A TOPOLOGY OF EVERYDAY CONSTELLATIONS

GEORGES TEYSSOT

THE MIT PRESS

CAMBRIDGE, MASSACHUSETTS

LONDON, ENGLAND

FISITE. A 765 T49 013

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This book was set in Filosofia and Trade Gothic by the MIT Press. Printed and bound in the United States of America.

Library of Congress Cataloging-in-Publication Data

Teyssot, Georges, 1946-

A topology of everyday constellations / Georges Teyssot.

pages cm - (Writing architecture)

Includes bibliographical references and index.

ISBN 978-0-262-51832-1 (pbk.: alk. paper) 1. Space (Architecture) 2. Spatial behavior. I. Title.

NA2765.T49 2013 720.1—dc23

2012028541

10 9 8 7 6 5 4 3 2

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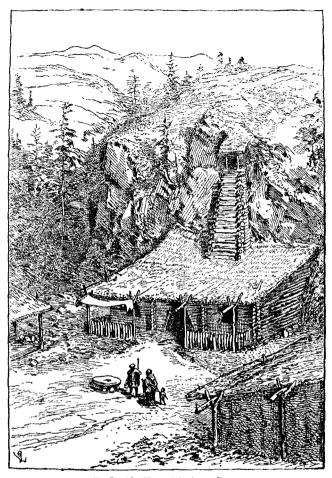
It is characteristic of architecture to press towards standard types [Typischen]. Typology [or typification; Typisierung], in its turn, spurns the abnormal and seeks the normal.

—Hermann Muthesius, "Die Werkbund-Arbeit der Zukunft" (The Future Work of the Werkbund), 1914¹

During the 1960s in Europe and the United States, the idea of a "typology"—as opposed to the neoclassical "type"—was applied to the plans of buildings, and the term morphology was used in relation to the forms of the city. Both terms were borrowed from the biological sciences. The new use of typology was problematic, since it was unrelated to the concept of type used in architecture during the eighteenth and nineteenth centuries. Architects, in fact, appeared to be unaware of this disciplinary difference, which has resulted in a terminological confusion between type and typology. While the revival of the notion of type through Antoine-Chrysostome Quatremère de Quincy corresponded with a return of architectural theory to Platonic ideals, the introduction of the term typology put into circulation ideas that originated in nineteenth-century ethnography and criminology.

In the second half of the nineteenth century, beginning with Gottfried Semper, architects began to look for a "scientific" foundation for the origin of architecture. The classical notion of archetype (developed, for instance, by Quatremère de Quincy) referred to original ur-forms such as the Greek temple or the Roman basilica. Semper extended those ur-forms to include the different activities of "primitive" man, such as weaving, pottery and ceramics, and carpentry. Semper was one of the most prominent architectural scholars to investigate the regional production of domestic architecture in Europe, connecting medieval buildings of northern and southern Germanic countries to a number of primitive, and vanished, archetypes. In his work Der Stil (1860-1863), Semper developed an interest in framework construction (Fachwerk)--half-timbered edifices that combine Gezimmer (structural carpentry) and Gemäuer (masonry, either stone or brick), which he illustrated with the example of a mill at Effretikon, near Zurich.3 This inquiry into "primitive" architecture was pursued further in Eugène-Emmanuel Viollet-le-Duc's The Habitations of Man in all Ages (1875), in which the author maintained that the first houses were those of the "Aryas" (by which he meant the Aryans), who built walls and roofs using logs and then stones.4 From the second half of the eighteenth century, travelers like the Frenchman Abraham-Hyacinthe Anguetil-Duperron (1731–1805) and the English poet and jurist William Jones were able to trace the affinities between Parsee and Sanskrit-the focus of their studies—and Greek and Latin.5

This work would slowly lead to the creation of a new genealogy of the European nations, allowing, for instance, an historian like Henri Martin (1810-1883) to think of "the great Indo-European family . . . of which Ariya, that holy land of the earliest ages, appeared to have been the cradle."6 It was in France, through the work of the paleontologist Baron Georges Cuvier (1769-1832) and, later, the historian Jules Michelet (1798-1874), that the difference between the Semitic world and the Indo-Germanic world was cast in terms of struggle. In Germany, one of the most influential promoters of the "Indo-German," or Aryan, myth was Jacob Grimm (1785-1863), who included in his classic History



The Primitive House of the Arya. -Fig. 3.

2.1
The primitive log house of the Aryas; in Eugène-Emmanuel Viollet-le-Duc, *The Habitations of Man in All Ages* [Histoire de l'habitation humaine, 1875], trans. Benjamin Bucknall (Boston: James R. Osgood and Co., 1876). Private collection of the author.

of the German Language (1848) a chapter titled "Immigration." which gave an account of the successive invaders of Europe from the East.8 This opposition, presented as a scientific thesis, was confirmed by the writings of other "Indomaniacs" like Ernest Renan (1823-1892), the official ideologist of France's Third Republic.9 This dangerous mixture of history, linguistics, and archaeology would build, via Herbert Spencer's reading of Charles Darwin, the long-lasting myth of the Aryan archetype.

New Archetypes

In his Histoire d'un dessinateur (Story of a Draftsman) (1879). Viollet-le-Duc dedicated two chapters to what he called "lectures on comparative anatomy," similar to those of Cuvier. 10 His organic concept of architecture in Dictionnaire raisonné de l'architecture very much resembled Cuvier's anatomic notion of the correlation of the organs, 11 in which an organ existed only in relation to the whole, and each form could be explained only through its place in the system. Cuvier believed that for classification purposes each animal could be represented by an ideal "type" that would include all of the characteristics distinguishing it from other types, and would not change from generation to generation. He classified all animals into four main branches (embranchements) according to the construction of their nervous systems. Less important, or subordinate, systems of characteristics were used to create classificatory subdivisions within the four branches. He called this method of classification the principle of the subordination of characters. 12 For Viollet-le-Duc, there was an initial formal principle in art, comparable to the one that the crystallographer René-Just Haüy had discovered in relation to minerals, and that Johann Wolfgang von Goethe had imagined in relation to an original or archetypal plant (Urpflanze). It is not known whether Viollet-le-Duc knew the work of Étienne Geoffroy Saint-Hilaire or his colleague Henri Dutrochet, who thought that vegetables and animals had the same cellular structure within their different tissues. 13 They believed cells are agglomerated through pressure, which confers on them a polygonal form, a form similar to that which Viollet-le-Duc thought made up Gothic architecture. In Histoire d'un dessinateur, Violletle-Duc published an image of compressed rubber pipes that are hexagonal in section.14 This is exactly the cellular law of compression discovered by Dutrochet. While architecture was seen as organic, it still remained to be discovered how dwellings were to be constructed. 15 In fact, Viollet-le-Duc's argument is based on both organic ideas and ethnographic notations.

For Viollet-le-Duc, the primitive type of architecture in the West was the *chalet*, the rural Alpine dwelling that Jean-Jacques Rousseau first described in Nouvelle Héloïse. 16 An obvious source for the suburban and resort villa, the Swiss chalet in France and Germany was the equivalent of the cottage in England. In his article "House" in Dictionnaire de l'architecture, Viollet-le-Duc stated that the Western dwelling was the expression or visual identity of a distinguished or peculiar family as well as a symbol of modern individualism, hence his term individual edifice. 17 He added: "Everyone desires their own house." Having established a specific equation between individuals and the house, he drew a peculiar genealogy of the chalet as the structure nearest, in Europe, to the primitive abode.18

It is possible to postulate the influence on Viollet-le-Duc of the self-proclaimed "Count" Joseph-Arthur Gobineau's Essay on the Inequality of Human Races (1853-1855), which offered a genealogy of Aryan migrations and a theory of the superiority of the German Nordic races.¹⁹ Viollet-le-Duc suggested that the nomads' wagons (traveling homes that at a certain point settled in a particular region or site) provided the archetype for the Swiss chalet, the Muscovite cabin, and the Norwegian peasant's hut. $^{20}\,\mathrm{He}$ extended this genealogy to include the rural houses of Normandy

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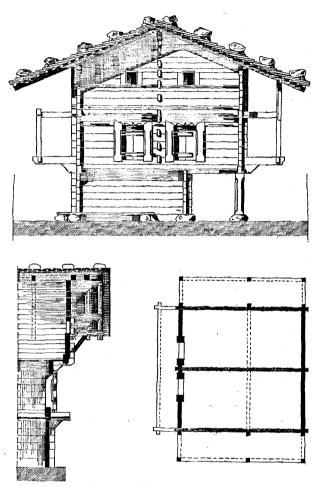


Fig. 245. - Chalet suisse (style ancien).

