The Vernacular, Modernism, and Le Corbusier

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From the 1930s to the 1960s, modernist architects showed a clear concern with the vernacular, as witness the work of Alvar Aalto in Finland, Franco Albini in Italy, and Aldo van Eyck in Holland, or the publication of Bernard Rudofsky's *Architecture without Architects* (1964) by the Museum of Modern Art in New York. Le Corbusier's connections to the vernacular cover an even longer span: he received his early education within a regionalist movement, used vernacular rubble walls in his Villa Mandrot in the 1930s and brick vaults in the Jaoul houses in the 1950s, and showed a continued interest throughout his career.

It is thus natural to ask what role the vernacular played in the modernist architecture of the 1920s, although ships rather than folklore come to mind when looking at buildings like the Villa Savoye (Figures 1, 2), and although the style of this architecture, variously referred to by the terms "machine aesthetic" and "International Style," has been contrasted with traditional vernacular by friends and foes alike. In fact, Le Corbusier's introduction of rubble walls in his Villa Mandrot at Le Pradet in 1929–1932 is considered indicative of a major turning point in his career.[1]

In this article I will limit the question to Le Corbusier and focus on two paradigmatic moments: a trip through the Balkans in 1911 which was probably the central experience of the vernacular in his youth, and his design of that modernist icon, the Villa Savoye at Poissy in 1928.[2] The emphasis will be on the process by which Le Corbusier constructed a modernist concept of architecture and on the question: What role did the vernacular play in that process? The term "vernacular" will be used in its most generic sense, embracing ethnic, folk, regionalist, primitive, etc.

The Balkan trip, undertaken when he was twenty-three years old, was part of a longer tour from Vienna to Istanbul, Athens, and Rome—a tour which Le Corbusier called his *Voyage d'Orient*.[3] In the first part of the tour, particularly devoted to vernacular things, Le Corbusier took a boat down the Danube from Vienna to Budapest and Belgrade, then traveled by land through Serbia to Bucharest and finally, over the mountains, to the ancient Bulgarian capital of Tirnovo, to Adrianopolis and Istanbul.

On the Danube boat in Hungary, Le Corbusier asked the captain to indicate "un village resté dans son état intégral," a village untouched by the Western industrial civilization that he himself came from.[4] In the town of Baja he found some traditional pottery and commented on "the village potter, whose fingers blindly obey the orders of a centuries old tradition"; "it is the fingers of these potters that work, not their spirit, not their heart."[5]

About gypsy musicians at a wedding in Serbia he wrote: "Our beautiful Danube becomes a deity in the song and play of the Gypsies. . . . Standing, the chief, a popular bard, sings the song of his people. He invents some phrases, following the emotion that shakes him, but the elements of his song are ancient,"and "the Gypsies let the race speak, the great nation of the dead, through songs from centuries back."[6]

Throughout the trip he looked at typical local houses. In Hungary he noted their plan arranged around a courtyard; in Tirnovo he noted their living room whose window, more wide than tall, reached from wall to wall. In Romania and Tirnovo he was struck by the bright color scheme of the houses, repainted twice a year in brilliant white with accents of sharp blue, and he commented: "When the blood is young and the spirit healthy, normal sensualism affirms its rights."[7]

It should be noted that, in these places, Le Corbusier sought not his own vernacular, but that of other people. In today's parlance, he sought the *other*, a pure and natural man, in contrast to a Western man corrupted by the turmoil of the nineteenth century. Le Corbusier's belief in some "original" purity was common for the period.[8] It also reflected the influence of Jean Jacques Rousseau's ideas on his education, as recently highlighted in a book by Adolf Max Vogt.[9]

But if Le Corbusier had hoped to find some intact and organic vernacular culture, he was painfully aware of witnessing a disappearing one instead. In Turkey after the Balkan tour, he noted that pottery had fallen out of use: people preferred ten-liter metal cans (recycled petroleum cans), which do not break; and he commented that "peoples don't stop at

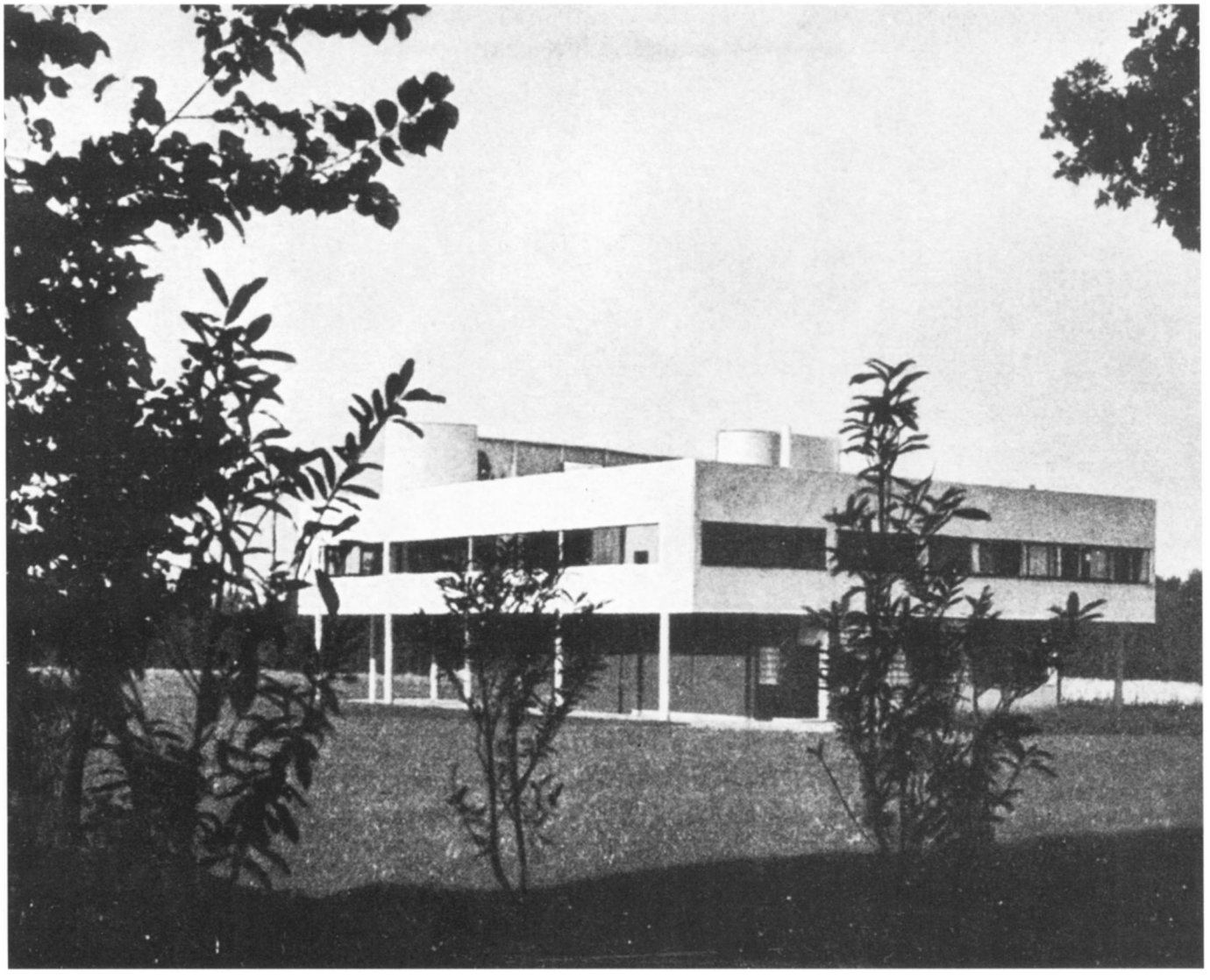


FIGURE 1: Le Corbusier, Villa Savoye, Poissy, 1928–1931

poetic dreams."[10] In Italy, at the end of the trip, he lamented similarly that progress was so ugly, in West and East, and that "there is nothing left of *original* things."[11] But he concluded that the solution to the ravages of modernization should not be sought in the example of premodern cultures, because they are even more vulnerable than our own.[12]

On the basis of this brief sample of observations we may ask what was the significance of the Balkan vernacular for Le Corbusier. Like all architects Le Corbusier learned from precedent, and during his travels he noted architectural solutions for later use. Thus, the Tirnovo window can be seen as the source of his *fenêtre en longueur*, the ribbon window which would become one of the defining features of modernist architecture; and the Hungarian courtyards, which he called "summer rooms," can be seen as leading to the enclosed terrace of Villa Savoye.[13]

In learning from precedent, throughout his life, Le Corbusier was particularly interested in solutions of great elementarity, and sought these in vernacular or ancient settings like the Balkans or Pompeii, or in examples of functional minimalism like railway sleeping cars, ship cabins, and airplanes.[14] An argument can be made that Le Corbusier owed this interest to Rousseau's ideas on the natural life: the more basic and paradigmatic, ancient or vernacular a solution is, the closer it gets to being "natural" and "original."[15] In this sense, one could talk of the vernacular as a reserve of "original" architectural solutions.

