From Horowitz, Maryanne (ed.). New Dictionary of the History of Ideas (6 Volume Set), 1E. © 2005 Gale, a part of Cengage Learning, Inc. Reproduced by permission. www.cengage.com/permissions

HYGIENE Please cite as: Hooker C., 'Hygiene', in: Horowitz, M.C. (ed) New dictionary of the history of ideas. 2005: Charles Scribner's Sons. ISBN-10: 0684313774 | ISBN-13: 9780684313771]

to interpret the story along mundane lines, but then comes the climax or the punch line, which makes listeners laugh in surprise as they realize they have been led "down the garden path." The linguist Victor Raskin at Purdue University is working to program computers with the ability to bring in a myriad of cultural references while simultaneously testing possible interpretations so as to arrive at the one that is "funny." In his book Semantic Mechanisms of Humor (1985) Raskin distinguishes between what he calls bona fide scripts and joke scripts. Joke scripts differ from stereotypes in that a stereotype is an idea that many people seriously believe in and act on, while joke or comic scripts are more literary than sociological or political. They are amusing ideas that serve as the nucleus for folklore. New Englanders do not really believe that French-speaking Canadians are stupid, nor do the British think that the Irish are dirty, nor does the world at large think that Italians are cowards, yet extensive joke scripts circle around these and many other groups. The fact that joke scripts develop rather haphazardly out of the history of particular countries helps to explain why people from different cultures have a hard time catching on to each other's jokes, many of which are variations on old themes or examples of one's expectations being suddenly violated.

The idea of looking at the creation and reception of humor to trace the intellectual (as opposed to the emotional) paths that humor takes through the brain is fairly new. Arthur Koestler in *The Act of Creation* (1964) claims that for people to think in new and creative ways, they must engage in bisociative thinking so as to bring concepts together in original ways. The "Ah!" kind occurs when people have an emotional reaction as they create or recognize artistic originality. The "Aha!" kind occurs when they bring divergent concepts together into scientific discoveries, while the "Ha Ha!" kind occurs with the comic recognition of ridiculous situations.

As indicated by these examples, the humor research of the future is likely to focus on particular kinds of humor as created and received by individuals in particular situations. And as the world grows smaller and people are forced to communicate with and adapt to people with different customs and beliefs, there will probably be increased interest in understanding both the bonding and the out-bonding as well as the release of frustration that comes when people laugh together.

See also Dream; Mind; Philosophy; Tragedy and Comedy.

BIBLIOGRAPHY

- Barreca, Regina. They Used to Call Me Snow White—but I Drifted: Women's Strategic Use of Humor. New York: Viking, 1991.
- Bergson, Henri. *Laughter: An Essay on the Meaning of the Comic.* Translated by Cloudesley Brereton and Fred Rothwell. New York: Macmillan, 1911.
- Boskin, Joseph. Rebellious Laughter: People's Humor in American Culture. Syracuse, N.Y.: Syracuse University Press, 1997.
- Cousins, Norman. Anatomy of an Illness as Perceived by the Patient: Reflections on Healing and Regeneration. New York: W.W. Norton, 1979.
- Davies, Christie. *Ethnic Humor around the World: A Comparative Analysis.* Bloomington: Indiana University Press, 1990.

- Freud, Sigmund. Jokes and Their Relation to the Unconscious. Translated and edited by James Strachey. New York: W.W. Norton, 1960.
- Gates, Henry Louis, Jr. *The Signifying Monkey: A Theory of Afro-American Literary Criticism.* New York: Oxford University Press, 1988.
- Koestler, Arthur. The Act of Creation. New York: Macmillan, 1964.
- Lederer, Richard. Anguished English: An Anthology of Accidental Assaults upon Our Language. Charleston, S.C.: Wyrick, 1987.
- Morreall, John, ed. *The Philosophy of Laughter and Humor.* Albany: State University of New York Press, 1987.
- Nilsen, Alleen Pace, and Don L. F. Nilsen. *Encyclopedia of Twentieth-Century American Humor*. Phoenix, Ariz.: Oryx Press/Greenwood, 2000.
- Raskin, Victor. Semantic Mechanisms of Humor. Dordrecht, Netherlands: Reidel, 1985.
- Rishel, Mary Ann. Writing Humor: Creativity and the Comic Mind. Detroit: Wayne State University Press, 2002.
- Simon, John. Paradigms Lost: Reflections on Literacy and Its Decline. New York: Potter/Crown, 1980.
- Spalding, Henry D. Joys of Jewish Humor. New York: Jonathan David, 1985.

