classroom and among the first words a child learns to read and write. Despite all its variations, the chair could almost stand for the whole "domain of middle-size dry goods," to use the philosopher Charles Taylor's phrase.

In the West, we prefer to contemplate nature without too many chairs obtruding. We picnic on the grass and spread blankets on the beach. But in artificial settings, there is something disconcerting about the absence of chairs. The "festival seating"—that is, none



*High-backed chair (1902) designed by Charles Rennie Mackintosh*

at all—introduced by post-Woodstock concert promoters soon connoted not celebration but chaos and violence. (The arrangement, though widely banned in the 1980s, is still common, even if the euphemism has long worn thin.) The standing-room-only arrangements of many British football stadiums in the same period amplified hooliganism and turned small perturbations into fatal stampedes. Chairlessness as dehumanization was carried to a nightmarish extreme by the infamous mass transports of the prewar Reichsbahn and the Soviet gulag.

Chairs go a long way toward filling a vacuum. They act as our proxies, claim space for us. The New Jersey Transit rail line between Princeton Junction and New York passes a large, new, nondescript condominium near the station in downtown Linden; almost half of the apartments have plastic chairs on their balconies, yet I have never seen a soul sitting in them at any hour I passed by. The chairs seemingly are not for

human use but rather for filling otherwise empty niches in the building's exterior.

Yes, chairs are in every sense fundamental to us. With their humbler cousins, the stools and benches, they have been with us for millennia. Curiously, though, they are neither essential nor especially healthful even in industrial and postindustrial societies—even if a few activities probably do demand them. Until relatively recently, the majority of the world's people rarely used chairs, and many still do not. Yet chairs have spread inexorably around the world, occasionally promoted deliberately by Western rule or influence but more often spontaneously adopted. The change has been one of the most thoroughgoing and apparently irreversible in the history of material culture. Essential parts of this spontaneous technology transfer are still obscure. But in every sense, the fortunes of the chair illustrate human malleability—and society's construction, reconstruction, and misconstruction of the human body. Once people begin to spend most of their lives in chairs, they are removed as though by ratcheting from their original ground-level ways; individual return may be hazardous, and social reversal has been unknown. Whole civilizations, in adopting chairs, literally change not only their posture but their point of view.

The chair's history is made up of several stories. The first is a functional and a negative one: chair seating was not predestined to dominate modernized humanity. Western specialists themselves branded it a health hazard, but only after it had become such a standard that radical change became almost impossible, as would later be the case with computer keyboard layouts. The use of chairs spread partly because technological systems were built around them before alternatives were available. The second story is a symbolic one: physical elevation appears to be a mark of prestige and power in nearly all societies, yet for centuries raised seating (including objects similar to Western chairs) never went beyond its ritual boundaries in nonchair societies. The third story is a material story: the chair as a European cultural good adopted less for economic than for social reasons, a slow but relentless change. And the fourth is functional again: the chair finally makes itself indispensable by induc-

ing changes in the bodies of its users. Yet those users have second thoughts, and begin their own experiments in ground-level living.

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Europeans and Americans occasionally are disconcerted to see Asians, individually or in families, sitting in airports or even at urban bus stops, preferring squatting or other ground-level positions to standing or raised seating. They may be feeling envy because chairs in most Western public spaces are so appalling. (The *Newark Star-Ledger* reported in 1989 that the Port Authority was installing “specially designed, uncomfortable seats” in its New York bus terminal. They remain.) But the feeling may also be wonder at seeing a remnant of an allegedly preindustrial, agrarian way of living. Western technology, with its operatives seated at everything from farm tractors to computer terminals, seems a functionally chair-borne way of life. In the West, the closest we come to a floor-sitting worker is the cross-legged hand tailor, laboring in the shadow of sewing machines designed for chair operation. (The British columnist Bernard Levin once gloated good-naturedly to his readers that, having grown up in an East End needle-trade family, he could sit cross-legged and they couldn't.)