But in fact, during the Hungarian and Balkan part of the trip Le Corbusier was not particularly intent on recording architecture. His notes about Balkan houses are skimpy, compared with the attention that he lavished on Pompeian houses in a later part of the trip. The real emotion, in his Balkan notes, concerns people and the relationship of people and their artifacts. It is through this relationship, more than the borrowing of specific architectural solutions, that the Balkan experience affected Le Corbusier's modernism.

FIGURE 2: Le Corbusier, Villa Savoye, terrace

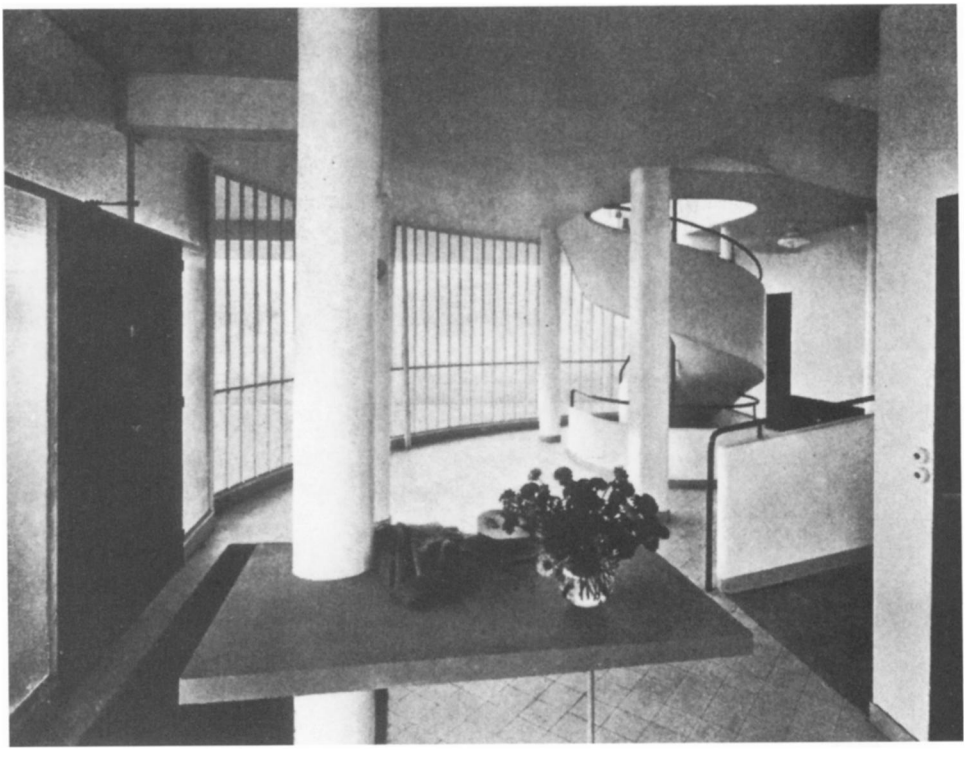


FIGURE 3: Le Corbusier, Villa Savoye, entrance hall

To approach the issue concretely one may examine the Villa Savoye, and in particular its entrance hall (Figures 3–5). One arrives by car, gets out under the main box on *pilotis*, and one finds oneself in the hall. I will focus on three elements. The first is the glazing which defines the space: an industrial glazing, as in factories and greenhouses. The second is the ramp: an ordinary industrial ramp, like those found in factories. The third is the washbasin: an industrially produced object, of the sort found in any bathroom.

These are all ordinary elements, "found" elements, not designed expressly for Villa Savoye. But together, they add up to a ceremonial entry. One is inside, yet not really inside the house; the ramp, like some inclined street, reinforces the sense that one has not yet arrived and evokes ceremonial ramps in the courtyards of medieval or ancient compounds, ramps made to be ascended on a horse or a litter; the washbasin, in this halfway situation, suggests the ablutions of a ritual entry, for example in a mosque or a church.[16]

Also, the placement of the columns is careful but not fussy: they are not designed to form a decorative motif, but seem to

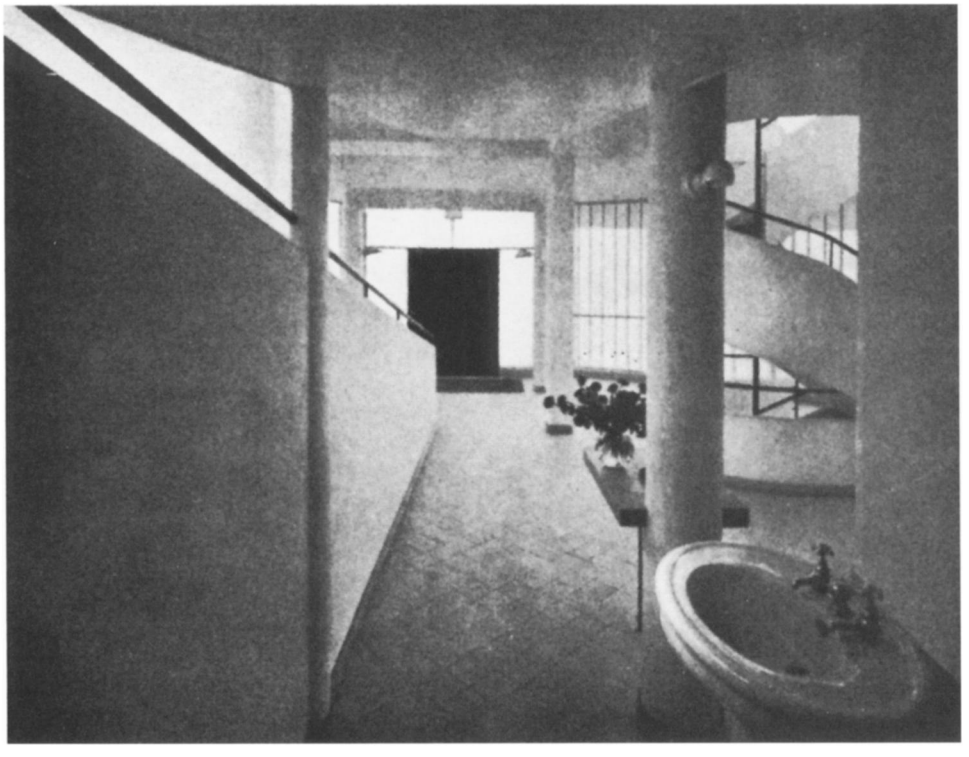
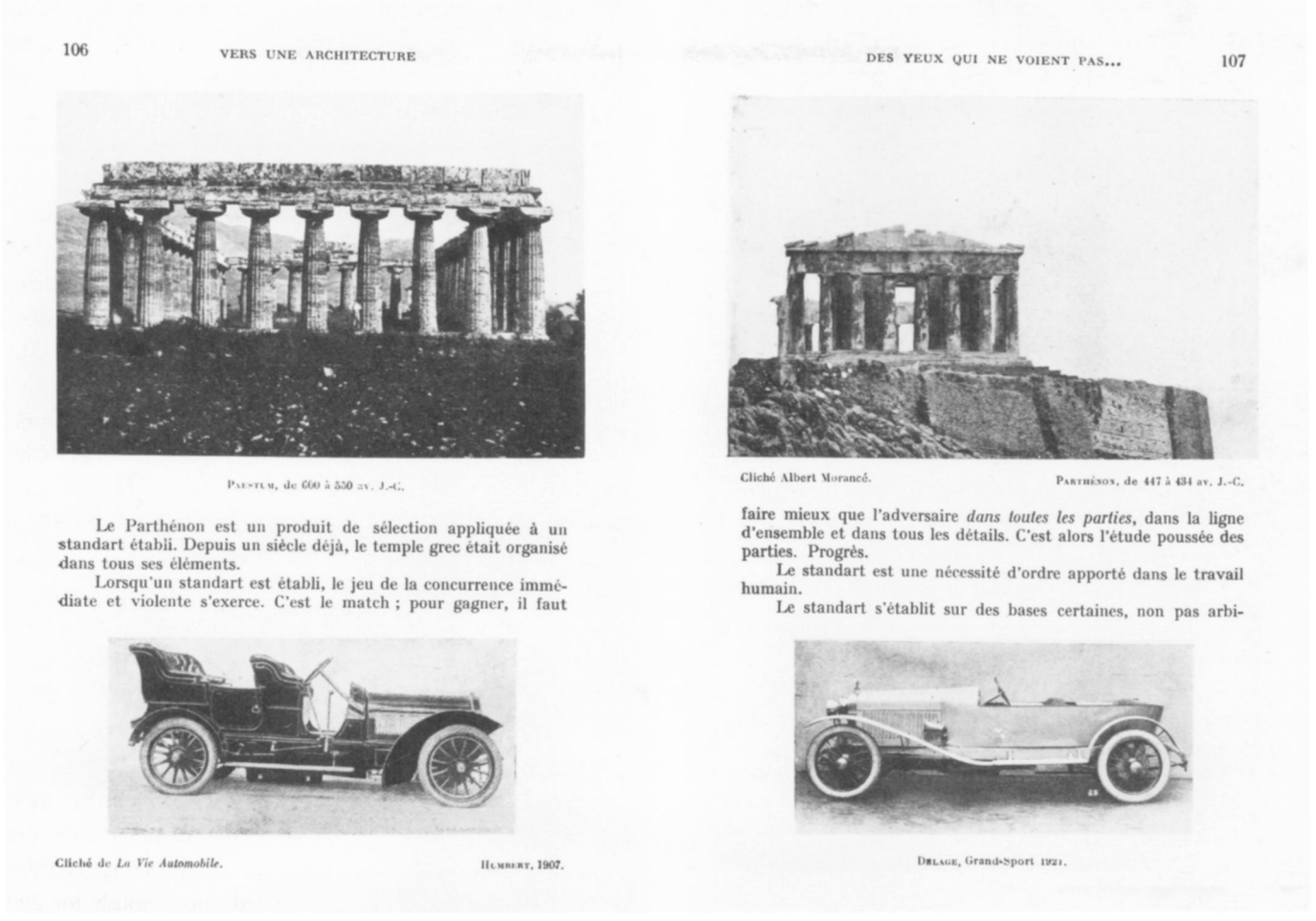


FIGURE 4: Le Corbusier, Villa Savoye, entrance hall

FIGURE 5: Le Corbusier, Villa Savoye, entrance hall


106 VERS UNE ARCHITECTURE

PAESTUM, de 600 à 550 av. J.-C.

