Hector Guimard’s Métro: The Adaptation of an Architecture

In the essay for “An Architect’s Opinion of ‘L’Art Nouveau,’” written for Architectural Record, the French architect Hector Guimard puts great emphasis on the idea of a national art, which he claimed springs forth from through the medium of the artist surrounded by his or her cultural milieu. “It is upon us architects that falls...the duty of determining, by our art, not only artistic, but also the civilizing and scientific evolution of our time.”¹ Guimard wrote the article in 1902, about forty years after The Origin of Species was first published, but a strong dependence on the concept of evolution remains evident. Furthermore, the philosopher Henri Bergson’s contemporary philosophy, including his thoughts on evolution as well as on time (especially with respect to Einstein’s theories of relativity), has strong concordant relationships with Guimard’s work, with respect to his use of interrelationships between parts, between part and whole, and his use of different materials. These are not necessarily questions of influence, but more along the lines of what Fredric Jameson calls a “cultural dominant,” that is, correlations without direct or necessary derivation.²

Guimard’s interest in an almost deterministic concept of cultural evolution is apparent in his discussion in the same article as above, stating that

by studying the principles of art which have guided artists from the earliest period down to the present day, it is possible to make a selection, and that if we will take the trouble to find out how our predecessors managed to discover them, we can by applying the same method to the conditions prevailing in our own times, deduce therefrom the proper modern rules.³

² This is obviously taken radically out of context, but it is a convenient description. For Jameson’s use of the term, see the introduction to Postmodernism, or, The Cultural Logic of Late Capitalism. Durham, North Carolina: Duke University Press, 1991, p. 4.
³ Guimard, op. cit., p. 41.
Guimard writes of “deduc[ing] three principles which should have a predominating influence in all architectural productions”: logic, harmony, and sentiment. Sherban Cantacuzino points out that these principles may be read to in terms of a convenient transposition of the Vitruvian triad, a reading which is reinforced by the fact that Guimard presents his principles as a necessary deduction, rather than a subjective or even absolute assertion. Guimard is obviously not interested in iconoclasm (i.e., in eschewing his training at the École des Beaux-Arts), but rather in adaptation. This is apparent in Guimard’s comments on the acknowledged influence Viollet-le-Duc. In the Entretiens sure l’Architecture, Viollet argued for “‘architectural forms adapted to our times,’ instead of disguising them ‘by an architecture borrowed from other ages.’” This quote is most interesting in the context of Guimard’s remark that “I have merely applied the theory of Viollet-le-Duc, but without allowing myself to be seduced by medieval forms.” Thus one can see again that Guimard’s arguments for both nationalism and contemporaneity are results of his argument for the continual adaptation of contemporary art forms and methods from one time or culture to another.

This idea of parametrically contextual adaptation is surprisingly consonant with Henri Bergson’s discussion of the élan vital 5 years later in Creative Evolution (originally published 1907). Bergson writes: “Life does not proceed by the association and addition of elements, but by dissociation and division.” If, for Guimard, society (in the broadest sense) engenders and produces culture (in the narrow sense of the arts), then the multiplicities of various nationalisms

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4 Ibid.
7 Guimard, Letter to L.C. Boileau, quoted in Cantacuzino’s “Hector Guimard,” op. cit., p. 13. Citation not provided.
should produce a variegated array of cultural formations. In the *Architectural Record* article he suggests this:

Seeing that the ‘Art Nouveau’ is now crossing the Atlantic to your shores, I hope that my American confrères will not rest content to be mere copyists, but will be creators...the principles by which I am guided in producing French architecture would enable them just as easily to create an American art....

However this also seems to imply a certain passivity on the part of the architect, as in M.F. Hearn’s reading of Viollet-le-Duc, that “as much as the Romans and other s might admire Greek orders, their adoption of Greek forms would never result in the same kind of architecture.”

Therefore Guimard’s challenge to American architects, though perhaps at first glance hypocritical (based on his own comfort with application of Viollet, while simultaneously asking the Americans not to be “mere copyists”), is actually a charge to the Americans to adapt or apply Guimard’s principles to their processes.

In an interesting confluence, both Viollet and Bergson argue for a certain type of organicism, which is obviously significant for Guimard as well. Viollet wrote, “There must be a connection between the parts; there must be a dominant idea in this assemblage of services....” Bergson’s somewhat more complex conception of organicism is imbued in his understanding of evolution, which Deleuze describes in the following terms: “Evolution takes place from the virtual to actuals,” such that “what coexisted in the virtual ceases to coexist in the actual and is distributed in lines or parts that cannot be summed up, each one retaining the whole, except from a certain perspective, from a certain point of view.” Therefore for Bergson, both part and whole are important in the retention of pluralism within monism, and vice versa. Bergson’s explication of

9 Guimard, op. cit., p. 49.
part and whole is executed on the grounds of subjective experiences of time with respect to a collective or actual time, about which Deleuze explains, “There is only one time (monism), although there is an infinity of actual fluxes (generalized pluralism) that necessarily participate in the same virtual whole (limited pluralism).”

In this system, neither part nor whole takes absolute precedence, but instead fluctuate back and forth.

In its architectural manifestation for Guimard, evolution seems to result in an argument for formal autonomy. A contemporary critic, Henri Frantz, commented on this in counterpoint to other ornamental design in France, saying that Guimard’s goal was “to escape completely from all ornament directly borrowed from nature, or, to put it shortly, from floral design....Line alone is what M. Guimard relies on; he gets all of his effects from the use of ‘line’ or combinations of lines.”