But floor- or mat-level seating could have been and could still be perfectly functional. The same technologies that let paraplegics operate machinery of all kinds without the use of foot pedals (seated in chairs, but only because the rest of Western society is) could also allow design of lower-profile automobiles, truck cabs, and even aircraft controls. Computer monitors and keyboards could be used at precisely the heights at which scribes and scholars composed masterpieces of science and literature in ancient civilizations from Egypt and the Americas to Asia. John T. Bonner, professor emeritus of biology at Princeton University, recalls his World War II days in aviation research at the Army Air Force's Wright Field, when pilots complained of intense pain after extended missions using conventional seats and praised the first alternative design, a simple cloth sling that put users in a position closer to reclining. In fact, recumbent bicycles, with

the rider leaning back rather than perched on a saddle, are potentially more efficient and generally speedier (and less hazardous to operate) than the “safety” frame that has prevailed for the last hundred years. Perhaps cultural prejudice against reclining as much as sheer conservatism prompted bicycling officials to reject the design for competition.

Chairs themselves are surprisingly hazardous. According to the U.S. Consumer Product Safety Commission, 410,000 injuries serious enough to disable someone for at least a day occur every year in connection with chairs, sofas, and sofa beds, most as a result of falling. Another 400,000 injuries involve beds; the number would be far lower if we used floor-level bedding like the original Japanese futon. (Just as missionaries brought some of the first chairs to China, they later introduced Western beds to Japan.) John Pierson has written in the *Wall Street Journal* that sitting in chairs causes most of the lower-back pain that costs the American economy \$70 billion a year.

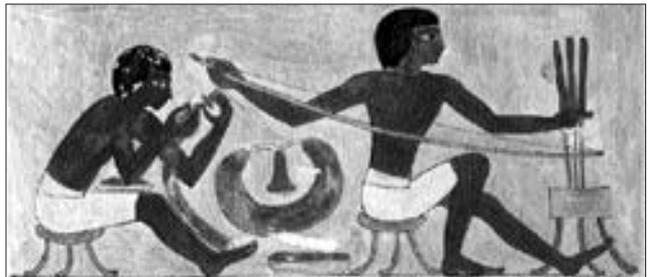
We don't often consider mat-level alternatives, partly because our upbringing hastens us in childhood from the positions that the very young find so natural. The French anthropologist Marcel Mauss considered the loss of childhood squatting “an absurdity and an inferiority of our races, civilizations, and societies.” Depriving the child of this capacity is “a very stupid mistake. . . . All mankind, excepting only our societies, has so preserved it.” In *Growth and Culture: A Photographic Study of Balinese Childhood* (1951), Margaret Mead and Frances Cooke MacGregor observe that Balinese children “retain the flexibility that is characteristically seen in the human fetus, moving with a fluidity that suggests suspension in amniotic fluid.”

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It is a challenge to reconstruct how part of humanity began sitting in chairs while the

rest (including some of the most culturally complex) lived near ground level. The historian Bernard Lewis has remarked that during their seventh- and eighth-century expansion, the Arab conquerors, a desert people without a steady wood supply, replaced the chair-level ways of the pre-Islamic Middle East with softer seating closer to the floor, only to return to the chair in today's urban society. But why did the Egyptians and other Mediterranean peoples begin to use chairs in the first place? Skeletons can sometimes reveal something about seating habits, but the answer remains mysterious.

What is clear is that chairs are keys to a distinctively Western system of things and symbols. Many other cultures have had elevated seating for rulers and other authority figures. It is almost a cultural universal that higher is better. In folk culture and trade union caricature, the rich are portrayed as sitting on top of the poor. Even other animals attach



*Ancient Egyptians, such as the ones depicted in this facsimile painting of a tomb wall (1450 B.C.), used stools to facilitate everyday tasks. These workers are stringing beads for jewelry.*

importance to keeping the high ground; when a pet parrot sits on a human shoulder, it asserts possession as much as it claims protection, and owners of some aggressive dogs must prove their dominance to reclaim their favorite chair or sofa.

All this does not suffice to promote the chair as we know it. Hierarchy can exist very close to the ground. In pre-Columbian Mexico, even Aztec rulers slept on the same kinds of mats as their subjects, and the same mats on low platforms were standard seating even in law courts and government offices. It is true that the wood or wicker seat (*icpalli*) of emperors and notables had backrests that provided much of the allure of power seating

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attributed to today's high-backed "executive" or judge's chair, but the sitters were still cross-legged. In fact, in pre-Columbian Mexico rulers were often called "He of the Mat." Most of the thrones of South Asia, including Iran's original golden Peacock Throne (actually removed as booty from Delhi in 1739), were designed for cross-legged sitting, though Western-style chairs were also known; the current replacement of the lost Peacock Throne follows Western throne models. And even in the contemporary United Arab Emirates, according to the cultural historian Margaret Visser, guests must lower their bodies immediately to floor level and never rise while their host is seated.