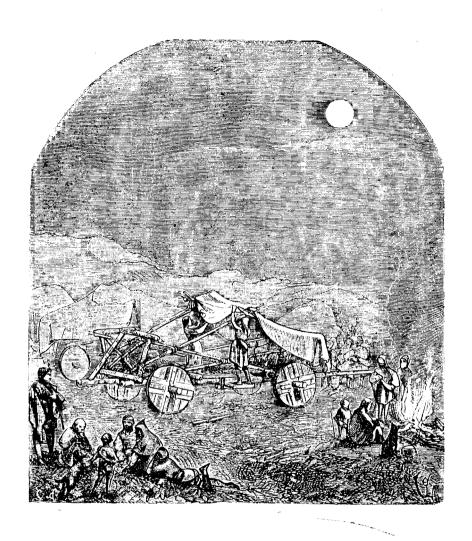
2.2

A "Swiss chalet (ancient style)"; in Julien Guadet, Éléments et théorie de l'architecture, 3rd ed. (Paris: Librairie de la Construction Moderne, 1909), volume 1. Courtesy Prof. Martin Bressani, McGill University.

and the Vosges, which were still built of wood during his lifetime. In addition to writing about these structures, he also built his own version of this nomadic hut, a chalet in Lausanne he called "La Vedette" (1874-1876). 21 The architectural myth of the chalet was also a political myth, probably one of the strongest in the nineteenth century, because it collapsed the diverse sources from biology, ethnography, and history into a single image. 22

Meanwhile, in other parts of Europe and in the United States, the idea of type was presented as a scientific truth, derived from scholarly research associated with archaeological excavation. German cultural history (Kulturgeschichte) would extend some of Semper's and Viollet-le-Duc's assumptions. For example, Friedrich von Hellwald, one of the developers of cultural history, reproduced many plates from Viollet-le-Duc's Habitations of Man in his Der Vorgeschichtliche Mensch: Ursprung und Entwicklung des Menschengeschlechtes: für Gebildete aller Stände (The Primitive Man: Origin and Development of Mankind, for the Cultivated Public of all Classes, 1879). 23 The idea of an ur-type for the German house was revealed by Franz Carl Müller-Lyer's History of Social Development (1912): "The house of wood was typical of the early Aryan culture. . . . [T]he Germans only built of wood, hence the connection of the word bauen = to build, and Baum = tree."24 In Germany, an original genealogy was "scientifically" traced, connecting culture with civilization—that is, the Aryan culture with the (German) wooden house. Thus, an archetype, wrapped in the authority of the academy, was born.

At the end of the 1880s in Paris, the Committee for Scientific and Historical Works in the Ministry of Education decided to conduct an inquiry into the condition of dwellings in France. A questionnaire was sent to local administrators in every region and province asking for a description of "typical houses" (maisons-types) in order to determine the living habits in different parts of the country: "In nearly all regions, there are, for the use



2.3
The Aryan wagon; in Eugène-Emmanuel Viollet-le-Duc, The Habitations of Man in All Ages. Private collection of the author.

of farmers (whether they are owners or not), hundreds, thousands of houses, more or less similar, and it is this typical house, this characteristic unity, which it is necessary to study in order to define its elements."25 For Alfred de Foville, who edited the findings, "each region showed a characteristic type, repeated a thousand times." The important question, however, was whether the milieu influenced the house, or the inhabitants influenced their dwellings. De Foville writes:

Man makes his house and in doing so, he must put into it something of himself. However, through the passage of time, the house makes man too, through the particular fold [pli] that it impresses on his daily life. Our house, for us, and above all for the laborers of the city and the fields, is therefore more than a mirror: it is also a mold, and our existence partly owes to it the form and the direction that it takes. 26

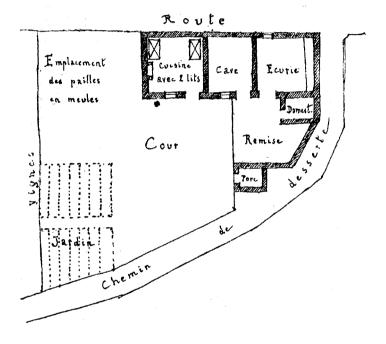
De Foville's hypothesis is one of reciprocal influences of milieu and inhabitant. In concluding his discussion of the contemporary housing situation, he remarks that "each household wanted its own 'home,' its separate lodgings," bearing witness to a unanimous desire for independence. Only the autonomy of a self-supporting household will guarantee its moral standards, its hygiene, and its social usefulness. "The more individual the house, the easier it is to modernize."27 De Foville begins with a factual inquiry and survey, builds a theory, and concludes with a normative dictate, following precisely the method of the engineer and sociologist Frédéric Le Play (1806-1882), who had written a history of family types and a theory of "place-workfolk." Years later the young Charles-Édouard Jeanneret became an avid reader of de Foville's inquiry, which he studied before World War I at the National Library in Paris.

Human Typology

At the beginning of the nineteenth century, physiologist Xavier Bichat articulated the hypothesis that all men can be divided among three different classes related to three different realms of human behavior: acting, thinking, and feeling. This resulted in three different psycho-physiological types, which led to a human typology that comprised the practical, the rational, and the emotive. Included in the first type were administrators, workers, and engineers; in the second, scientists; and in the third, moralizers, artists, and poets.²⁸ These divisions influenced Henri Saint-Simon (1760–1825), who derived from Bichat's types his own classifications: first, the artiste as creator; second, the savant as critic and scholar; and, third, the industriel as executive. Later in his life, Saint-Simon would slightly modify his classification. A new aristocracy of talent was proclaimed, led by men of sensibility who showed Platonic abilities, including artists, poets, religious leaders, and ethical teachers, which replaced the old orders of nobility and clergy. Individuals with motor skills formed the second, or industrial class. Last came the scientists, who revealed Aristotelian faculty and belonged to the cerebral type.²⁹ To fight the malady of the modern age—an age of specialization dominated by self-centered, egotistical, isolated individuals—one had to return to a principle of synthesis, transforming society into an organic whole. The means for this metamorphosis was a social physiology.³⁰

The sociology of Vilfredo Pareto (1848–1923) in Italy, of Max Weber (1864–1920) in Germany, and of Le Play and Émile Durkheim (1858–1917) in France were all answers from the European universities to the challenge raised by Marxism. Both Le Play and Durkheim shared the belief that the science of society, or "social science," should be a normative science. Le Play, a conservative Catholic, wanted to defend private family life from the encroachments of public bureaucracies, but Durkheim and



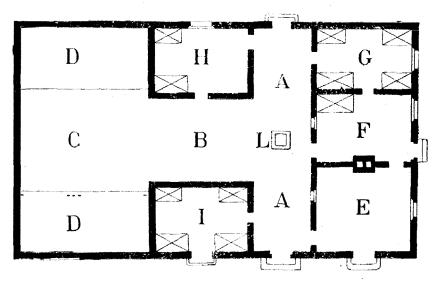


2.4 Elevation and plan of a traditional house in the Beaujolais region (France); in Alfred de Foville, Enquête sur les conditions de l'habitation en France. Les Maisons-types (Paris: E. Leroux, 1894–1899), 2 vols. Private collection of the author.