Alleen Pace Nilsen Don L. F. Nilsen

HYGIENE. *Hygiene* is defined in current English dictionaries as "the science of health." This definition, though formally correct, hides a long history of change in the word's use, from its holistic classical meaning of "individual regimens to preserve health" to its nineteenth-century connotations of "social medicine" (including lethal eugenics programs), to its current limited construal as "personal cleanliness" or "germ removal." For more than 2,500 years of use in many different lands, concepts of hygiene have been integral to personal identity, shaping sense of self through boundary maintenance and spirituality.

The Ancient World, c. 500 B.C.E.-200 C.E.

In Greek mythology Hygeia was one of the daughters of Aesculapius, a renowned healer and demigod; she was considered the goddess of health. The Greek word hygiene hygieine meant "sound, healthy, or strong," and was possibly related to the Sanskrit ugias, or "strength." In the works of Greek physicians, from Hippocrates (460-c. 377 B.C.E.) onward, hygiene was that branch of medicine dedicated to the "art of health," distinguished by Galen (129-c. 199 C.E.) from its other arm, therapeutics, or the treatment of disease. The Greeks understood the world to be composed of four elements-earth, air, fire, and water-and, analogously, understood life to be controlled by the four principles of hot and cold, wet and dry, which corresponded to the four "humors" that composed the body: yellow and black bile, blood, and phlegm. The body was understood holistically as a dynamic state of interaction between these four principles, whose imbalance could cause disease. The goal of hygienic practice was to achieve qualitative and humoral balance within the body, and thus for each person to live out their allotted lifespan.

practices with the moral order of their culture: a hygienic person went with his fellows to the gymnasium, was abstemious with alcohol, and had only acceptable sexual relations.

The Greeks' conception of the body as an organic whole integrated into its environment, and their regimen-based methods of preserving health by achieving harmony within the body, were remarkably similar to health systems that apparently coincidentally evolved in India and China. Though their explanatory frameworks differ from the Greeks and from each other, both Indian Ayurvedic medicine and traditional Chinese medicine have longevity and prolonged states of health as their goal, and both discuss which substances, qualities, and actions are lifeenhancing and which are not. Because of these similarities, the word *hygiene* is sometimes inaccurately used to refer to these traditions in English-language medical histories of these peoples.

The Middle Ages and Renaissance, 200-1700 C.E.

European medical writing all but ceased as academic study disintegrated with the Roman Empire. Academic medicine owed its revival in the ninth century C.E. to the enthusiasm of Muslim scholars, who, having established an empire from Persia to Spain, translated and extended the classical medical corpus, particularly the works of Galen. The concept of *hygiene* was revitalized, particularly as it could readily absorb the Islamic belief that the spiritual unity of the cosmos was the basis for all medical practice and the cleansing and purification rituals that surrounded prayer. New texts of regimens for health were produced by such renowned physicians as Abu Bakr Muhammad ibn Zakariya ar-Razi (Rhazes; c. 865–between 923 and 935 C.E.) and Avicenna (Ibn Sina; 980–1037 C.E).

These Islamic physicians followed Galen's successors in considering the six "nonnaturals" (that is, factors external to the body) as the canonical categories that composed hygiene: air (or "environment"), food and drink, sleeping and waking, movement and rest, retention and evacuation (including ejaculation), and mental-emotions ("passions of the soul"). Regimens and advice books were structured around these categories. While regimens were widely respected, in practice, as in the classical period, many people blended them with the incantations, rituals, and charms of popular medicine, just as the notion of spiritual harmony integral to Islamic hygiene coexisted with religious notions of disease as a test or punishment.