In the absence of heavy furniture, the mat and the carpet have rich symbolic worlds of their own. The Japanese tatami is a module still used as a basic measurement of space. Among Japanese artisans, "mat learning" had the same connotations that "armchair knowledge" does in the West. The Chinese title translated as "chairman," *chu hsi*, means literally "mat master."

In the West, the chair diverted attention from the floor covering and helped determine every aspect of life and belief from the sublime to the material. Jewish and Roman sources both acknowledged chair sitting as central to kingship. Solomon's throne in 2 Chronicles 9:17-19 sets the pattern of a ruler elevated with legs suspending from the body and resting on a small stool; Greeks and Romans represented their deities on the high-backed *thronos*. The Holy See, the bishop's cathedra, and other chairs of state also followed this pattern. In the European High Middle Ages, high-status men and women worked the finest gradations of power and prestige in the public arrangement of their chairs. The physical occupation of a seat of office not only stood for office, it constituted office, and in one 12th-century succession dispute in the Holy Roman Empire, three ranking bishops physically removed Henry IV from his throne and thereby deposed him. (This mentality does not require a Western-style throne. Even in the 20th century, one Indian prince recalled for the anthropologist Adrian C. Mayer: "So long as I ascend the *gaddi* [a cushionlike throne for cross-legged sitting] I am ruler, otherwise I am not. I am just

nobody.") Even today, cartoonists depict Saint Peter in a heavenly chair, not sprawled on a cloud.

From such exalted seats of power the chair has extended throughout Western society, even into its rudest outposts. The archeologist James Deetz has argued that until around 1600, the chair in most households was a single seat for the male head: "As the ruler was enthroned before his court and kingdom, so was the husbandman enthroned within his household. Others sat on stools, chests, settles, benches, cushions, or rush-covered floor." In our own popular culture, Archie Bunker's easy chair in *All in the Family*, higher than his wife Edith's, echoes ancient patriarchy.

For men and women of all stations, sitting Western-style affects more than the spine. While the water closet as we know it dates only from the 19th century, the contrast between the Western seated position for defecation and the Asian and African squatting posture has long been familiar to travelers. In this century, Western physicians and designers have subjected the commode to the same scrutiny as the office chair, and most agree that it promotes straining and constipation. (Along with diet, squatting seems to have kept the common Western inflammation of the bowel, diverticulitis, out of Africa.) The architect Alexander Kira's definitive 1976 monograph, *The Bathroom*, cites overwhelming medical opinion against the throne-toilet as we know it; yet so accustomed are we to the sedentary life that no significant market has ever developed for re-designed fixtures.

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With so little to recommend them, chairs and related objects—raised beds, desks, worktables, commodes—nevertheless dominate the world. And at first glance this is not surprising. Were not chairs part of the baggage of empire, instruments of hegemony? And sometimes the symbolism of sitting positions is apparent. Press photographs of Ayatollah Khomeini and his circle always showed them seated at carpet level in robes and turbans, in contrast to the Westernized shah and his officials—a contrast that must

have been powerful to Iran's traditionalists.

But there is far more to the adoption of chairs than conquest or modernization. More than 30 years ago, the remarkable self-taught Sinologist C. P. Fitzgerald investigated one of the mysteries of material culture: why, of all the peoples of Asia, the Chinese should have changed from ground-level to chair seating before modern times, within a half century of the year 1000, to be exact. There were several types of chair seating documented in China as early as the second century A.D. One involved a military folding chair not so different in function and design from goods available today through L.L. Bean and originally intended for use in often-muddy fields where mat and carpet living were impractical. Over the centuries, it became a common furnishing indoors, and as such gradually ceased to be noticed by writers. By around A.D. 750, another form began to appear: a fixed frame chair closer in appearance and use to Greco-Roman and Byzantine counterparts. (Fitzgerald observes that the Chinese were sitting in chairs for centuries while most Europeans contented themselves with stools.)