Le Parthénon est un produit de sélection appliquée à un standart établi. Depuis un siècle déjà, le temple grec était organisé dans tous ses éléments.

Lorsqu'un standart est établi, le jeu de la concurrence immédiate et violente s'exerce. C'est le match ; pour gagner, il faut

Cliché de *La Vie Automobile*. HUMBERT, 1907.

DES YEUX QUI NE VOIENT PAS... 107

Cliché Albert Morancé. PARTHÉNON, de 447 à 434 av. J.-C.

faire mieux que l'adversaire *dans toutes les parties*, dans la ligne d'ensemble et dans tous les détails. C'est alors l'étude poussée des parties. Progrès.

Le standart est une nécessité d'ordre apporté dans le travail humain.

Le standart s'établit sur des bases certaines, non pas arbi-

DELAGE, Grand-Sport 1921.

FIGURE 6: Le Corbusier, pages from the chapter "Les autos," *Vers une architecture* (1923), 106–107

be there for some commonsense reason. As Le Corbusier wrote to a friend in the early 1920s, with obvious pride: "I have totally lost the taste for the 'motif' and I design like any old chap" (*je compose comme un vieux bonhomme.*)[17]

Let us leave aside, for a moment, the larger poetic evocations, and stick to the actual elements from which this place is put together: as said, ordinary "found" elements of everyday life today (in 1928). They have been found in factories, bathrooms, ships, etc. They are standard use-objects, and they are intentionally taken from settings that have not been "designed" for aesthetic effect.

Le Corbusier's emphasis on such objects comes from a complex discourse about architecture and the decorative arts, centered on the concept of *Sachlichkeit* (factualness), and developed at the turn of the century in German-speaking countries.[18] Two protagonists of this discourse important for Le Corbusier were Adolf Loos in Vienna and Hermann Muthesius in Berlin.

Loos was concerned with the urban bourgeoisie. He found it pointless that decorators and architects try to invent a new style for this clientele; a style appropriate to modern urban life already existed in those use-objects which architects had not touched: men's clothing, shoes, etc.[19] For Loos, these were to urban life what the unpretentious farm was to rural life: in short, modern vernacular.[20] Le Corbusier, who absorbed Loos's ideas in two phases, in 1913 after the *voyage d'Orient* and then again in 1920, extended them to include industrial products.[21]

Muthesius requires a longer discussion. While building upon Loos's foundation, he was more concerned with industrial mass society and its commodities.[22] Particularly relevant is his address to a meeting of the Deutsche Werkbund, an association of artists and industrialists, held in Cologne in 1914. At that meeting, which Le Corbusier attended, Muthesius provoked a heated debate by advocating *Typisierung* (literally, typization)—a potent prescription because he used the ambiguities of that German word to conflate two charged discourses and social visions.[23]

The most explicit and recent of them concerned the evolving structures of industrial society, specifically the cultural implications of standardization (one of the meanings of *Typisierung*) and marketing by brands (*Typen*), whose uniformity was expected to promote and embody a new cultural unity. This discourse had been developed over the previous fifteen years by such figures as the sociologist Georg Simmel,

FIGURE 7: Le Corbusier, Villa Fallet, La Chaux-de-Fonds, 1905–1907

FIGURE 8: Le Corbusier, Villa Fallet, detailFIGURE 8: Le Corbusier, Villa Fallet, detail

the politician Friedrich Naumann, and the critic Karl Scheffler. It drew on conceptual structures and reformist concerns from the German academic discipline of political economy, out of which sociology emerged as a discipline in 1909, and whose professors sought a third way between laissez-faire capitalism and socialism.[24]

But in visualizing how a unified culture might look, and in the very choice of the root *Typ* to designate standards and brands, those new facts of modern life, Muthesius implicitly relied on an older and more traditionalist discourse as well—implicitly, because the older discourse had already been integrated into the new one ten years before, by two of Muthesius's mentors, Naumann and Scheffler.[25] This earlier discourse concerned the stable structures of preindustrial society, with its standard vernacular types (*Typen*), for example, the German farmhouse. Its best-known spokesman was the writer Paul Schultze-Naumburg, who in turn drew on the German discourse on *Volkskunst* of the late nineteenth century.[26] While conscious of changing conditions, Schultze-Naumburg and his friends upheld the continued relevance of traditional types, which should be adapted but not invented anew. They saw these types as solutions perfected anonymously and collectively over many generations, representative of their society precisely because of the anonymity of the process that had embedded the collective identity into the form.[27] During the famous debate at Cologne, a Muthesius supporter applied this reasoning to Greek temples, perfected anonymously for 200 years before Ictinus designed the Parthenon by slightly inflecting the type.[28]

By conflating the two discourses in the term *Typisierung*, Muthesius bestowed on the products of industry the same ability to embody organic culture that vernacular types were deemed to have, thus enlisting in support of expanding industrialization concepts originally advanced by those who would rather contain it.[29] Muthesius dreamt of a modern vernacular—accelerated by intentional *Typisierung*, but vernacular nevertheless, "found" in the anonymous developments of modern industrial society. Le Corbusier caught well the range of Muthesius's argument and condensed the whole—industry, temples, and all—into two iconic pages of his book *Vers une architecture* (Figure 6).[30]

Sachlichkeit is often confused with *Zweckmässigkeit*, functionality. But the discourse on *Sachlichkeit* was not driven primarily by a concern with function: it was far more complex, culturalist rather than rationalist. I would argue that a central preoccupation was *representativeness*, i.e., a matter of character and identity: things describe the identity of a group when they are "facts" produced unselfconsciously by the group, when people do what they have to do, when they worry about use rather than image.

Sachlichkeit had played no role in the early formation of Le

Corbusier, and he absorbed this concept starting only in 1913, after the Balkan trip.[31] His education had been that of an artist and had stressed creativity, within a conceptual framework set by John Ruskin and local cultural politics.[32] These cultural politics are particularly relevant to our topic.

Le Corbusier had grown up in the Swiss Jura, a French-speaking area close to the Franco-German linguistic border within Switzerland, and at a time when the issue of Swiss cultural identity was heating up.[33] In the debate on this issue, two positions emerged, one based on geography, in the 1890s, and the other, based on race, after 1900. It was the first of these that Le Corbusier absorbed in school from his teacher, the painter Charles l'Eplattenier.[34] The proponents of geographic identity argued that all Swiss, German-speaking and French-speaking alike, have a fundamental thing in common: they are shaped by the mountains.[35] L'Eplattenier's paintings depict mountains, and his didactic ambition was to create a regionalist style and art movement based on the natural characteristics of the Jura mountains. L'Eplattenier's influence is visible in the first house built by his pupil in 1907, the Villa Fallet in La Chaux-de-Fonds, where the decoration is based on the motif of rocks and pine trees (Figures 7, 8).

The important point is that L'Eplattenier chose to *invent* a new style, even while drawing inspiration from natural elements. There was indeed a local tradition of splendid farmhouses, built in the same way for 300 years before industrialization, but L'Eplattenier did not try to reconnect with it (Figure 9).[36]

For the purposes of this article, the position of L'Eplattenier (inventing a style) and the position of *Sachlichkeit* (finding a style that has already emerged anonymously) represent a point of departure and a point of arrival for Le Corbusier, the first before 1907, the second after 1913. Between those points came two important experiences in Germany during 1910: his encounter in Munich with William Ritter, who inspired the Balkan leg of the *voyage d'Orient*, and his exposure in Berlin to the classicism of Peter Behrens, the architect best known for designing the AEG factories and in whose office Le Corbusier spent several months.[37] I will focus here on Ritter.