his followers, at home in the French academic system, expected families to cooperate with the State in order to promote a kind of organic solidarity. One of Le Play's followers was Henri de Tourville (1842-1903), a founder of the periodical La Science Sociale. He accepted the principle of direct observation and the use of classificatory devices, but criticized what he thought was the overly quantitative aspect of Le Play's monographic method, and discarded Le Play's three types of family: the patriarchal, the stem, and the unstable.³² De Tourville instead created a broader nomenclature, which became an instrument of social dissection. a kind of sieve, which permitted him to sift all elements of a social type and to classify them according to their qualities. This new method, which emphasized quality over quantity, was used by another follower of Le Play, Edmond Demolins (1852-1907), who studied the migratory routes of the nomads of the Asian steppes, and the manner in which migration had determined the development of new types of families and societies. In his two-volume Les grandes routes des peuples (1901-1903), Demolins rejected Le Play's "three ages of work" (the age of pastures, of machines, and of coal) and proposed that the history of the people of the steppes was the key to understanding the origin of Western civilization.³³ These nomads, first settling in the western part of Scandinavia, evolved into "particularized families," which then migrated to England, America, Australia, and New Zealand. "Particularized families"—that is, parents and their children-were autonomous, mobile, and capable of quick adaptation to the "modern" market economy and to a kind of individual housing type. This was in contrast to Mediterranean societies, which he claimed had retained the patriarchal family type: providing a home anchored in land and traditions for the extended family, with all its relatives, including employees, servants, cooks, craftsmen, cultivators. For Demolins, the correlation between nomadism and individualism created the norm, or type,

that modern society should practice. Thus, he provided a "scientific" basis for the sanitization and modernization of the family. Only a particularized family could be acted upon by reformers, doctors, hygienists, philanthropists, nurses, priests, and judges. Not by chance, Demolins wrote a book that was immediately translated into English as Anglo-Saxon Superiority: To What It Is Due (1899). 34 The new, ideal "type" of family and household was to be North American: unconstrained by tradition, individualistic and nonconformist, self-governing and self-sufficient, and entrepreneurial.

Meanwhile, another kind of architectural typology originated in France. The Municipal Council of Paris decided, in December 1893, to create a "sanitary file" (casier sanitaire) of houses, similar to the criminal record of an individual. The idea had been announced in 1849 by Sir John Simon (1816-1904), London's medical officer, and developed by John Snow (1813-1858), who drew maps of the city in 1855 showing the addresses of those who had died from cholera. 35 In Paris, the job was given to Paul Juillerat (1854-1935), chief of the Bureau of Sanitation, who organized the files by collating various kinds of data: administrative (house plans), technical (drainage plans), statistical (demographics), and scientific (quality of drinking water). 36 In what would become a new urban ecology, the French administration, between 1894 and 1904, compiled 80,000 files representing all of the residential buildings within the walls of Paris.³⁷ Juillerat joined the traditional descriptions of buildings with medical files, creating records of unquestionable facts.³⁸ His method of collecting data in many ways resembled the one created for the study of criminal types compiled by Italian criminologist Cesare Lombroso in Homo delinquens, published in Milan in 1876. It was also analogous to the idea of creating a photographic archive for use by the police as irrefutable evidence in identifying suspects.³⁹ In all of these examples, the issues at stake are related



A salle commune de travail (flett) B, aire C, grange (dehle); D, D, étables E, salle commune de la famille (dunzen) F, chambre des grands-parents (kahmer) G, chambre des enfants et des servantes H, chambre de l'héritier-associé (anerber) I, chambre des célibataires et des domestiques; L, foyer.

2.5

Frankish and Saxon dwelling types: plan of the settlement of Luttershof, at Lüneburg near Celle in northern Germany; in Edmond Demolins, *Comment la route crée le type social* (Paris: Firmin-Didot, 1901–1903), 2 vols. Private collection of the author.

to the establishment of an archive, be it of diseased houses or of individuals. Making an archive through such rational, scientific procedures permitted the elaboration of the typical, and thus authorized the application of the normal.

Photography had been employed for judiciary purposes since 1860, but photographic portraits of a single person could often appear completely different. This problem was explored by Alphonse Bertillon (1853-1914), the creator of anthropometrics between 1883 and 1889. Bertillon was chief of judicial identity for the Paris police and the brother of Jacques Bertillon (1851-1922), chief of the Office of Statistics in Paris. 40 According to the younger Bertillon, the photographic portrait could be used for identification purposes only if the photographer, in the process of archiving the image, named the principal traits of the person photographed. Those singularities had to be described in words. One would "recite" the details of a face, hence the importance of what Bertillon called "speaking photographic portraits," or "speaking likenesses" (portraits parlés), in which language did not define the ever-changing particularities of real beings, but only peculiar elements revealed by the photograph. The "speaking likeness" was a commentary not on a real face, but on its photographic representation. To overcome the fact that photography could not reproduce the multiple phases of an aging face, Bertillon developed a "signaletic anthropometric"—that is, the measurement of the characteristic and invariant traits of a living individual, devoid of the envelope of the flesh and reduced to its structural nakedness. Man was now a combination of lines and measurements that could be compiled in a catalogue or displayed on a chart.41

Bertillon's archive attempted to associate images with words. Traditionally, the device used to couple images with words was called an emblem (a pictorial image epitomizing a concept) or an allegory (a visual device expressing an idea). However, emblem and

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SPECIMEN OF DESCRIPTION CARD. FILLED OUT. (Face).

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"Specimen of description card" and "Measurement of right ear"; in Alphonse Bertillon, Signaletic Instructions Including the Theory and Practice of Anthropometrical Identification, trans. from the latest French edition (Chicago and New York: Werner Co., 1896). Western Americana Collection. Rare Books Division. Department of Rare Books and Special Collections. Princeton University Library.



FIGURE 16. RIGHT EAR.

FIRST MOVEMENT.—The operator gently touches the upper rim of the ear with the stationary branch, keeping it immovable by pressing the upper extremity firmly against the head with his left thumb, his fingers resting on the top of the subject's head.

Second Movement.—The shank of the compasses bring in a position parallel to the axis of the ear; the operator pushes forward the sliding branch until it touches very lightly the lowest point of the lobe. He then satisfies himself that the bell of the ear has not been compressed by the instrument, and reads the indication.

allegory could easily lead to universal condensation of meaning (such as justice, strength, danger), which was too general or abstract for police identification. What Bertillon attempted instead was a procedure connecting each individual to a general system of representation capable of recording the diversity of the type.

Morphological Types

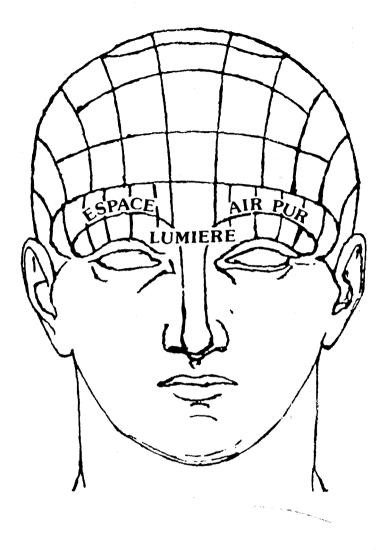
Bertillon's method was derived in part from Franz Joseph Gall's work on the physiology of the brain and craniology. Gall (1758-1828) affirmed that the moral qualities and intellectual faculties of man are innate and that these depend on cerebral morphology. By collecting craniums and casts, which he compared and classified, the German physicist and biologist invented a kind of psychophysiology. He no longer attempted to define a common denominator for all humans, as had been undertaken in the eighteenth century, but instead tried to connect the twentyseven faculties that he had defined to a system belonging to a particular individual.⁴² Gall's work was expanded by his pupil, Johann Caspar Spurzheim (1776–1832), who became fashionable for detecting the character of individuals by reading the bumps on one's cranium. 43 In coining the term phrenology, Spurzheim's ambition was to affirm the universal value of the physiological principle according to which form corresponds to function.44 Following in Spurzheim's footsteps, in the 1830s Orson Squire Fowler (1809-1887) opened a "Phrenological Cabinet" in New York and gave character readings by mail. 45 By way of the theory that function creates form, Fowler invented the concept of a "home for all," convincing more than one thousand Americans to build a house with an octagonal plan, the figure closest to the perfection of the circle.46

Another curious connection between architecture and science was the "Familistère," built between 1858 and 1879 by industrialist and philanthropist André Godin (1817–1888) on the

outskirts of Guise in northern France. 47 Godin was a follower of Charles Fourier (1772-1837), who had dreamed of and designed a "phalanstery," a vast edifice housing an industrial "phalanx" that would be the foundation of a model community. Set in a pastoral landscape, its units would have housed people living in harmony through cooperation, with each individual following his or her own passions. Fourier believed there were twelve common passions that resulted in 810 character types, thus the ideal phalanx would have exactly 1,620 people. Godin, an industrialist who produced cast-iron coal stoves and furnaces, had joined the École sociétaire formed by Victor Considérant (1808-1893), a leader among Fourier's followers and author of many publications, including the book Social Considerations on Architectonics (1834; 1848). 48 Godin rejected the notion of Fourier's phalanx, however, and attempted instead to adapt it by building a "family-stery," a kind of monastery for working families organized around three rectangular courtyards, each with a glazed ceiling. 49 Like many during this period, Godin thought that human needs resided in a precise location in the body's organs—the sphenoidal part of the cranium, for instance, housed the needs for open space, light, and pure air. Because the Familistère responded to the requisites of human life, it improved its inhabitants. Godin maintained: "Intelligence is proportionate to the way in which light illuminates the house."50 In a certain way, the Familistère was a phrenological construction.