Fitzgerald believes that Greek- or Syrian-born Nestorian missionaries brought chair sitting from Constantinople to China, but there was another source closer to home: the peoples of the north, some of whose rulers surprised Han Chinese diplomats by holding formal audiences while sitting on chairs with their legs hanging down. This practice also is seen in the imagery of one of the five Living Buddhas, the Maitreya, whose cult was popular in the north. Why was this sitting position popular there? It may have reflected the influence of northern peoples who spent much of their time on horseback and found it more natural than cross-legged positions. The Chinese characters for "chair" in any case attests to its foreign origin: "barbarian bed."

The Chinese appear to have modified a raised platform or *k'ang* (a wooden adaptation of an oven-platform popular in the cold winters of the north), adding a back and shortening the seat. But the precise process is less important than the result: a cultural revolution of sorts in which clothing and furnishings were modified for men



*Chinese rosewood chair, Qing dynasty, 17th–18th centuries*

and women whose bodies were now several feet higher off the ground. Chinese joiners over the centuries created some of the most beautiful and comfortable chairs on earth, and even introduced the S-curved splat, the earliest antecedent of today's domestic designs.

If China shows how powerful historical accident can be in the diffusion of a concept as basic as the chair, Japan illustrates how mat-level ways can persist. Had the Chinese adopted the chair before the beginning of the Heian age (794–1185), Japan might have made the same transition. But though examples of chairs were known to the Japanese, they had little lasting influence. The art historian Kazuko Koizumi has identified a number of periods after the 12th century, when groups of Japanese took to chair living. In the Kamakura period (1185–1333), the chairs of Zen abbots—who usually sat cross-legged rather than in the Maitreya position—were copied for a time by wealthy samurai, the same group who emulated the furniture that arrived with Spanish and Portuguese missionaries and merchants during the brief Momoyama period (1573–1600). Except for the emperor and high-ranking Buddhist clerics, Japan remained almost entirely mat based until the Meiji Restoration in 1868. And for the dignitaries who used chairs, they may have been as much conveniences of age as emblems of exalted status. Colder Chinese winters cannot account for such a sharp difference; neither can Japan's island geography. (Chairs were even less common in Korea.) There may be no better answer than contingent events at crucial junctures.

It was European conquest, diplomacy, trade, and warfare beginning in the 16th century that finally secured the worldwide dominance of the chair, at least among most elites. The lines of influence become easier to draw, if not to explain in detail. We have seen that chair sitting is not inherently more

comfortable to those who have grown up with one of the dozens of other resting positions that the anthropologist Gordon Hewes documented in a masterly article more than 40 years ago. Those who tried it in middle age often reported intense discomfort, he noted. The most influential channel of change may have been the Western-style schoolroom, which accustoms children to chairs in their formative years.

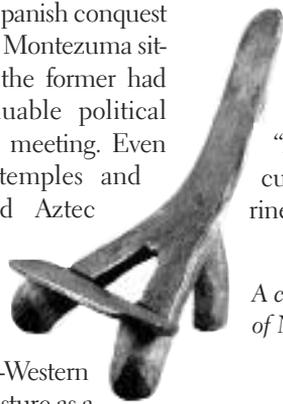
Consciously or not, Europeans began to maneuver non-Westerners into the chair as a precondition of bringing them to the bargaining table. The universal privileging of elevation probably guaranteed that the higher seating technology would prevail. European lore told the story of an African queen whose courtier bent over to make a living chair of his own back when her European hosts tried to humiliate her by not offering one. More likely, the West offered its furniture as instruments of co-optation or coercion.

Aztec manuscripts of the Spanish conquest of Mexico depict Cortés and Montezuma sitting in massive chairs that the former had brought—obviously as valuable political instruments—to their initial meeting. Even after the destruction of temples and palaces, the Christianized Aztec nobles integrated into the Spanish order, adopting the huge, Spanish-style chairs. The Aztec nobility thus became the first of the non-Western elites to change its seating posture as a result of European expansion. But this was a cultural and not a functional change; bureaucracy as such can work perfectly well in mat-level societies without chairs or tables.

In Africa, the result was similar but the forms and motivation radically different. In many traditional African societies, stools were not the stark, utilitarian seats of medieval Europeans, but superbly carved objects almost inseparable from the owner and carried with him on trips. The Ashanti and some other groups believed the owner's soul dwelt in the stool. Royal seats had political potency even beyond their European counterparts; like European thrones and unlike Asian ones, they were occupied with sitters' legs resting on the ground. Whereas the chair remained a practical item of furni-

ture for the Chinese, it entered Africa with a different aura. It was a kind of superstool. Africans had long made backrests for ground-level use, and some kings had already used seats and backrests together.