William Ritter was a French-speaking Swiss writer, art critic, and painter from Neuchâtel living in Munich, who would be a senior friend and mentor to Le Corbusier during the next six years, until well into the First World War.[38] Two themes were central to Ritter's thinking. The first was his emphasis on roots: identity cannot be constructed or willed; it comes from the history and place into which one is born. Ritter disliked Americans, urbanized Germans, and Jews, all of them up-

FIGURE 9: Farmhouse in the Jura mountains near La Chaux-de-Fonds, probably eighteenth century

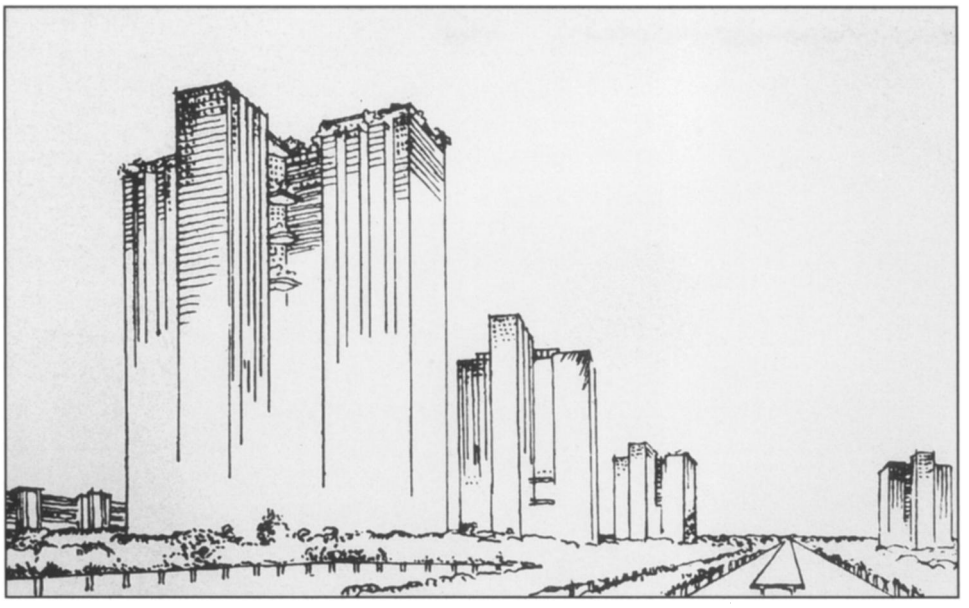


FIGURE 10: Le Corbusier, skyscrapers, from the chapter "Le plan," *Vers une architecture*, 43

rooted in his eyes.[39] Accordingly, his art criticism always started from the givens of an artist's situation (ethnicity, cultural background, etc.), and then proceeded to analyze the manner in which the artist had worked with or against those givens. In the Swiss debate about identity, he favored the position that race determines identity, specifically, that the French-speaking Swiss have a Latin identity.[40] The second theme in Ritter's thinking was his deep attachment to the Slavs, along with an interest in peasant life in the Balkans, where he had spent several years and collected many vernacular objects.[41]

Le Corbusier's Balkan trip was informed by Ritter's attitudes. In line with them, Le Corbusier experienced the trip as an immersion in cultures grown over centuries, received and accepted rather than created and chosen, as the passages quoted earlier record: the fingers of the potter "obey the orders of a centuries old tradition"; the gypsies "let the race speak" through their songs; and so on.

Not that Ritter was the only source of Le Corbusier's interest in the vernacular; Rousseau has already been mentioned, and Ritter's attitude was echoed by other writers familiar to Le Corbusier.[42] But Ritter provided sustained exposure and broad philosophical grounding for the notion that any real culture is built on previous generations, hence *received.*

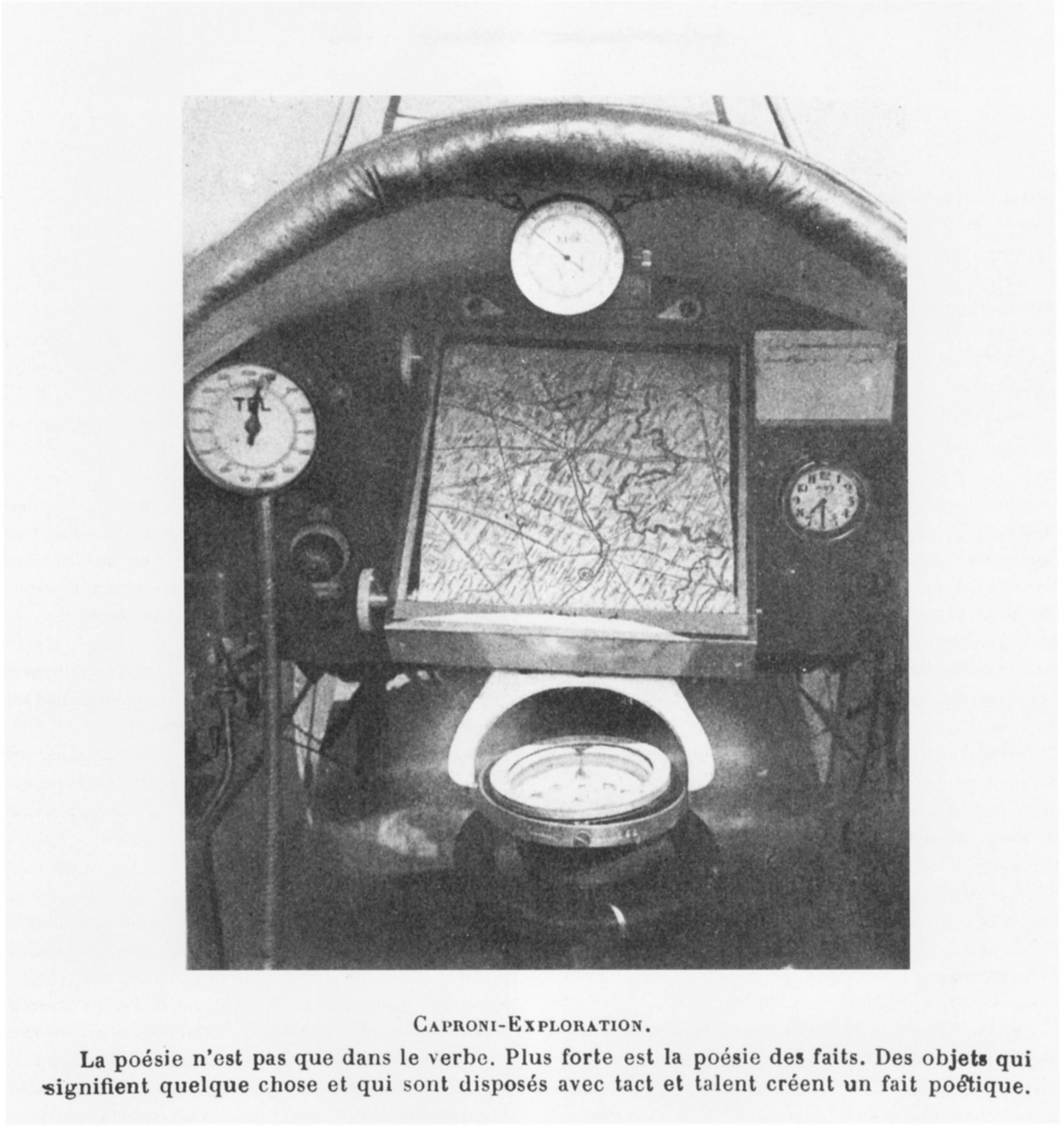
Seen in this light, Le Corbusier's experience of the vernacular in the Balkans had two opposite effects. On the one hand (in line with Ritter), it was his first experience of supposedly organic cultures whose forms are not chosen but received. On the other hand (think of the petroleum cans), the Balkan trip was Le Corbusier's first—and decisive—experience of the inevitability of Western industrial modernity, seen not as welcome progress but as a tragically unavoidable reality.

Taken as a whole, these two experiences opened Le Corbusier to the notion of a modern vernacular: as integrated and "found" as the ancestral vernacular, yet issued from the urban cosmopolitan reality of the industrial West, which was winning out in the world. In short, the Balkan experience prepared Le Corbusier to absorb, two years later, the particular way in which that notion was articulated by Loos, Muthesius, and other *sachlich* theorists.

Regarding style, Le Corbusier had begun to find the notion of received cultural forms in Peter Behrens's classicism (classicism, by definition, is a received architectural language, to be learned and not invented).[43] Regarding the relationship of style and society, he got that notion of received cultural forms from Ritter, the inspiration behind the Balkan trip, with his insistence that identity is destiny.

By the 1920s, when he emerged in Paris as a leading modernist, Le Corbusier had arrived at a point of view quite different from the one he had started from. He had begun within a movement seeking to invent a regionalist style; and he had ended by arguing, with Loos and Muthesius, that modern culture is best described by the work of those anonymous people, notably engineers, who do not try to invent a new aesthetic.

This conclusion created a problem for somebody like Le Corbusier, who saw himself as a creative artist: what was his contribution going to be? The question had already preoccupied German artists and had fueled the Werkbund debate Le Corbusier witnessed in Cologne in 1914. In fact, even before Cologne, in a letter of late 1913, written within weeks of reading Loos, he had envisioned what it would be like to design starting from needs instead of aesthetic intent, and had concluded in a sad Ruskinian echo: "That's the huge lamp of sacrifice lighting up. And how hard it is to live each hour sacrificing!"[44] Eventually, he dealt with the problem in two ways, both of them articulated in *Vers une architecture.*



CAPRONI-EXPLORATION.

La poésie n'est pas que dans le verbe. Plus forte est la poésie des faits. Des objets qui signifient quelque chose et qui sont disposés avec tact et talent créent un fait poétique.