The drive to compare craniums and brains was also pursued by the Turin-based scholar Cesare Lombroso (1835-1909), who analyzed the remains of Immanuel Kant, Alessandro Volta, Ugo Foscolo, and Carl Friedrich Gauss in his widely translated book Man of Genius (1864; English translation 1891).51 Using Gall's principle of organology, Lombroso defined, through statistical methods, the frequency of the criminal type within a population of convicted perpetrators and honest people. The "delinquent

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2.7
Localization of human needs in the cranium; in André Godin, *Solutions sociales* (Paris: A. le Chevalier, 1871). Courtesy of ETH-Bau Library, Zürich, Switzerland.

type" was defined by "stigmata degenerationis," the stigma of the degenerate. Within his system of criminal anthropology, each stigma of the criminal contributed to the makeup of the criminal type. The criminal is such by nature, and, like a savage in a civilized country, he is an anachronism; by carefully isolating these types, society might free itself of them.⁵²

The very notion of human type—the idea of a physiological mean in which the ideal would be deduced from the observation of the ordinary—was made possible by the Belgian sociologist Adolphe Quételet (1796-1874). In his Treatise on Man (1835), Quételet provided the statistical tools for the definition of a common type of human, proposing the concept of the "average man" as a "fictitious being." 53 Individual singularities were now to be observed only in light of the physiological mean or average. This was a reversal of the classical, Neoplatonic notion of type based on the ideal. The new anthropology defined singularity only as a quantitative type, defined by statistics and means. This prosaic type, which erased the individuality from any human being, concretized the exemplary figure of the "everyman." Thus, Quételet showed that the extreme varieties of individuals conformed, beyond their obvious appearances, to a general and invariable law. Two consequences arose from this philosophy: the body was now seen as an impersonal envelope, and every body was considered commensurate to a norm. This improved methods of identification, as it was now possible to measure identity by the degree of departure from the statistical norm.54

As seen in the discussion above, by selecting the principal traits of the face through words, Bertillon, a great admirer of Quételet, connected image with language. Beyond the encyclopedic purpose of Cesare Ripa's Iconology (the first illustrated edition, 1603); and long before Aby Warburg's atlas of images (Bilderatlas), Fritz Saxl's iconography, or Erwin Panofsky's essays in iconology, such an identity procedure was, literally, an

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"iconology." Rather than attempting to characterize a person's identity by broadly defining its whole picture, or by tracing a unique, particular icon, Bertillon's method is based on clues offered by minute details. Under his system, only a divergence from the mean can produce notation, since the mean, or the norm, is unutterable and ineffable. Identity is defined by the measurement of invariant traits of the living body. The living being is reduced to segments, which are themselves reduced to the essence of geometrical lines. This combination of lines, weaving the organic with the geometric, no longer imitates, but figures the invisible.

This geometricization, which was also explored in the chronophotographs of Étienne-Jules Marey, 55 gave theorists and artists the opportunity to analyze the various morphological types of the human being. In France, for instance, Paul Richer (1849–1933), in his Canons of Proportions of the Human Body (1893), provided a renewed basis for the study of human morphology, organized into types.⁵⁶ In Italy, the connoisseur of Italian Renaissance art Giovanni Morelli (1816–1891) devised a method for attributing paintings based on "signature motifs" (motivi sigla), the insignificant details such as the representation of hair, nails, or ears that permit one to recognize the hand of a specific artist.⁵⁷ With his medical background, Morelli was trained to recognize signs through symptomatology; thus his method is based on clues offered by trifling details, not by the identity of the whole composition, or by the subject matter. The identity of the artist is best expressed in details that, at first glance, escape attention. This geometricization would eventually lead to the rectangular division of the human body by Oskar Schlemmer (1888–1943), producing a "box man" (Schachtelmensch).58

It was Quételet's reduction of the body to a measurable type that permitted architects to think of the dwelling as a place that could be defined statistically, allowing the idea of normalization to be established. By reducing the analysis of the house to measurable data and a diagrammatic scheme, Juillerat's sanitation cases created morphological domestic types that could be used in a policy of intervention. Used to track the path and origin of disease, house by house, this sanitary file recorded the moment of an encounter between medicine (the germ, the bacterium, the bacillus) and sociology (the insalubrious dwelling), thereby defining a new housing type based not on a fictional narrative (the Aryans, for example), but on numbers. The aim of the files was to help eradicate "walls that kill." From then on, the authority of evidence established the "evidence" of authority, meaning that the authority had become conspicuous through the use of real data and facts available as proof. This redefined authority was no longer moral but scientific; as in a criminal trial, it presented legal evidence, instituting a new semiotics of the house.

Following the creation of the sanitary files, a proposal was made to hang a plaque on each house indicating its sanitary condition. Interestingly, the owners, a group highly represented in Parliament, opposed and defeated this idea because they considered the hygienic State equivalent to the collectivist State.⁵⁹ Unlike other northern European countries, which attacked disease (tuberculosis, for example), the French government preferred to organize a hunt against the diseased—the infected persons. It demolished entire neighborhoods, moving its inhabitants into overcrowded hospitals or dispersing them to the farthest edges of the cities. This process of exclusion based on disease could, of course, be easily extended to a "hygiene of race." 60

Organic Household

The idea to imbed and wed the history of a nation with the history of a people (Volk) can in part be credited to Wilhelm Heinrich Riehl (1823–1897) and his The Natural History of the German People, written largely between 1851 and 1855.61 The original title,

Natural History of the People as the Foundation of German Social Policy, showed that Riehl's sociology and anthropology of folklore (Volkskunde) was a conservative ideation of rural life, championing the virtues of neocorporatist social organization. In the first three volumes he presented German society as an organic totality, a natural work of art, and the connection between the physical and cultural topographies inscribed in the landforms. In the tradition of Johann Gottfried Herder (1744-1803) and Friedrich Schelling (1775-1803), Riehl exalted the Germanic folk ethosfound in villages, guilds, and social estates—as a bulwark against bureaucratic socialization and an antidote to revolutionary egalitarianism. Stressing the traditional German opposition between culture and civilization, Riehl writes: "I raise my voice on behalf of the rights of forests over fields, of mountains over plains, of a natural popular culture over a homogeneous civilization."62 His enemy was what he called the "estate of the estateless," which included factory workers, day laborers, bureaucrats, commercial travelers, commodity speculators, wholesale merchants, intellectuals, journalists, Jews, and gypsies. An academic authority in Germany, Riehl presented the family as both the model and the metaphor for society at large, yet the very idea of family, he thought, had been disintegrated by modern life in Germany, by cosmopolitanism in France, by the nomadism of gypsies in the rest of Europe, and by the absence of roots in North America, where family life had almost completely disappeared "in the stampede to earn money."63

To resist the degeneration of the family—for Riehl, the origin of the decadence of modern society—suggested the revival of a traditional setting, that of the "entire household" (das ganze Haus), which tended to disappear when individual members of a family divided into separate groups. The site of the household, both its architecture and its landscape, contained the extended family—including relatives, servants, and agricultural workers—

and imposed a "domestic discipline" on each of its members. "This expanded household," Riehl wrote, "extends the benefits of family life to entire groups who would otherwise be without family. . . . For the social stability of the nation as a whole, such a practice is a matter of the most profound significance."64 Claiming that the renewal of society depended on the renewal of the home, he dismissed modern residential architecture, which he described as "miniature versions of box-like urban tenements, designed to be as cheap and profitable as possible," and lamented the disappearance of large halls, huge family hearths, and ornamented galleries on each floor. Combining a medievalist resuscitation with an avant la lettre functionalist trend, Riehl claimed: "It is a fact of art history that the medieval house, castles, and churches were built from the inside out, that the exterior forms and proportions were freely arranged to suit the requirements of the interior, the practical uses of the building, whereas in our doctrinaire fashion we moderns routinely build from the outside in." As an example he referred to the models provided by "authentic" German farmhouses, and the so-called Swiss chalets, "which are constructed purely with a view to domestic utility, yet thanks to the instinctive aesthetic sensibilities of the common folk, are as lovely as folk song, as picturesque as peasant costume."