When Europeans arrived with furniture that integrated seat and back—and the first of these came with the Portuguese in 1481—these well-chosen gifts soon won the admiration of elites. African rulers received them not as alien impositions but as potent elaborations of their own ways. While there had been indigenous high-backed seats in some regions, artisans now developed the European idea with complex narrative and cosmological decorative programs. Some of these magnificent objects in turn made their way to European collectors and museums. What would the original chair makers have thought had they been informed that, in 1921, a Bauhaus student named Marcel Breuer (later celebrated for the tubular-steel sled-base Cesca chair) would in turn appropriate their work, now considered naive, as inspiration for a five-legged “African” chair? It is as though world culture had become not an array of vitrines but a house of mirrors.



*A chair crafted by the Tiv peoples of Nigeria*

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In the rest of the modernizing world, chairs spread with less aesthetic panache. The European embassy and diplomat's home was usually the point of entry. The Akasaka Detached Palace in Tokyo, built under Western direction in the early Meiji era (1868–1912), was modeled after Versailles. Once the local upper classes began to entertain with Western furnishings, social emulation began a process—later accelerated by the customs of the office, the railroad car, the airplane seat, and the automobile—that did the rest. Sometimes, as in Turkey, the old elites remained conservative and it was members of the newer middle classes who took to Western decor, but diplomats were still the chief agents of change.

For their part, affluent Europeans and Americans were drawn to what they considered sensual alternatives to the sprung and overstuffed parlors of the 19th century. The canvases of Jean Auguste Dominique Ingres, Eugène Delacroix, and a host of academic Orientalists later in the 1800s evoked an unbooted, uncorseted, and uninhibited Middle East, duly recreated in three dimensions in the world exhibitions that were the Internet of the age. Later in the century, some Westerners even built “Turkish corners” in their homes with low divans, about as close as they were willing to approach the carpet.



Conversation Mauresque (1832), by Eugène Delacroix

Of course, chairs are not used universally and almost certainly never will be. Many people still cannot afford even simple ones; others, especially peasants, may simply prefer ground-level ways. Richard Eaton, a historian who visits India often, reports that while offices, schools, and factories in the South have chair seating, homes generally do not—another argument against technological determinism.

Still, there are signs that the world’s commitment to the chair may be difficult to arrest, let alone reverse. In Japan, where many households have maintained both tatami and Western rooms, younger people are finding it increasingly difficult to maintain traditional ground-level seating positions. The less time is spent in them, especially in the kneeling meditation posture of *seiza*, the less comfortable they become. Worldwide lumber scarcity has discouraged traditional Japanese building methods, and many families now choose American materials and plans inspired by the sets of Hollywood films. Meanwhile, children as young as two and three sit on tiny chairs at cram-school desks preparing for the kindergarten entrance examinations.

It is not clear whether (as some Japanese and foreign officials have

claimed) the decline of kneeling has supplemented diet in increasing the stature of Japanese youth, or whether different proportions have contributed to the preference for chairs. Sitting habits affect tendons, ligaments, and joints in ways that medical research has hardly studied;

prolonged kneeling can induce bursitis, and extended cross-legged sitting by Western novices may damage knee joints permanently. In our posture, cultural choices become biological facts. It is not clothing but seating that truly makes men and women. Even mature Japanese executives now routinely use cushions with short backs in traditional restaurants to ease their discomfort. Most new toilets are of the Western sitting type.

Meanwhile Europeans and Americans continue to experiment fitfully with mat-level life. Shag carpets, conversation pits, beanbag chairs, and brightly patterned floor cushions are all period pieces, but the impulse is not dead. And behind it is not so much a quest for health or even novelty as the sense that the chair as a technology has raised us a bit too much from nature, from *our* nature. In the end, the chair may not be a matter of health or performance or power, but of values. The scholar of Zen D. T. Suzuki contrasted Rodin’s chair-height *Thinker* with Sekkaku’s Zen master in meditation: “To raise oneself from the ground even by one foot means a detachment, a separation, an abstraction, a going away in the realm of analysis and discrimination. The Oriental way of sitting is to strike the roots down to the center of earth and to be conscious of the Great Source whence we have our ‘whence’ and ‘whither.’” Has humanity lost something in attitude as it has gained in altitude?