FIGURE 11: Le Corbusier, illustration from the chapter "Les autos," *Vers une architecture*, 113

The first was to put the focus on geometric formal relationships, rather than on on the particular shape of things. Thus, Le Corbusier defined architecture as the *play* of volumes under the light, emphasized the importance of proportions and regulating lines, and stated that the Parthenon soars above other similar Greek temples because of its refined geometric relationships and precise profiles.[45] He took this approach repeatedly in his designs of the 1920s, for example, when he imparted majestic proportions and rhythmic progression to his skyscrapers (Figure 10), and when he justified the proportions of his Villa Stein at Garches through regulating lines.[46] This broad emphasis on geometric relationships had a complex pedigree going back to a modernist emphasis on pure form around 1900, to academic artistic theories of the nineteenth century, and beyond them to classical aesthetics.[47]

The second way in which Le Corbusier dealt with the

problem has already been suggested in discussing the larger poetic evocations of the entry hall of the Villa Savoye. There, art is achieved by focusing not on relationships of form but on relationships of meaning: a ramp and a washbasin, in a place which is inside but not quite so, create a ceremonial entry.

This focus on relationships of meaning had a literary pedigree. It came to Le Corbusier through the French poet Pierre Reverdy, heir to the symbolist poetry of Stéphane Mallarmé and, by the end of the First World War, close to cubist painters and Le Corbusier. Reverdy argued in 1917–1918 that poetry is constructed from elements found in common life and is created when distant realities are brought together.[48] Le Corbusier said the same a few years later, in the caption for the photograph of an airplane cockpit, which he published in *Vers une architecture* (Figure 11). What you see in the photograph is the padded edge of a powerful machine; the dials by which you know its performance; the stick by which you dominate it; the map on which you choose where you want to go; the compass by which you know where you are going. In short, the poetic experience of flying an airplane. Below the picture, Le Corbusier's caption reads: "Poetry is not just in the word. Stronger is the poetry of facts. Objects that mean something, disposed with tact and talent, create a poetic fact."[49] Le Corbusier writes of "la poésie des faits": here, he has invented, quite consciously, *poetic Sachlichkeit.*

To conclude, let us go back to the initial question of this essay: what role did the vernacular play in Le Corbusier's construction of a modernist architecture? Its principal role, I have suggested, was not as a source of architectural motifs, but as a conceptual model for a natural relationship between society and its artifacts, hence between society and architecture; specifically, a conceptual model for the notion of *modern vernacular*—one as naturally the issue of modern industrial society, and as representative of it, as the traditional vernacular of common parlance had been of earlier societies.

Looking forward in time from the 1920s, this vernacular model within modernism suggests a conceptual continuity between Le Corbusier's "machine aesthetic" of that decade and his "brutalist aesthetic" of the following ones, with its reference to rural, primitive, and manual building—two aesthetics whose puzzling contrast has been a central theme of Corbusian literature. The vernacular model was a constant, articulating the persistent hope for a natural and organic modern society, and for a natural relationship of modern society and architecture. As Mary McLeod has shown, what changed was the sense of where to seek the fulfillment of such hope. During the 1920s Le Corbusier sought it in the rationalist and abstract organization of industry and in its products; later, disillusioned by them, he sought it in a more direct and wholistic connection of people with people, and people and techniques.[50]

Looking backward from the 1920s to Le Corbusier's formation, we have seen that, although intense personal experiences like the Balkan trip played a crucial role in forming his notion of a modern vernacular, he did not come to it by himself, but built it upon received discourses. Thus, Le Corbusier's experience of the Balkans was informed by certain ideas of traditional vernacular, of racial and national identity, that he had absorbed through his friend Ritter. And then, upon the personal and ultimately local experience of the trip Le Corbusier grafted the sophisticated concepts of *Sachlichkeit,* developed over fifteen years in large European urban centers, concepts which themselves incorporated ideas about traditional vernacular and through which Le Corbusier could, in the 1920s, formulate specific architectural strategies meaningful to a larger urban public.

The notion of vernacular in all of these discourses was focused on collective identity, not the variety and quaintness appreciated by picturesque aesthetics, and it embraced all kinds of artifacts, not just architecture. Around the turn of the century, it took on a central role in architectural thinking, together with classicism, which was about the related theme of order. At a time of rising mass politics, right and left, such evocations of collectivity held increasing appeal for reformers of all persuasions, who felt that the nineteenth century had left a legacy of social and artistic disaggregation.

As a conceptual model, this notion of the vernacular was important because it could open architecture to a redefinition. Unlike classicism, which was a closed formal system internal to architecture, the vernacular model insisted on connecting architecture to something external to it, the identity of a society; and it further insisted that such connection be not invented but found. Thus, the vernacular model helped to open architecture to such "facts" as ships and industrial products. On the one hand, this increased openness represented a difficult challenge for architecture, because it weakened its autonomy as a discipline, hence its continuity and accountability: with architecture no longer a closed system, it became more difficult to refine and codify routine design strategies (such as eighteenth-century apartment planning in France) that could provide standards for teaching and judgment. On the other hand, like all disciplines, architecture has always been open to influences from other disciplines or cultures (think of the Italian influence on France during the sixteenth century), and this openness had been growing exponentially since the eighteenth century because of travel and changes in technology, economy, and society. In the face of this accelerated change, the vernacular model provided a way to master the process: as we have seen in the case of Le Corbusier, it provided a conceptual structure for integrating

the new ideas and "facts" into the discipline of architecture, and for broadening its vocabulary and responsibilities.[51]

For Stanford Anderson

Notes

[1] This essay was first presented as a lecture in the workshop "Modern Culture and the Ethnic Artifact," held at the Internationales Forschungszentrum Kulturwissenschaften in Vienna, 28–31 August 1996, and organized by Ákos Moravánszky of the Eidgenossische Technische Hochschule in Zürich. I thank Professor Moravánszky and the workshop participants for stimulating discussions. I also thank Mardges Bacon, Sarah Ksiazek, Harvey Mendelsohn, and Christian Otto, who read drafts of this article and made useful suggestions.

Le Corbusier ridicules regionalism in *Vers une architecture* (Paris, 1923), 189, in the chapter "Maisons en série." In Stuttgart, foes of the modernist Weissenhof housing settlement(1927) ridiculed its non-German character and displayed vernacular elements in their counterdemonstration, the Am Kochenhof settlement(1933): see Richard Pommer and Christian Otto, *Weissenhof 1927 and the Modern Movement in Architecture* (Chicago and London, 1991), 153–157. Le Corbusier's stylistic turn around 1930 is an issue in every major monograph on him, for example, in William J. R. Curtis, *Le Corbusier: Ideas and Forms* (New York, 1986), where chapter 9 is titled "Regionalism and Reassessment in the 1930s."

[2] The principal publication of Le Corbusier's work is his own *Oeuvre complète*, 8 vols. (Zurich, 1929–1970). For an overview of his career the standard remains Stanislaus von Moos, *Le Corbusier, Elemente einer Synthese* (Frauenfeld, 1968), revised English edition *Le Corbusier, Elements of a Synthesis* (Cambridge, Mass., 1979). For an overview of Le Corbusier's early years see the recent book by H. Allen Brooks, *Le Corbusier's Formative Years* (Chicago, 1997). The literature by and on Le Corbusier, too vast to list here, can be found in two bibliographies: Darlene Brady, *Le Corbusier: An Annotated Bibliography* (New York, 1985); and Christopher Pearson, "A Selected Bibliography of Works on Le Corbusier Published in the 1980s," *Bulletin of Bibliography* 51 (March 1994): 31–52.

[3] Le Corbusier, *Le Voyage d'Orient* (Paris, 1966: cited subsequently as *Voyage*), trans. *Journey to the East* (Cambridge, Mass., 1987). His sketchbooks from the trip are published as Le Corbusier, *Voyage d'Orient, Carnets* (Milan and Paris, 1987: cited subsequently as *Carnets*). Other important documentation can be found in Giuliano Gresleri, *Le Corbusier, Viaggio in Oriente* (Venice, 1984).

[4] Le Corbusier, *Voyage*, 19. The captain suggested the town of Baja, some 100 kilometers south of Budapest along the Danube.

[5] Ibid., 16, 17.

[6] Ibid., 42, 43.

[7] Ibid., 21, 55, 116–117.

[8] Particularly since the publication of Edward Said's *Orientalism* (New York, 1978), we are more aware of the manipulations and epistemological difficulties lurking in any search for origins, or in any distancing from an *other*. For a recent anthropological perspective see James Clifford, *The Predicament of Culture: Twentieth-Century Ethnography, Literature, and Art* (Cambridge, Mass., 1988). Zeynep Çelik, focusing on Le Corbusier's projects for Algiers in the 1930s, finds colonial overtones in his interest in the non-Western world; but Sybel Bozdogan, focusing on the *Voyage d'Orient* of 1911, comes to the opposite conclusion: Zeynep Çelik, "Le Corbusier, Orientalism, Colonialism," *Assemblage* 17 (April 1992): 59–77; Sybel Bozdogan, "Journey to the East: Ways of Looking at the Orient and the Question of Representation," *Journal of Architectural Education* 41 (summer 1988): 38–45, 61. For our purposes here, the issue of colonialism is marginal, since most of the vernacular and modernist architecture in question will be European. It would be more interesting to explore, along similar lines, the implications of any notion of the vernacular, Western and not, older and contemporary; but that would go beyond the limited scope of this article.