In his praise for the Swiss chalet, Riehl foreshadowed Semper and Viollet-le-Duc. All agreed (paradoxically, since Riehl despised the French attitude and manners) that the house of the future should be constructed "from the inside out." First, the family had to be reconstituted, so that it would build a house in its own image. "Once we have reestablished a solid domestic tradition," wrote Riehl, "a new and organic residential architecture will also emerge, and architects will be at a loss to explain precisely how it came about—for the style will have come to them, not the other way around." For Riehl, the organic household

had a name, grew like a plant, and was sung as a folkloric melody, while the modern house was changeable and temporary, mass-produced, and, even worse, rented. As such, it became a commodity, drawn into the maelstrom of urban capitalist society.

Riehl's work proved very influential in further studies of the household and its settlement (Siedlung). Inspired by Darwin's theory of evolution, the Austrian Friedrich von Hellwald (1842-1892) wrote Culturgeschichte in ihrer natürlichen Entwicklung bis zur Gegenwart (Cultural History in Its Natural Evolution, up to the Present, 1876-1877), a history of civilization from an evolutionary perspective that was considered authoritative in the Germanic countries.66 This work, which went through several revised editions and reprints, was dedicated to German evolutionary biologist Ernst Haeckel (1834-1919), a specialist in marine fauna and author of the bestseller Art Forms in Nature (1899-1904).67 In Culturgeschichte von Hellwald presented a curious collection of oddities, such as a Wagnerian, Germanic warrior of the Iron Age, which he connected with a sealed funerary tumulus of the Stone Age at Waldhusen, near Lübeck. 68 Subsequently, von Hellwald published scores of successful volumes imbued with the racial beliefs common in that period, including one on the history of human settlements in 1888.69 Riehl also influenced The Prehistoric Man, originally edited by Wilhelm Baer, but which von Hellwald reworked in an 1880 second edition that displayed peculiar imagery of "the Proto-German Family" (urgermanische Familie).70 During the second half of the nineteenth century, every well-known authority in the Germanic countries agreed on the so-called superiority of the Aryans. One of the most eminent supporters of the myth was Ludwig Büchner (1824-1899), a materialist philosopher who wrote Kraft und Stoff, Empirisch-naturphilosophische Studien (Force and Matter, 1855), 71 in which he defended the thesis against the religious notion of free arbiter, arguing that since man is part of nature, he is, as

such, not free, because he moves where his brain drives him. A convinced Darwinist, he expressed in an 1868 lecture a belief in the congenital incapacity of "primitives" to raise their minds to the level of abstract ideas. In his view, the lower classes—as well as women—could be compared to primitive peoples.⁷² Riehl's presence can also be seen in the four-volume opus by August Meitzen, Siedlung und Agrarwesen der Westgermanen und Ostgermanen, der Kelten, Römer, Finnen und Slaven (Settlement and the Essence of the Agrarian in West and East Germans, the Celts, the Romans, the Finns and the Slavs, 1895), which was a cause of great concern for contemporary French scholars because it extended the Germano-Frankish housing type to half of France, denying the historical existence of the Gallo-Roman model.⁷³ In this way, it would seem that scholars were already preparing for the next war. Recent studies have shown how Hermann Muthesius's work on housing related to such trends, and have situated some of his publications, such as the celebrated The English House (1904–1905),74 within the theoretical framework of German "cultural history," showing the intimate commonality of purpose with work such as Julius Langbehn's Rembrandt als Erzieher (Rembrandt as Educator, 1890), Paul Schultze-Naumburg's series of books titled Kulturarbeiten (Works of Culture, 1901-1917), or Paul Mebes's publication Um 1800 (Around 1800, 1908), an originator of the so-called "circa 1800" movement that advocated a return to Prussian neoclassicism, circa 1800.75 It is now possible to trace the genealogy, together with the mythology, of the "German house," which, starting from Meitzen's imperialistic affirmation and rewriting of history, as in his Das deutsche Haus (The German House, 1882), will lead to Schultze-Naumburg's theories on the German, organic type of houses, which will in turn lay the foundation for National Socialist ideas about "type," such as those exposed in Paul Schmitthener's multiple publications on the German Dwelling House. Together these

investigations shed light on the debate about typology, or, more precisely, about "typification" (*Typisierung*), at the Deutscher Werkbund, founded by Muthesius, for instance—as well as its somewhat embarrassing connections with nationalistic trends and tendencies.

Hygienics and Eugenics

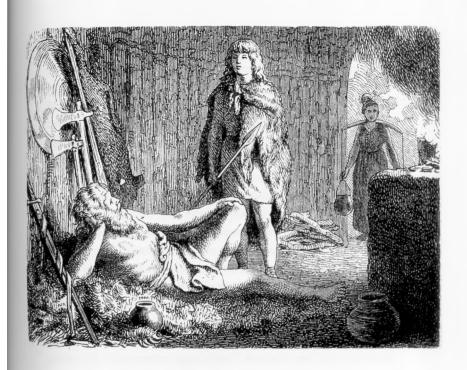
Superficially, one could argue that proposals for housing reform in France at the end of the nineteenth century were less nostalgic, or reactionary, than those in Germany, but such an assertion would not be accurate. The major influence at that time was the Arts and Crafts movement of William Morris (1834–1896), whose theories were disseminated in France by Dr. Henri Cazalis (1840–1909), a poet who belonged to the Parnassian group. Cazalis's talent was not limited to literature, but extended to philosophy, history, the fine arts, and music. He was also a physician involved in psychiatry and eugenics.

Writing under the name Jean Lahor,77 Cazalis published a booklet, W. Morris et le mouvement nouveau de l'art décoratif (William Morris and the New Movement in Decorative Art, 1897), in which he described ugliness and beauty as somewhat similar to "atmosphere," or the environment, possibly subject to contagion. 78 He referred to Gabriel de Tarde's book Les Lois de l'imitation (1890), a sociological analysis of repetition, adaptation, and imitation by the lower classes of the traditions, habits, and fashions of the dominant classes, which provided a vivid history of the arts as well as of luxury, courtesy, and civility. De Tarde argued that the eighteenth-century salon "would admit only equals, or equalized those it would admit," demonstrating that such instruments of civilization were also instruments of social leveling, producing democratic societies and a type of person governed by public opinion.⁷⁹ Picking up on de Tarde's idea, Cazalis believed that bad taste could be communicated, like



2.8 The "Sealed Site of a Stone Age Funerary Barrow (or, *Tumulus*) near Waldhusen (Lübeck, Germany)"; in Friedrich von Hellwald, *Kulturgeschichte in ihrer natürlichen Entwicklung bis zur Gegenwart*, 4th ed. (Leipzig: Friesenhahn, 1896), between pp. 48 and 49. Courtesy of Princeton University Library.





2.9

A "Germanic Warrior of the Iron Age"; in Friedrich von Hellwald, *Kulturgeschichte in ihrer natürlichen Entwicklung bis zur Gegenwart*, 4th ed. (Leipzig: Friesenhahn, 1896), between pp. 200 and 201. Courtesy of Princeton University Library.