European enthusiasm for hygiene returned with the upsurge in medical writing that marked the Renaissance, and handbooks were produced for a much wider audience. For example, in England between 1456 and 1604, 115 out of 392 editions of books on medicine and regimen were issued in the vernacular. However, these works contained an increasing diversity of thought that left the content of hygienic practice unfixed, further blurred the distinction between hygiene and therapeutics, and, under the influence of nascent sciences and the growing authority of mathematics, assigned and calculated degrees to humoral balance. Emphases and goals were shifting. For example, although exercise had largely dropped out of hygienic manuals in the medieval period, there was a renewed emphasis on regimens of movement in the Renaissance; and practitioners now aimed higher than the Galenic allotment of years,

Hygienic instruction was tailored to each individual's constitution, itself the result of humoral activity, and to their environmental and personal circumstances, such as age, sex, status, and relations with others. Proper hygiene included regulations concerning sexual activity, sleeping and waking, bathing, exercise (a central activity for freeborn Greeks), and above all, diet. Dietary regimens were extremely detailed as to when it was or was not appropriate to eat particular kinds of animals or grains and considered food very carefully in all its cooked and raw states, discussing strategies such as boiling, grilling, roasting, and breading that would moisten, dry, heat, and bind. Because food was considered to have such powers in altering a person's internal humoral balance, the distinction between hygiene and therapeutics was blurred, as the same foods could be prescribed to cure disease as well as maintain health. Although the Greek physicians regarded their work as purely empirical, in contrast to superstitious medical practices such as appeasing angry gods, their texts clearly equated healthy

Healthy skin keeps him on the job

00

Health propaganda poster, c. 1940s. As civilization progressed during the twentieth century into expanded industrialization, frequent overcrowding, and two world wars, health risks increased. As a result, governments instituted programs aimed at encouraging citizens to practice good hygiene for a healthier society. © K.J. HISTORICAL/CORBIS

wishing instead to preserve their youth and achieve an unlimited longevity.

Personal hygiene also became more clearly equated with the health of the soul as it was reinterpreted through Christian belief and practice. Thus classical hygienic prescriptions on diet became condemnations of the "sins" of gluttony and drunkenness. Self-help and an increasing asceticism (all-cold regimens were popular) were the twin characteristics of hygiene at this time. The works of social theorists John Locke (1632-1704) and John Wesley (1703–1791, founder of Methodism) emphasized "hardening" regimens and sobriety. These clearly moralistic ideas about hygiene fueled criticisms of "civilization" by Jean-Jacques Rousseau (1712-1778) and others, who suggested that compared with the "noble savages" of the "new" world, Europeans were being devitalized by nervous diseases brought on by overeating and drinking, failure to exercise, late rising, and tight lacing. Hygienic regimens were to aid in maintaining European identity in the face of dissolution.

Hygiene and Public Health, 1700–1945

The concept of hygiene underwent immense changes during and after the eighteenth century. As the use of dissection and the microscope became increasingly common for the new medical sciences of anatomy, physiology, and pathology, Galenic theories were quickly discarded. Many physicians began to treat traditional hygiene as at best a branch of education rather than an area of medicine, at worst a form of folklore. However the status of hygienic study was defended by Paris professor of medicine Jean Noel Hallé (1754-1822), who argued that the subject of hygiene had two facets: the individual, in which the physician would consider such factors as age, sex, temperament, habits, profession, poverty, and travel; and the social, in which the physician would consider climate, location, occupations, customs, laws, and governments, as they affected health. This transference of many of the ideas incorporated in traditional hygiene to the level of the public and the population was reflective of a general growing interest in "state science," literally "statistiks." This referred to the collection of numerical data about the composition, strengths, and weakness of a *population* on the grounds that the economic and political strength of a nation were directly proportional to the health of its citizens. (Indeed, the concept population may be said to have been produced by these new measurement techniques.) As Hallé wrote, the hygienist must become counsel and spiritual guide to the legislator, intervening in those areas where an individual had little control.