[9] Adolf Max Vogt, *Le Corbusier, der edle Wilde* (Braunschweig, 1996).

[10] Le Corbusier, *Voyage*, 118–119.

[11] Le Corbusier, *Carnets*, Carnet 4, 69; the emphasis is Le Corbusier's. About the Balkans and Turkey: "Pourquoi notre progrès est-il laid? Pourquoi ceux qui ont encore un sang vierge aiment-ils prendre de nous le plus mauvais?" (Le Corbusier, *Voyage*, 170). And about the West: "le public . . . n'y comprend plus rien. . . . Il a en lui aussi, l'épouvantable germe qui s'en va ruinant dans les pays chastes, les coeurs jusqu'ici simples et croyants, les arts jusqu'ici normaux, sains et naturels" (ibid., 121–122).

[12] The passage "le public . . . naturels," quoted in the previous endnote, continues thus: "Ce que j'ai vu en route m'enlève à jamais tout espoir en la candeur des races neuves et je porte toutes mes espérances sur ceux qui, ayant commencé à l'alpha, sont déja bien loin, et connaissent beaucoup. C'est pourquoi je pense qu'il n'y a pas à réagir. Car l'épuration est une nécessité vitale, et, comme on fuit la Mort, par simple désir de vivre on reviendra,—oui, à la santé de cette époque, santé adéquate à nos contingences, et, delà, à la beauté." (Le Corbusier, *Voyage*, 122.) In this passage, the term "races neuves" refers to premodern cultures, which are still virgin, chaste, and simple, to use Le Corbusier's terminology. And the phrase "ceux qui, ayant commencé à l'alpha, sont déja bien loin" refers to urban culture and modern art.

[13] Other examples are Le Corbusier's Maison Citrohan (1921), an individual house type based on Parisian artists' lofts and cafés, and his Immeuble Villas (1922), an ideal apartment complex in which the unit type is based on the cells of Carthusian monasteries.

[14] Thus, Le Corbusier claimed that the arrangement of one of his houses at the Weissenhof exhibition of 1927 had been derived from railway sleeping cars: Le Corbusier, "La signification de la cité-jardin du Weissenhof," *L'Architecture vivante* (spring 1928): 9–15. And while traveling to India in 1959 he carefully recorded some internal arrangements in his airplane, for later use in bathrooms and kitchens: Sketchbook P59 in Le Corbusier, *Le Corbusier Sketchbooks*, 4 vols. (New York, 1981–1982), 4: 457.

[15] Vogt, *Edle Wilde*. The book as a whole argues for the importance of Rousseau in Le Corbusier's education at home, in kindergarten, and in elementary school. Pages 229–235 in particular deal with Le Corbusier's father, an early and enthusiastic mountain climber who built two alpine huts, i.e., basic shelter for extreme conditions. By analyzing diary entries of Le Corbusier's father, Vogt shows that he viewed those conditions as a Rousseauian return to "natural" life. Vogt's point is important because it can easily be extended to Le Corbusier's interest in functional minimalism.

[16] The ceremonial aspect of the Savoye ramp is noted in von Moos, *Le Corbusier* (1979 ed.), 88 (see n. 2), and connected to Renaissance and baroque examples. A medieval precedent is suggested in Jürgen Joedicke, "Die Rampe als architektonische Promenade im Werk Le Corbusiers," *Daidalos* 12 (June 1984): 104–108.

The importance of the ramp at the Villa Savoye is not diminished by the spiral service staircase to its left. The ramp is directly in front of the entrance, while the staircase is to the side and "shows its back" to the entrance; and the presence of this subordinate and duplicate itinerary only emphasizes the ceremonial quality of the ramp. It should also be noted that the exposed spiral staircase was not part of the initial concept, and that it appeared when the project was scaled down for budgetary reasons: in the first and grander project for the Villa Savoye, the service staircase was entirely hidden, as shown in Le Corbusier's *Oeuvre complète*, 1: 186.

Catholic churches have basins of holy water near the entry doors, and mosques have ablution fountains: for example, Hagia Sophia, visited by Le Corbusier, had one in the ceremonial court outside.

It should also be noted that Le Corbusier intended the wash basin to have a more prominent location than the one it eventually received, partially hidden by a column. In the first and grander project for the Villa Savoye, the basin was framed by a sculptural curved screen. In the final reduced project the basin is placed in front of the column, as the published plans show.

[17] Le Corbusier to William Ritter, 21 June 1922. Bern, Schweizerische Landesbibliothek, Ritter Nachlass; copies at the Bibliothèque de la Ville in La Chaux-de-Fonds and at the Fondation Le Corbusier in Paris.

[18] Three points about terminology are important here. First, the literal translation of the word *Sachlichkeit* is "factualness," but in German the word has a range of colloquial meanings that must be rendered by a number of English terms: "factualness," "matter-of-factness," "sobriety," "objectivity," "realism," "functionality," "practicality," "pragmatism." In the context of modernist architecture, the terms most used have been "sobriety" and "objectivity." I find the term "factualness" most precise because it explicitly incorporates the root "fact," *Sache*, a word that is often used alone in the writings of German theorists of the concept such as Karl Scheffler. The various meanings of the term are listed in Stanford Anderson, "Style-Architecture and Building-Art: Realist Architecture as the Vehicle for a Renewal of Culture," in Hermann Muthesius,

Style-Architecture and Building Art, intr. and trans. Stanford Anderson (Santa Monica, Calif., 1994), 38, n. 10.

Second, for the sake of simplicity I use the term *Sachlichkeit* as an umbrella to designate a broad cultural discourse extending from the 1890s to the First World War. While the concept of *Sachlichkeit* was arguably the most common and early denominator in that discourse, other concepts such as those of type, style, and culture, provided focus as well. Which one of these terms best designates the whole discourse remains an open question.

Third, before the First World War, *Sachlichkeit* was invoked by both traditionalists and modernists. Naturally, it was the latter use of the concept that provided the springboard for the modernist generation after the war, and that captured the attention of historians of modernist architecture (including myself). But it was precisely the traditionalist-modernist tension it accomodated that made this concept so fertile, as will be suggested below.

On *Sachlichkeit* see Harry Francis Mallgrave, "From Realism to *Sachlichkeit*: the Polemics of Architectural Modernity in the 1890s," in *Otto Wagner, Reflections on the Raiment of Modernity*, ed. Harry Francis Mallgrave (Santa Monica, Calif., 1993), 281–323; Stanford Anderson, "*Sachlichkeit* and Modernity, or Realist Architecture," ibid., 323–362; Anderson, "Style-Architecture"; and Mitchell Schwarzer, *German Architectural Theory and the Search for Modern Identity* (Cambridge, 1995), passim.

On the relevance of the concept for modernist architecture, the seminal essay remains William Jordy, "The Symbolic Essence of Modern European Architecture of the Twenties and Its Continuing Influence," *JSAH* 23 (October 1963): 177–187, which identifies "symbolic objectivity," i.e., symbolic *Sachlichkeit*, as a central conceptual structure of modernist architecture. See also Fritz Schmalenbach, "The term *Neue Sachlichkeit*," *Art Bulletin* 22 (September 1940): 161–165 and Rosemarie Haag Bletter, introduction to Adolf Behne, *The Modern Functional Building*, trans. Michael Robinson (Santa Monica, Calif., 1996), 1–83.

[19] Loos developed this argument in various articles of 1897–1900, later gathered in his book *Ins Leere gesprochen, 1897–1900* (Paris and Zürich, 1921; reprint Vienna, 1981). He further articulated the same argument in "Architektur," *Der Sturm* 42 (15 December 1910), later translated as "L'Architecture et le style moderne," *Les Cahiers d'aujourd'hui* 2 (December 1912): 82–92, and in "Ornament und Verbrechen," first published in French as "Ornement et crime," *Les Cahiers d'aujourd'hui* 5 (June 1913): 247–256; both essays were later republished in German in his book *Trotzdem, 1900–1930* (Innsbruck, 1931; reprint Vienna, 1982).

[20] Loos, "Architektur." Loos does not use the expression "modern vernacular," but the sense of his essay clearly supports it.

[21] Nothing in Le Corbusier's correspondence suggests that he knew about Loos at the time of the Balkan trip, although Loos's "Architektur" was published in *Der Sturm* in Berlin while Le Corbusier was there. In fact, just before boarding the ship on the Danube at the beginning of the trip, in a poignant missed encounter, Le Corbusier sketched a shop window on the Viennese Graben that caught his attention: it was the Knize store by Loos, not yet finished (Le Corbusier, *Carnets*, Carnet 1, 56–57). But Le Corbusier casually annotated the sketch "a very nice store on the Graben"; he did not seem to know who Loos was, and this should not surprise us, as Loos's architecture and writings had been little published and mostly in Viennese publications not easily accessible to Le Corbusier. In late 1913 he read two of Loos's articles in French translation, as we know from his correspondence: these were "Architektur" and "Ornament und Verbrechen" (see n. 19). There is no record of further contact until 1920, when Le Corbusier met Loos in Paris and began seriously to come to terms with his thinking. On Le Corbusier's debt to Loos see Stanislaus von Moos, "Le Corbusier und Loos," in Stanislaus von Moos, ed., *L'Esprit Nouveau. Le Corbusier und die Industrie 1920–1925* (Berlin, 1987), 122–133.