2.10

The Proto-German family; in Wilhelm Baer, *Der Vorgeschichtliche Mensch: Ursprung und Entwicklung Menschengeschlechtes*, 2nd renewed edition by Friedrich von Hellwald (Leipzig: O. Spamer, [1879]), 67. Courtesy of Princeton University Library.

good taste, through the powerful social instrument of imitation. For art to remain elevated and pure, it was necessary that the mediocre or vile contagion "from below" be barred from spreading to the highest sphere.⁸⁰

Both the Jugendstil and Art Nouveau movements developed parallels between aesthetics and hygiene. The curves of the "natural" body were brought into the building, while the building curved to receive the imprint of bodies. At the 1900 Parisian Exposition, Cazalis praised the restraint of the French iron architecture of Paul Sédille, admired the work of Belgian architect Gustave Serrurier-Bovy, liked the "very modern" art of the Finn Eliel Saarinen, and commended Japanese craftwork, English sideboards and bathrooms, and American Tiffany lamps.81 The doctor was particularly concerned about hygiene: "For the first time since antiquity, this new art gives to hygiene the place which it rightly deserves in the design and organization of the building or the house."82 He went on to mention an exhibition on the hygiene of hotels and inns, praising the simplicity and cleanliness of the northern European countries and observing that aesthetics was obliged to occupy itself with this very humble virtue. Finally, quoting the experiments of the Lever Corporation at Port Sunlight, near Liverpool, and the House of Cure built by the Krupp factory in Bensdorf, which were exhibited at the Parc de Vincennes in Paris, Cazalis revealed his social and architectural program: "We want art to be distributed to everybody, like air and light, and we want it to be everywhere, in the house of the artisan, as in our own, from school to college, from those university barracks usually so ugly and always lugubrious, to hospitals, railway stations, and everywhere where human crowds, and especially popular ones, assemble."83 Nothing in Cazalis's outline appeared to be written by a racist or extreme reactionary. This is because there was no contradiction between the racist agenda and the socialist program in Europe at that time. In both cases, the aim was unique: to target the human body through hygienics and eugenics.

The Aryan Dwelling

The reference to the "human crowds" in Cazalis's 1901 book L'art nouveau . . . au point de vue social (Art Nouveau . . . from the Social Point of View) was probably intended as an allusion to the rightwing theories of the physiologist Gustave Le Bon (1841-1931), who published a volume titled Les civilisations de l'Inde (The Civilizations of India) in 1887, and whose book The Crowd: A Study of the Popular Mind (1895) referenced Cazalis by name.84 For Le Bon, the crowd was the receptacle of the unconscious and opposed to the conscious elite. An inferior part of contemporary society, it had to be controlled by medical strategies. Le Bon warned that the crowd, with its "herd mentality," could bring about the psychological decline of races because its irrationality was the cause of mental contagion and left the mind open to manipulation by leaders. In this regard, it should be noted that eighteen editions of The Crowd had been published by 1913, and it was carefully read by, among others, Georges Sorel (1847-1922), a theoretician of the political use of violence, and Benito Mussolini (1883-1945). "A crowd is a serial flock that is incapable of ever doing without the master," wrote Le Bon. 85 Men collected in a crowd are subject to "rapidly contagious" emotions, which explains not only the suddenness of panic, but also illnesses such as agoraphobia. An affirmation "sufficiently repeated," he thought, could lead, as in advertising and political campaigns, to a convincing truth by the "powerful mechanism of contagion"; the same powerful mechanism could enforce "not only certain opinions, but certain modes of feeling as well."86

Le Bon was likely influenced by the psychophysiologist Jules Soury (1842-1915), an ultranationalist who used evolutionary biology to justify racial, as well as social, inequalities. Both men

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wanted to found an official society similar to Francis Galton's Eugenics Society, established in London in 1867. They believed in the new "science" of anthroposociology, which, through craniometry, could determine racial typologies. From 1875 to 1885, Rudolph Virchow (1821–1902), a prominent German liberal and physiologist, by arguing that Darwinism was more useful to socialists than to conservatives, launched a colossal inquiry, measuring the cephalic index of fifteen million schoolchildren in order to establish statistics of cranium morphology in all of Germany. 88

In a similar exercise in 1891, the social anthropologist Georges Vacher de Lapouge (1854–1936), aided by the poet Paul Valéry (1871–1945), measured six hundred craniums extracted from an old cemetery. Vacher de Lapouge, author of L'Aryen. Son rôle social (The Aryan: His Social Role, 1899), believed that the "unfit" must be prevented from reproducing by a process of medical selection. ⁸⁹ A follower of Galton and Haeckel, he would develop a racial classification between "brachycephalics" (round-headed men with brown hair and eyes) and "dolichocephalics" (men with long, narrow skulls, blond hair, and blue eyes, descendants of the original "Aryans"). The dolichocephalics corresponded to the Homo Europaeus who emigrated to northern Germany, Great Britain, and the United States, while the brachycephalics engendered the Homo Alpinus who came from Asia Minor and the Balkans to Switzerland and France.

A follower of Herbert Spencer (1820–1903), himself convinced of the biological determination of human destiny, Le Bon believed that the struggle for life would cause inferior people to die out and the best-adapted human races to survive. This racist theory was largely pessimistic, since amelioration of the physical environment did not improve the human race. Like Le Bon, Cazalis also supported Social Darwinism: "Let's educate the majority, which is made up of the common people . . . to avoid

destroying our own majority; because as a Darwinian, I repeat that innumerable masses, masters of today's life . . . are always a cause of mediocrity."91 Cazalis advocated the institution of an authoritarian and elitist government that would erase the historical catastrophe of the French Revolution and rebuild a new democracy: "Hygiene, a branch of aesthetics-because health and cleanliness are necessarily the essential conditions of beautyhygiene already attempts to give to people's habitations what has for too long been lacking, pure air and the sun that kills pathogenic germs, and light, which is as much necessary for thought and the soul as it is for the body."92 Cazalis signed his given name to his volume on eugenics, La Science et le mariage (Science and Marriage, 1900), dedicating it to nationalist author Maurice Barrès (1862-1923), who wrote a best-selling novel, Les déracinés (The Uprooted, 1897), about the eradication of traditions and the unhappy life of uprooted people. 93 While William Morris thought that art should be made by the people, Cazalis thought it had to be made for the people, as the title of his 1902 book, L'art pour le peuple (Art for the People), demonstrated. 94 His hygienic democracy was part of a general eugenics: the doctor wrote books on "scientific" marriage, prenuptial inspection, hereditary diseases, and the protection of health and race.95 In this period, ethnic cleansing and aesthetic hygiene went side by side.

All of Cazalis's proposals converged in one of his last books, which described "low-cost dwellings and low-cost art" (1903) and was dedicated to Georges Picot, president of the Housing Society of France. 96 Cazalis reminded French authorities that de Foville had published a wondrous study of the types of houses, and maintained: "We must prepare immediately for the workers of the most industrialized parts of the country types of individual houses, such as cottages or chalets, which would be built in the regional style, blending harmoniously with the beauty and appeal of those rural parts."97 Much more practical than his

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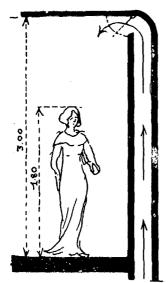


FIGURE 9.

être effectué ce chauffage.

Veici une pièce d'un cube déter- A miné et à température donnée dont il s'agit d'élever ou d'abaisser la température. Il scrait désirable que l'é- c lévation de température en hiver, pût être modifiée en abaissement de température pen dant les fortes chalcurs de l'été, ce double problè-

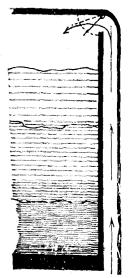


FIGURE 10.