The concept of "public hygiene" increased in importance as European societies experienced the devastating epidemics of cholera, typhoid, smallpox, and plague that struck as a result of war, colonization, and industrialization. Acting on the statistical relationship between mortality rates and living conditions, the primary government response was in terms of "sanitation," the removal of environmental pollution by garbage and nightsoil collection services, building ventilation devices in houses, and limiting industrial refuse. This environmental focus in public-health strategies reflected the popularity of the miasmatic theory of disease transmission, which conceived disease as the airy product of refuse, decay, and smell. It also shaped, and was shaped by, an increasing social preoccupation with cleanliness, possibly attributable to the transmission of the eighteenth-century French aristocracy's mannerly culture, a new kind of hygienic regimen that was distinguished from its predecessors by its cleansing rituals, from nose-blowing to bathing. Hygiene was partially distinguished from sanitation (though the two terms were interchangeable) by its focus on the social and moral health of society, the ultimate aim of sanitation. As Benjamin Ward Richardson (1828-1896) captured in his utopian tale Hygeia: A City of Health, it was felt that the mere fact of living in uncrowded conditions and enjoying regular bathing would result in the moral and spiritual uplift and pursuit of self-improvement among the great unwashed who were filling the fever-decimated hospitals, prisons, shipping vessels, and factories of the day.

Thus hygiene became a central technique of social government in the nineteenth and early twentieth centuries; indeed this could well be termed the Hygienic Era in honor of the proliferation of societies and subjects devoted to hygiene, each of which connected individuals to projects in governing society. In domestic hygiene, maternal hygiene, tropical hygiene, international hygiene, industrial hygiene, sex hygiene, moral

RACIAL HYGIENE

In the hygienic era, national populations were conceptualized as biological entities, that is, as races. Encompassing much more than skin color, the notion of race reflected social characteristics (such as courage or honesty) as well as physical ones (such as longevity and intelligence) that were considered to be hereditary. Races were thought about in Darwinian terms as organisms that could evolve or degenerate, win or become extinct, according to changes in their membership and in competition with others. Accordingly, at the beginning of the twentieth century many Western physicians and social reformers were concerned that their race would "degenerate" and become devitalized by the reproduction of "unfit" specimens, that is, those with undesirable physical and social characteristics thought to be heritable, including insanity, alcoholism, Down's syndrome, epilepsy, criminality, and poor eyesight. As new tests for fitness, such as the Binet IQ test, were developed and distributed across populations, ever increasing numbers of such "unfit" were discovered and anxieties worsened.

hygiene, and many other arenas of hygiene, governments sought to regulate their citizens' movements, interactions, choices, habits, and thoughts. As public-health measures proliferated, from establishing house, city, or national-border based quarantines to building "lock hospitals" for prostitutes with venereal disease, "lines of hygiene" became literally lines of rule, and conversely, lines of rule were manifest through hygienic regulations. This was most obvious in the colonial world, where the containment, education, and/or exclusion of nonwhites (predominantly ethnic populations and immigrant laborers) were often managed medically by quarantines or isolation measures directed at their supposedly diseased bodies and unhygienic habits.

Population hygiene or health was now clearly predicated on notions of purity and pollution as Western cultures struggled to imaginatively maintain the boundaries of their bodies and identities against the incursions of various "others," from viruses to Chinese gold-seekers. Domestic hygiene aimed at excluding dirt, and equivalently moral hygiene aimed at excluding evil. Indeed, practices and instruments of hygiene, such as the minutely detailed bodily training given to those with tuberculosis or inactive typhoid bacteria about how to prevent their illness from spreading to others, produced identities. Hygienic practice marked who was white or nonwhite,

Racial hygienists sought to improve their racial stock by encouraging the propagation of the fit, sterilizing the unfit, and forbidding racial "dilution" by intermarriage. These policies were written into law in most Western countries in one form or another, such as in the antimiscegenation and sterilization laws passed in a majority of the United States, which by 1941 had caused 36,000 individuals to have been compulsorily sterilized. The ultimate expression of these ideas was of course found in Nazi Germany, where euthanasia of "unfit" children and of the inmates of psychiatric institutions was carried out in the 1930s, a precursor to the horrors of the mass genocide of Jews, Gypsies, and others designated unfit during World War II.