[22] On Muthesius as theorist see Hans-Joachim Hubrich, *Hermann Muthesius, die Schriften zur Architektur, Kunstgewerbe, Industrie in der "Neuen Bewegung"* (Berlin, 1981); Julius Posener, *Berlin auf dem Wege zu einer neuen Architektur* (Munich, 1979), 525–547; Anderson, "Style-Architecture" with recent bibliography. On the German Werkbund see Joan Campbell, *The German Werkbund: The Politics of Reform in the Applied Arts* (Princeton, 1978). On Muthesius's position about type and the 1914 debate at Cologne see Stanford Anderson, "Deutsche Werkbund—the 1914 Debate: Hermann Muthesius versus Henry van de Velde," in Ben Farmer and Hentje Louw, eds., *Companion to Contemporary Architectural Thought* (London, 1993), 462–467, and Frederic J. Schwartz, *The Werkbund, Design Theory and Mass Culture Before the First World War* (New Haven and London, 1996), 121–150; 241, n. 8 for bibliography. On the effect on Le Corbusier of the 1914 debate see Winfried Nerdinger, "Standard und Typ. Le Corbusier und Deutschland, 1920–1927," in *Le Corbusier und die Industrie* (see n. 21), 44–53.

[23] The full text of Muthesius's speech is found in Deutsche Werkbund, *Hermann Muthesius: Die Werkbund-Arbeit der Zukunft und Aussprache darüber . . . Friedrich Naumann: Werkbund und Weltwirtschaft . . . 7. Jahresversammlung des Deutschen Werkbundes . . . in Köln* (Jena, 1914), which also includes the "theses" and "countertheses" which preceded the speech, and the discussion that followed. Extensive extracts are found in Julius Posener, *Anfänge des Funktionalismus* (Frankfurt, 1964), 199–227, and in Munich, Die Neue Sammlung, Staatliches Museum für angewandte Kunst, *Zwischen Kunst und Industrie, Der Deutsche Werkbund* (Munich, 1975), 85–115.

[24] This whole discourse is admirably articulated in Schwartz, *Werkbund*: pages 75–81 deal with the history of the disciplines of political economy and sociology, and pages 121–146 deal specifically with the issue of type and with the evolving meanings of the German words *Typ*, *Typus*, and *Typisierung*; but the whole book is important to grasp the larger cultural implications of the debate.

Particularly important as a precedent to Muthesius's speech was Friedrich Naumann's "Kunst und Industrie," *Der Kunstwart* 19, Heft 2 (1906): 66–73, 128–131. Writing about the marketing of industrial products, Naumann spoke of "types or brands" ("Typen oder Marken") thus connecting the word *Typus* or *Typ* to industrial mass production. The most apt English term for "Marken" is "brands" (used in Schwartz, *Werkbund*, 128), but the full range of meanings is best conveyed by several English expressions together: "brands," "trademarked products," "trademarked models."

[25] See n. 29.

[26] The pardigmatic text is Paul Schultze-Naumburg, *Kulturarbeiten*, 9 vols. (Munich, 1901–1917). On Schultze-Naumburg see Norbert Borrmann, *Paul Schultze-Naumburg, Maler, Publizist, Architekt, 1869–1949* (Essen, 1989). Since 1897, Schultze-Naumburg had collaborated with *Der Kunstwart*, a periodical founded by Ferdinand Avenarius ten years earlier, and an important forum from its inception for the discourse about *Volkskunst*. Schultze-Naumburg's reliance on the adaptation of traditional types would, in turn, underlie the iconic house designs of Heinrich Tessenow.

It should be noted that Schultze-Naumburg was opposed not to industrialization per se, but to its cultural ravages, as pointed out by Christian Otto, "Modern Environment and Historical Continuity: The Heimatschutz Discourse in Germany," *Art Journal* 43 (summer 1983): 148–157. Naumann, Scheffler, and Muthesius shared that concern but differed in their analysis of cause and cure and, ultimately, in their political agendas.

[27] For example, in 1897 Alfred Lichtwark praised the "*Typus*" of traditional Hamburg houses, developed during the Middle Ages around the needs and ways of life of shipmasters and fishermen, and then formalized by classicism during the eighteenth century: Alfred Lichtwark, "Das alte Hamburger Haus" and "Schiffer- und Fischerhäuser," later incorporated into his book *Palastfenster und Flügelthür* (Berlin, 1899). And in 1904 Schultze-Naumburg wrote that people in earlier times "were wary of improvising quickly on their own what can only be the cumulative work of generations: creating the type, which the artist must fully master in order then to deviate from it according to the specific task" ("hüteten sich davor, kurzer Hand aus Eigenem heraus das leisten zu wollen, was nur die Arbeitssumme von Geschlechtern sein kann: das Gestalten des Typus, den der Künstler auswending beherrschen muss, um ihn dann des Einzelaufgabe entsprechend abzuwandeln"): *Kulturarbeiten*, vol. 3, *Dörfer und Kolonien* (Munich, 1908; first edition 1904), 32.

The notion that types emerge anonymously went back to Gottfried Semper, a source whom Muthesius mentioned explicitly in his speech "Wo stehen wir" (1911), as noted by Schwartz, *Werkbund*, 123. Semper stressed that types arising from use and function (for example, the type of a cup) are independent from time and place: Semper, *Kleine Schriften*, ed. Manfred and Hand Semper (Berlin and Stuttgart, 1884), 269. Schultze-Naumburg used the same argument for more nationalistic purposes, focusing on more complex types characteristic of specific German situations.

[28] Walter Riezler, statement during the discussion at Cologne. Full text in Deutsche Werkbund, *Werkbund-Arbeit der Zukunft*. Excerpt in Neue Sammlung, *Zwischen Kunst und Industrie*, 105–107.

[29] As already suggested, by conflating the two discourses Muthesius was

building on the thinking of his mentors Scheffler and Naumann, who had already coopted a traditionalist and ruralist concept to support an industrial urban argument, for example in 1901 and 1904, when they had pointedly used two words dear to the traditionalists, *Volkskunst* and *Volkstil*, to advocate an urban and industrial material culture. Karl Scheffler, "Volkskunst," *Dekorative Kunst* 4/4 (January 1901) in *Die Kunst* 4 (1901): 140–144; Friedrich Naumann, "Die Kunst im Zeitalter der Machine," *Der Kunstwart* 17 (July 1904). Scheffler came back to this theme repeatedly in the first years of the century; Naumann embedded it in the notion of type with his "Kunst und Industrie" of 1906 (see n. 24).

[30] Le Corbusier, *Vers une architecture* (Paris, 1923), 106–107, in the chapter titled "Des yeux qui ne voient pas. . . III: Les autos." This chapter was first published as an article two years earlier in *L'Esprit Nouveau* 10 (summer 1921). Without raising the question of its prewar German sources, Thilo Hilpert has already noted Le Corbusier's conflation of industrial and traditional ideals into an "industrial folklore;" Thilo Hilpert, *Le Corbusier 1887–1987. Genius. Atelier der Ideen, Laboratory of Ideas, Laboratoire des Idées* (Hamburg, 1987), 19, 194.

[31] Le Corbusier had certainly been exposed to the ideas of Karl Scheffler and Peter Behrens while working for the latter in Berlin in 1910–1911; as mentioned in note 21, he could conceivably also have heard of Loos. But nothing in Le Corbusier's letters and notebooks of that time suggests an interest in *sachlich* ideas, other than Behrens's classicism. At that time, Le Corbusier was concerned with other issues. His tone changed only in 1913 after a trip to Germany, the probable acquisition of the *Jahrbuch des Deutschen Werkbundes* for 1913, and reading the two articles by Loos in French translation. By early 1914, articles and letters by Le Corbusier show that he was quickly absorbing the new ideas.

[32] Brooks, *Formative Years*, 23–91. On the importance of Ruskin in his formation see especially Patricia May Sekler, *The Early Drawings of Charles-Edouard Jeanneret (Le Corbusier) 1902–1908* (New York, 1977). Le Corbusier's original name was Charles-Edouard Jeanneret: he began using the pseudonym Le Corbusier in 1920.

[33] Alain Clavien, *Les Helvétistes; Intellectuels et politique en Suisse romande au début du siècle* (Lausanne, 1993). I thank Françoise Frey, the former curator of the Le Corbusier collection at the Bibliothèque de la Ville, La Chaux-de-Fonds, for suggesting this important reference to me.

[34] On L'Eplattenier see Sekler, *Early Drawings*, 1–47 passim, and the exhibition catalogue *Charles L'Eplattenier, 1874–1946* (La Chaux-de-Fonds, 1974).

[35] Clavien, *Helvétistes*, 13–56.

[36] Brooks, *Formative Years*, 185–191; Schweizer Baudokumentation, *Bauernhäuser der Schweiz* (Blauen, 1982), 1–12 with bibliography. Le Corbusier admired the farms of his region, and twice lived in them, during the winter of 1909–1910 and then again in 1911–1912, during the year following his Balkan/Mediterranean tour. His reason for living in these isolated buildings had more to do with lifestyle than architecture. Architecturally, his serious interest began only in the second sojourn, and it reflects the changes in attitude occasioned by the tour, discussed later in this article. Brooks makes the important point that, in his late work, Le Corbusier came back to his experience of these farms, transforming their funnel-shaped hearths into the assembly spaces of the Assembly building in Chandigarh (1951–1962) and of the church in Firminy (1960–1965).