2.11 Room ventilation and accumulation of polluted air; in Henry Provensal, L'habitation salubre et à bon marché (Paris: C. Schmid, 1908). Courtesy of Princeton University Library.

previous writings, the book included cooperative single dwellings in Puteaux (named "La Famille") and workers' houses near Beauvais (by Léon Benouville, who had also designed furniture for workers' homes in a restrained Art Nouveau style).98 The doctor concluded with his Darwinian credo that inequality between men is a universal, natural, and eternal law. Through the elimination of the weakest, the elite in France would win out: "Like true soldiers, they must think only of victory."99 For humanity the battle was not only political but aesthetic. This aestheticization of politics continued the fight of the Aryans, who inspired

a religion, or a future philosophy that would help to make life more enticing and exciting for many spirits who are too doomed, too silent . . . while revealing all there is of mystery, all there is of prodigy, all there is that is human and divine, in the lesser animal and in the lesser plant, being able to recognize and to affirm according to the Aryan dogma the kinship that unites all beings. 100

Another theoretician of Kulturgeschichte-Franz Carl Müller-Lyer, whose History of Social Development (1912) was read by many in Germany in the 1920s (including Walter Gropius)—put it this way:

Just as in organic nature a progressive movement exists from the monad to the mammal, so is it in culture. And in both developments the movement goes from small to great, from simple to complex, from homogeneous to heterogeneous, and in these processes of increase, combination and differentiation . . . lies progress—and it lies in nothing else. That is the objective formula of the idea of cultural progress. The happiness of the individual has no place therein. For Nature offers up the individual everywhere with cruel indifference on the altar of—the Type. 101

Given here as a kind of social program is the Darwinian elimination of the individual on the "altar of the type," a type revealed most clearly in the conscious reproduction of the beauty of organic forms and the renewal of the vitality of an ancient callisthenic culture.

The Altar of the Type

Comments on the suffocating nature of curves in Art Nouveau design were very common, and were echoed by reformers who saw the same constrictions in women's clothing. Many feminist congresses denounced the corset as an instrument of torture, starting, for example, with Catharine E. Beecher's Letters to the People on Health and Happiness (1855). 102 Reformers like Beecher sought to replace the corset with an entirely different clothing type. Fin-de-siècle clothing reform (Reformkleid) was also promoted by Paul Schultze-Naumburg, a painter, architect, and art critic who regularly contributed to the illustrated magazine Der Kunstwart, directed by his friend Ferdinand Avenarius. Around 1900, Peter Behrens offered new models of dresses, while Henry van de Velde organized an exhibition on "The Artistic Improvement of Women's Clothing" that united aesthetic and hygienic concerns.¹⁰³ Schultze-Naumburg himself organized a similar exhibition dedicated to a new kind of female garment, which he published in his famous The Culture of the Feminine Body as the Foundation for Women's Dress (1901). 104 Schultze-Naumburg, who based his model of natural clothing on Greek and Gothic sources, was also a promoter of what was beginning to be called the culture of nudism (Nacktkultur). Championing the body in its natural state, he prefigured the fashion in Germany for the practice of nude swimming and sunbathing, which was developed not only as hygienic reform but also as a reaction against

moral prudishness. The reform of clothing led to a reform of the body, which became thought of as a natural work of art. Schultze-Naumburg also published books promoting art in the home, 105 and the redesign of modern woman was part of the redefinition of the aesthetics of everyday life and the domestic, based on the notion of organic unity between art and life. The aestheticization and simplification of clothes and modern life would lead to a renewed, reformed environment. 106

Architects were most likely unaware of all these connections when they began to use the term typology in the twentieth century. While this did not diminish in any way the significance of their thinking, it is important to note that, as a consequence, architects did not clearly discuss the profound differences between the classical type, an ur-genesis that repeated the antique form, and modern morphogenesis, which established the abolition of mimesis, the institution of the norm, the repetition of the same, and the prescription of the new. The classical and neoclassical notions of type were based on the embodiment of ideals that referred, through nature and time, to principles and rules that conferred authority to the building, while the modern typology led to disembodiment. The new abstract typology was formed by means of calculation, determined by the laws of evolution, and grafted onto the skin by thousands of inscriptions. Although type no longer informed architecture (except as a revival), the idea of typology reorganized the environment in a thoroughly normative way. In a period such as ours, when architects have often denounced any typological approach while looking for a topological definition of the ground of architecture (which should also be analyzed for its methodological fictions), the analysis of how typology has structured social sciences and the arts in the last two centuries, and how normative and prescriptive it was and still is, may help us to better understand the notion of the



Abb. 73

2.12

Young woman's body before its disfiguration by a corset; in Paul Schultze-Naumburg, *Die Kultur des weiblichen Körpers als Grundlage der Frauenkleidung* (Leipzig: Eugen Diederichs, 1901), 71, fig. 73. Courtesy of ETH-Bau Library.

2.13

Reformed female garment; in Paul Schultze-Naumburg, *Die Kultur des weiblichen Körpers als Grundlage der Frauenkleidung*, 116, figs. 114–115. Courtesy of ETH-Bau Library.





Abb. 114

Abb. 115



2.14
Illustration by Peter Behrens for Henry van de Velde's article on contemporary female dress; in *Deutsche Kunst und Dekoration* 5, no. 10 (Darmstadt, July 1902), 369. Courtesy of ETH-Bau Library.



2.15
Illustration by Henry van de Velde for his article on contemporary female dress; in *Deutsche Kunst und Dekoration* 5, no. 10 (Darmstadt, July 1902), 379. Courtesy of ETH-Bau Library.

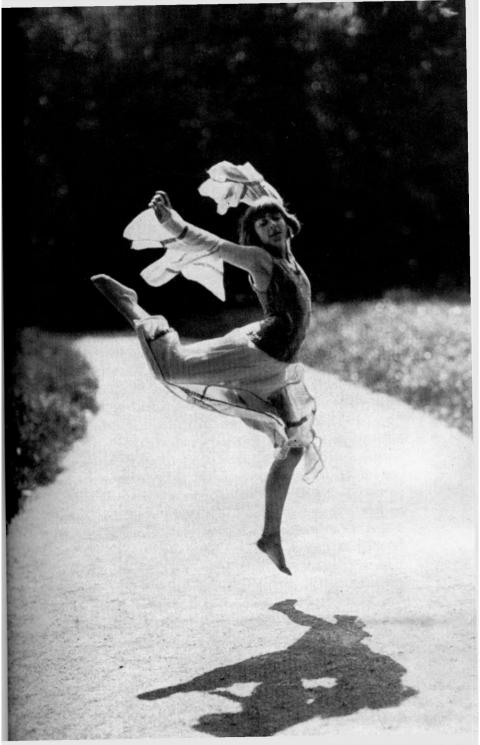


2.16

Nacktkultur dance: solo female dancer from the Ida Herion Dance School in Stuttgart, operating since 1912. Photo: Arthur Ohler; in Max Adolphi and Arno Kettmann, Tanzkunst und Kunsttanz: aus der Tanzgruppe Herion, Stuttgart (Munich: Julius Püttmann, 1928), n.p. Courtesy of ETH-Bau Library.

2.17

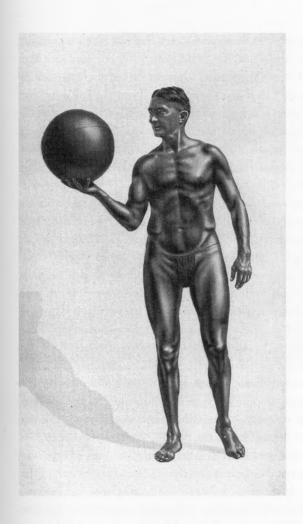
Ecstatic solo female dancer, dressed in veil-like skirt in an outdoor setting. Photo: Arthur Ohler; in Max Adolphi and Arno Kettmann, *Tanzkunst und Kunsttanz: aus der Tanzgruppe Herion, Stuttgart* (Munich: Julius Püttmann, 1928), n.p. Courtesy of ETH-Bau Library.



body as type—that is, the body as an entity to redesign, which makes it a kind of prosthesis.