In the aftermath of war, many racial hygiene associations, where couples had been encouraged to seek medical testing and confirmation of fitness before marrying, gradually became planned parenthood organizations with different social goals in mind.

citizen or alien, clean or contaminated, a good wife and mother or an impure one. By World War I, proper hygiene was regarded as a duty that all citizens owed their society. The widespread acceptance of the germ theory of disease in the 1890s encouraged this trend by focusing public-health measures away from the general environment and much more on personal practices, as the ordinary actions of apparently healthy people were now revealed to be the mechanisms that transmitted illness. With the sudden explosion of antibacterial soaps, powders for clothing, tissues, and face masks—beards were shaved and skirts lifted as Americans worried they harbored germs came a renewed obsession with domestic and bodily cleanliness as the markers of healthiness and moral and civic responsibility.

In the late twentieth century, the concept of hygiene lost its prewar obsessions with purity and its heavy moral agenda. *Hygiene* in the twenty-first century refers virtually solely to personal cleanliness, and more particularly to personal habits that minimize exposure to germs. For the past century this has been its global definition also, as since the nineteenth century the practices of personal hygiene have been relentlessly proselytized in developing nations, not only by anxious colonizing Europeans, but also by indigenous cultures as they replaced traditional knowledges with Western medicine. (For example, the Japanese Private Association of Hygiene was founded in 1883, a decade after the new Medical Constitution of Japan, which formally declared that Western medicine would be the only legal practice in the nation, was passed.) Many physicianhistorians regard the spread of such personal hygiene practices as having been, and continuing to be, directly responsible for saving millions of lives, and point to the sharp downward slide in incidence of once-devastating epidemic diseases as evidence for this contention. They are not wrong—but ideas about hygiene have produced and continue to produce identities and politics that colonize other social worlds, as well as healthy bodies.

See also Biology; Eugenics; Health and Disease; Medicine.

BIBLIOGRAPHY

PRIMARY SOURCES

- Galen. A Translation of Galen's Hygiene (De sanitate tuenda). Translated by Robert Montraville Greene. Springfield, Ill.: Thomas, 1951.
- Richardson, Benjamin Ward. Hygeia: A City of Health. London: Macmillan, 1876.

SECONDARY SOURCES

Armstrong, David. "Public Health Spaces and the Fabrication of Identity." *Sociology* 27 (1993): 393–403.

Bashford, Alison. Imperial Hygiene: A Critical History of Colonial-

ism, Nationalism, and Public Health. New York: Palgrave Macmillan, 2003.

- Hamarneh, Sami Khalaf. *Health Sciences in Early Islam: Collected Papers.* San Antonio, Tex.: Zahra, 1983.
- Mikkeli, Heikki. *Hygiene in the Early Modern Medical Tradition.* Helsinki: Finnish Academy of Science and Letters, 1999.
- Proctor, Robert. Racial Hygiene: Medicine under the Nazis. Cambridge, Mass.: Harvard University Press, 1988.
- Tomes, Nancy. *The Gospel of Germs: Men, Women, and the Microbe in American Life.* Cambridge, Mass.: Harvard University Press, 1998.
- Vigarello, Georges. Concepts of Cleanliness: Changing Attitudes in France since the Middle Ages. Cambridge, U.K.: Cambridge University Press, 1988.
- Wear, Andrew. "History of Personal Hygiene." In *The Companion Encyclopedia of the History of Medicine*, edited by William F. Bynum and Roy Porter. Vol. 2. London and New York: Routledge, 1993.
- Yamamoto Shun Ichi. "Introduction of the Western Concept and Practice of Hygiene to Japan during the Nineteenth Century." In *The History of Hygiene: Proceedings of the Twelfth International Symposium on the Comparative History of Medicine, East and West,* edited by Yosio Kawakita, Shizu Sakai, and Yasuo Otsuka. Susono-shi, Shizuoka, Japan: Ishiyabe EuroAmerica Inc., 1987.

Claire Hooker