[37] About Le Corbusier's stay in Germany during 1910–1911 and, more in general, about the influence of prewar Germany on Le Corbusier see the following, listed here in order of publication: Winfried Nerdinger, "Le Corbusier und Deutschland. Genesis und Wirkungsgeschichte eines Konflicts, 1910–1933," *Arch+* 90/91 (August 1987): 80–86, 97; Werner Oechslin, "Allemagne. Influences, confluences et reniements," in Paris, Centre Pompidou, *Le Corbusier, une encyclopédie* (Paris, 1987), 33–39, or, in German, "Le Corbusier und Deutschland: 1910/1911," in Werner Oechslin, ed., *Le Corbusier im Brennpunkt. Vorträge an der Abteilung für Architektur ETHZ* (Zürich, 1988), 28–47; Rosario De Simone, *Ch. E. Jeanneret—Le Corbusier. Viaggio in Germania 1910–1911* (Rome, 1989); Stanislaus van Moos, "Der Fall Le Corbusier. Kreuzbestäubungen, Allergien, Infektionen," in Vittorio M. Lampugnani, ed., *Moderne Architektur in Deutschland, 1900 bis 1950. Expressionismus und Neue Sachlichkeit* (Stuttgart, 1994), and Brooks, *Formative Years*, 209–253.

[38] There is no good biography of Ritter. Some useful information can be found in Josef Tscherv, *William Ritter, enfance et jeunesse, 1867–1889* (Melida, 1958); Josef Tscherv, *William Ritter 1867–1955* (Bellinzona, 1971); and Jean-Marc Rydlo, "Helvetus Peregrinus: William Ritter et la Slovaquie," *Hispo* (Bern) (October 1989): 7–20. My point of departure has been the substantial collection of works by Ritter kept at the Bibliothèque de la Ville, La Chaux-de-Fonds.

[39] Ritter's antisemitism is particularly obvious in his novel *Fillette Slovaque. Le cycle de la nationalité* (Paris: Mercure de France, 1903), and in his article "Magyars, Roumains et Juifs," *Demain* (Lyon) 1/19 (2 March, 1906): 10–13. His antagonism toward urbanized Germans and Americans can be inferred from Le Corbusier's correspondence with him.

[40] This position was articulated by the review *La Voile Latine*, published in Geneva from 1904 to 1910: on it see Clavien, *Helvétistes*. Ritter had a somewhat testy relationship with the review but shared its basic attitude, and a few months before Le Corbusier's grand tour he recommended to him a book by the most extreme of the review's collaborators, Alexandre Cingria-Vaneyre's *Les Entretiens de la villa du Rouet* (Geneva, 1908), which used the racial theories of J. A. de Gobineau to support a Mediterranean identity for French-speaking Switzerland. On this book see Paul Venable Turner, *The Education of Le Corbusier* (New York, 1977), 83–91.

[41] Earlier in his life, Ritter had spent time in Bucharest, and had written extensively about the Romanian painter Nikoulae Grigoresco. He had also written numerous articles about the artistic and political situation in Bohemia, Hungary and Rumania; and he had especially addressed the situation of the Slovak minority in articles and two novels, *Fillette slovaque* (see n. 39) and *L'Entêtement slovaque* (Paris, 1910), the latter read by Le Corbusier before his trip.

[42] At the time that he met Ritter, Le Corbusier was reading extensively while preparing a manuscript about urban design, "La Construction des villes." His notes mention Paul Schultze-Naumburg, the German theorist and preservationist whom we have already encountered. Le Corbusier also mentions Georges de Montenach and probably read Guillaume Fatio and Léandre Vaillat, three preservationists who wrote about Swiss vernacular architecture. All of these authors held ideas in line with those of Ritter, though Le Corbusier (a novice in their field) seems to have been interested mostly in technical points. Le Corbusier would rehash the ideas of Ritter and of most of these authors in an article written without much conviction for a popular audience in the summer of 1913: Charles-Edward Jeanneret, "La Maison suisse," *Les Etrennes helvétiques* (1914): 33–39. On Le Corbusier's manuscript about urban design see Brooks, *Formative Years*, 200–207. Le Corbusier's manuscript has recently been published as Charles-Edouard Jeanneret Le Corbusier, *La Construction des villes*, ed. Marc E. A. Emery (n.p., 1992).

[43] Behrens's classicism was itself part of the same *sachlich* interest in modern vernacular, because it was specifically inspired by German architecture around 1800, when the German bourgeoisie first attained a high level of self-consciousness. German critics contemporary with Behrens, like Alfred Lichtwark, Paul Schultze-Naumburg, Karl Scheffler, and Paul Mebes, saw classicism around 1800 as a sort of bourgeois vernacular. But little in Le Corbusier's letters suggests that he understood this implication of Behrens's style while he was working for him: his attention was focused on learning the formal discipline of classicism, an architectural language very different from that of the Arts and Crafts aesthetic in which he had been educated. On the return to classicism in early twentieth-century Germany see Stanford Anderson, "The Legacy of German Neo-Classicism and Biedermeier: Behrens, Tessenow, Loos and Mies," *Assemblage* 15 (October 1991): 62–87.

[44] "Voilà l'énorme lampe de sacrifice qui s'allume. Et combien il est dur de vivre chaque heure en sacrifiant!" Le Corbusier to Francis Jourdain, 21 December 1913, in Le Corbusier'a copybook, Bibliothèque de la Ville, La Chaux-de-Fonds, LCms89.

[45] Le Corbusier, *Vers une architecture*, 16, 48–63, 161–182: the famous definition reads, in full: "L'architecture est le jeu savant, correct et magnifique des volumes assemblés sous la lumière." Le Corbusier came back to the theme of proportions later in his life, with his book *Le Modulor, essai sur une mesure harmonique à l'échelle humaine applicable universellement à l'architecture* (Paris, 1942).

[46] On Le Corbusier's skyscrapers see Francesco Passanti, "The Skyscrapers of the Ville Contemporaine," *Assemblage* 4 (October 1987): 53–65. On the proportions of the Villa Stein see Roger Hertz-Fischler, "Le Corbusier's 'Regulating Lines' for the Villa at Garches (1927) and Other Early Works," *JSAH* 43 (March 1984): 53–59.

[47] Since this paper is not primarily concerned with Le Corbusier's ideas about form, a sketchy indication of sources will suffice. Le Corbusier's notion of "le jeu . . . des volumes . . . sous la lumière" was built on the ideas of Charles Blanc, the mid-nineteenth-century theorist, and of Maurice Denis and Julius Meier-Graefe, two art critics much in view in 1900–1914. His correspondence shows that he read Blanc in 1908, and he owned books by both critics: see Brooks, *Formative Years*, 68, and Turner, *Education*, 234–235. He certainly discussed the ideas of both with his travel companion August Klipstein on the way to Istanbul. Blanc's ideas, in turn, were an eclectic combination of eighteenth-century aesthetics and Platonic and German Idealist notions. The interest in proportional systems probably came from the late-nineteenth-century architectural theorists Auguste Choisy and August Thiersch: see Brooks, *Formative Years*, 447.

[48] Pierre Reverdy, "L'Emotion," *Nord-Sud* 8 (October 1917), and "L'Image," *Nord-Sud* 13 (March 1918). Both essays are reprinted in his *Oeuvres complètes: Nord-Sud, Self defence et autres écrits sur l'art et la poésie (1917–1926)* (Paris, 1975), 52–60 and 73–75. In the first essay, Reverdy argued that a work of art is constructed through elements taken from life. In the second, he argued that the poetic image is born "from the bringing together of two more or less remote realities" ("du rapprochement de deux réalités plus ou moins éloignées"). Christopher Green has pointed out the importance of Reverdy for the painting of Juan Gris in the late teens, and for that of Le Corbusier in the late thirties: Christopher Green, *Cubism and Its enemies* (London and New Haven, 1987), passim; Christopher Green, "The architect as Artist," in London, Arts Council, exhibition catalogue, *Le Corbusier, Architect of the Century* (London, 1987), 117.

[49] "La poésie n'est que dans le verbe. Plus forte est la poésie des faits. Des objets qui signifient quelque chose et qui sont disposés avec tact et talent créent un fait poétique." Le Corbusier, *Vers une architecture*, 113, in the chapter titled "Des yeux qui ne voient pas. . . III: Les autos."

[50] Mary Caroline McLeod, "Urbanism and Utopia: Le Corbusier from Regional Syndicalism to Vichy," Ph.D. diss., Princeton University, 1985.

[51] Stanford Anderson has addressed the question of continuity and change in architecture using a conceptual model derived from Karl Popper's theory of scientific knowledge. See, for example, Stanford Anderson, "Architecture and Tradition," *Architectural Association Journal* 80 (May 1965); and "Types and Conventions in Time: Towards a History for the Duration and Change of Artifacts," *Perspecta* 18 (1982): 108–117, 206–207.

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