For example, a large-scale solidarity of the new Human "type" was to be found in new *Siedlungen* and in the sporting activities of the Weimar period in Germany. According to Count Harry Kessler, an enthusiastic visitor to Ernst May's "New Frankfurt," the architecture of Siedlung Römerstadt could express the new ideals of the German youth: the nude sunbathers "are indicative of only part of a new vitality, a fresh outlook on life, which since the war has successfully come to the fore. People want really to live in the sense of enjoying light, the sun, happiness, and the health of their bodies." And, he adds, the *Siedlungen* "are another expression of this new feeling for life . . . the new domestic way of living." The architecture "is simply an expression of the same new vitality which impels youngsters to practice sport and nudity. . . . This German architecture cannot be understood unless it is visualized as part of an entirely new *Weltanschauung*." 107

Hans Surén's book Der Mensch und die Sonne (Man and the Sun. 1924) was so popular that it ran through sixty-eight reprints (250,000 copies) in its first year of publication. It contained photographs of naked women wading between reeds, muscled masculine bodies throwing a medicine ball, a nude skier practicing the Christiania turn on deserted slopes, group choreography articulating machine-like limbs, javelin throwers, mud bathing melees, archery, and more. 108 "Licht-, Luft- und Sonnenbad" ("light, air and sunbath") was the slogan of another successful Surén book, German Gymnastics (1925). 109 After the Nazis took power, Surén, a high-ranking Army officer, quickly adapted to the new situation, publishing a second edition titled Man and Sun: The Arian Olympic Spirit (1936). 110 The whole modern suburb seemed ordered by rhythmic gymnastics and geometric mass dancing. The erotic Nacktkultur of the Weimar period appears at its best in the productions of the dance school of Ida



2.18
Man with medicine ball. Photo: P. Isenfels; in Hans Surén, Deutsche Gymnastik: Vorbereitende Uebungen für den Sport—Frottierübungen, Atemgymnastik, Massage—Körperpflege—Verhalten im Licht-, Luftund Sonnenbad (Oldenburg: Stalling, 1925), 240. Courtesy of ETH-Bau Library.

Herion, operating in Stuttgart since 1912, and made famous by the book *Tanzkunst und Kunsttanz* (1927), by her students Max Adolphi and Arno Kettmann. Herion linked nudism and ecstatic dance, not to recover a primordial state of freedom, but to acquire a kind of wilderness, a remoteness from the conventional theater stage. In her intensely eroticized images, the body itself creates beauty, elegantly poised and detached from the world. The slogan "Licht, Luft und Sonnenschein" ("light, air and sunshine") celebrated the beginning of an "athletic democracy," as Thomas Mann put it. This was the age of the geometrization of crowds, of "ornamentation of the masses," as Siegfried Kracauer announced, 114 soon to become, as Ernst Jünger prophesied, the era of "Total Mobilization."

Planning and housing were part of the same genealogy, a general policy of building the equipment of the State that allowed individuals to be integrated into the collective channels of sanitary policy, social hygiene, and normative sociology. These disciplines shaped a multiplicity of fluxes channeling the movements of the population and guiding their mutations. The physiology of poverty became eugenics, the science of improving the biological type. Craniometry, and then biometry, the elaboration of a bio-typology, became the knowledge base for the manipulation of the matters of the Social, 116 and society opened its arms to the winners of natural selection. The idea of type was, of course, something German architects found useful during the Nazi period. At the time, Schultze-Naumburg, who had become a National Socialist dignitary, published research on the German Typen des Wohnhaüser (Types of Dwelling Houses). 117 In 1929, Paul Schmitthener began assembling a catalogue of the German "framework houses," a return to Semper's Fachwerk. 118 For Schmitthener, the traditional framework house was a true urhouse from which one could derive the universal German type of dwelling, thus developing a typology of "built form" (Gebaute



2.19

Adaptation of Weimar Republic nudism to the Nazi regime. Photo: G. Riebicke; in Hans Surén, *Mensch und Sonne: Arisch-olympischer Geist* (Berlin: Scherl, 1936), 85. Courtesy of ETH-Bau Library.

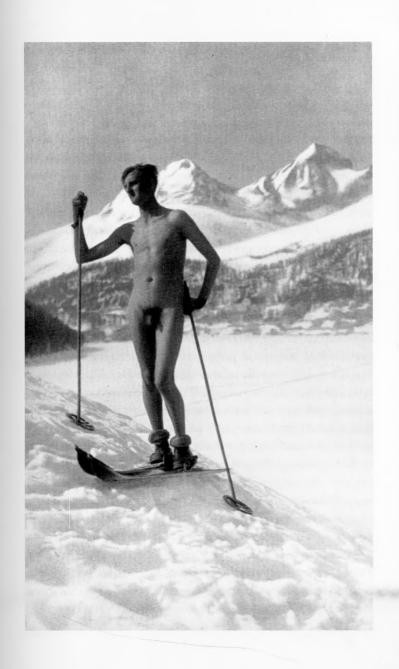


2.20

Sea wading in an "Aryan-Olympic spirit"; in Hans Surén, *Mensch und Sonne: Arisch-olympischer Geist* (Berlin: Scherl, 1936), 137. Courtesy of ETH-Bau Library.

2.21

Skier practicing nudism. Photo: G. Riebicke; in Hans Surén, *Mensch und Sonne: Arisch-olympischer Geist* (Berlin: Scherl, 1936), 223. Courtesy of ETH-Bau Library.



Form, 1943-1949). 119 The era of "total mobilization" led to the era of the worker, who was understood not as an individual, but as a "type," as explained in Jünger's The Worker: Domination and Form (1932). 120 A warrior dandy, Jünger was a decorated World War I officer whose poses recalled attitudes also embraced by writers and artists such as Gabriele D'Annunzio, the futurist Filippo Tommaso Marinetti, or Colonel T. E. Lawrence (of Arabia). In the postwar period, with the bestselling book Storm of Steel (1920), Jünger became a successful, though highly controversial, writer, because, as a right-wing nationalist (but never a Nazi), he was part of the conservative revolutionary movement. 121 For him, each war front corresponded to a work front, thus soldiers and workers became equivalent, which generated a new entity, the "worker-warrior." Whether a man in a howitzer crew or a woman joining the industrial workforce, Jünger's universal type tended to become the worker, der Arbeiter. In a review of his collected essays Krieg und Krieger (War and Warriors, 1930), Walter Benjamin asserted that Jünger was promoting a "mysticism of war," 122 and remarked, with some irony, that "in the face of this 'landscape of total mobilization,' the German feeling for nature has had an undreamed-of upsurge."123 Elsewhere he noted: "With D'Annunzio, decadence made its entry into political life, with Marinetti, Futurism."124 Therefore, Benjamin warned, "The logical outcome of fascism is an aestheticizing of political life."125 As in a chemical reaction, the nineteenth-century crowd of Le Bon disappeared, replaced by working masses able to organize a factory and knowledgeable about the points of control and the new networks. The war, global and civil, created a new uniformity, a suprapartisan and extranational being, whom Jünger called a "type" (Typus). 126 The Typus, reconciling the organic and the instrumental, will signify the completion of a Darwinian transformation within a new, inherently prosthetic, humanity.

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- 109. Ibid., 531.
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- 111. Ibid., 532.
- 112. Benjamin, "Oskar Walzel, Das Wort kunstwerk," in Gesammelte Schriften, 3:51; quoted in Jean-Michel Palmier, Walter Benjamin: le chiffonnier, l'ange et le petit bossu (Paris: Klincksieck, 2006), 446. My translation.
- 113. Benjamin, The Arcades Project, 463.
- 114. Benjamin, "On the Concept of History" (1940), in Benjamin, Selected Writings, vol. 4, 1938–1940, trans. Harry Zohn, ed. Howard Eiland and Michael W. Jennings (Cambridge, MA: Belknap Press of Harvard University Press, 2003), 396.
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- 116. Ibid.
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- 121. Deleuze, The Fold, 120.
- 122. Beckett, The Unnamable, 352.

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- 9. Poliakov, The Arvan Myth, 206-207.
- 10. Eugène-Emmanuel Viollet-le-Duc, Histoire d'un dessinateur, comment on apprend à dessiner (Paris: Bibliothèque d'éducation et de récréation, 1879).
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- 15. Martin Bressani, "Notes on Viollet-le-Duc's Philosophy of History: Dialectics and Technology," Journal of the Society of Architectural History 48, no. 4 (December 1989)::327-350; Bressani, "Opposition et équilibre: le rationalisme organique de Viollet-le-Duc, "Revue de l'Art 112 (1996): 28-37.
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