Or, in Guimard’s words, “In [the work of Victor Horta] the decorative base is no longer the leaf and the flower, but simply the stem.” In other words, a line no longer has to describe contour; it is free to take on an ontological status of its own. Because lines or vectors imply directionality or movement, the line becomes an expression of the *élan vital*, about which Bergson writes, “Nature’s simple act has divided itself automatically into an infinity of elements which are then found to be coordinated into one idea, just as the movement of my hand has dropped an infinity of points which are then found to satisfy one equation.”

Guimard sounds surprisingly similar, in a quote from a lecture in 1899 saying, “forms are engendered by ever-

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13 Ibid., p. 82.
16 Bergson, op. cit., p. 91. One can see in this passage where Deleuze’s affinity for Bergson comes from: Deleuze’s priority of the Leibnizian curved line over Descartes’ line described by points is apparent here. See Gilles Deleuze, The Fold: Leibniz and the Baroque, trans. Tom Conley. Minneapolis, Minnesota: University of Minnesota Press, 1993, p. 6.
differing movements; you have an impression of unity achieved by infinite variety. And what decorative scheme could be finer, more intoxicating...see how each tree, each bush, differs from its neighbors: not one branch resembling another; no two flowers are alike."\(^{17}\) Here Bergson’s conception of evolution, which dictates differentiation as the driving force of life, is echoed almost exactly by Guimard’s fascination with the infinite variation of nature. Bergson opposes his theory to “finalism,” wherein a whole takes precedence over the various strains of change, analogically as in a Beaux-Arts plan where functions are placed in a predetermined planimetric shape. However he also contrasts his theory with “mechanistic” ones, in which forms take on new and additional characteristics in parts but no necessary correlation with the whole exists, as in the Arts and Crafts style where functions aggregate to form a non-organic whole.\(^{18}\)

This schema of semi-organic Differentiation, then, is the importance of Guimard’s designs for the Paris Métro. Each freestanding entrance to a station marks a point in the network of the city, but acting as a whole the Métro was a novel form of movement around the city. Each node, then, became only a single moment on complex sets of lines representing the paths of each commuter. Furthermore, in their correlation the various different Métro stations acknowledge their coexistence and simultaneity, while retaining difference, as well as a tentative submission to an overarching whole. Deleuze’s commentaries on Bergson express a similar relation: “Duration is indeed real succession, but it is so only because...it is virtual coexistence: the coexistence with itself of all the levels...” In other words, when exiting the Métro at the Porte

\(^{17}\) Guimard, quoted by V. Champier in “Le Castel Béranger et M. Hector Guimard, Architecte,” in Revue des Arts Décoratifs, January 1899, p. 10. Quoted in Borsi, op. cit., p. 68. My italics; note that Guimard speaks of the impression of unity, based on variety, and not simply unity. The variety doubtless remains variegated, but an impression of a whole is achieved.

\(^{18}\) Bergson writes, “Life does not proceed by the association and addition of elements, but by dissociation and division.” He defines mechanistic theory as that “which means to show us the gradual building-up of the machine under the influence of external circumstances...But, whatever form this theory may take, supposing it avails at all to explain the detail of the parts, it throws no light on their correlation.” In contrast, finalism “says that the parts have been brought together on a reconceived plan with a view to a certain end.” See Bergson, op. cit., pp. 88-89.
Dauphine station, one understands a connection with, and the coexistence of, all of the other stations in the city.

Interestingly, Claude-Nicolas Ledoux’s tollgate projects could be understood to represent a similar ambition: that of a family of entryways to parts of Paris. The juxtaposition of these two public projects is nowhere more evident than at Parc Monceau, where one of the only remaining Ledoux barrières stands next to one of Guimard’s only remaining functioning Métro stations [Fig. 11]. Both Guimard’s and Ledoux’s serial architectures are meant to be entrances into the city, and in many respects are similar in their intents. However though each of Ledoux’s buildings is different in its own location, they do not have a specifically derivational relationship with one another. Although Anthony Vidler mentions Ledoux’s “transformations of an original type,” [Fig. 14] he also writes, “What gave all the barrières their unity was Ledoux’s commitment to a radical form of primitivism…,” and that some were “less reducible to types, or rather, formed types of their own, invented specifically by Ledoux.”

In contrast, Guimard’s Métro project was comprised of three variations on a single theme, and several subsidiary variations within each of those three.

However perhaps the most significant point of comparison is the respective use of ornamentation in Ledoux and Guimard. Ledoux’s projects represented a stripped-down Classicism that was by no means strictly historical in the sense of Laugier’s influential treatise. Guimard and Ledoux shared a relationship with Classicism, such that neither was especially constricted by his training, but both were progressive in their loose interpretation of its

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20 Cantacuzino discusses the differences between the station types and their uses in his article “Hector Guimard,” op. cit., pp. 17-19.

21 Laugier published the *Essai sur l’Architecture* in 1753.
principles. Ledoux’s monumental Classicism was meant to assert a “regular, masculine, and understated order.” However where Ledoux saw himself as establishing a “new public genre of architecture,” Guimard’s project was far more ambivalent towards history, as in a letter to the journalist L.C. Boileau: “I am the first to be surprised that with the classical principles one could be so new…decoratively, my principles are perhaps new, but they are grafted on to those applied by the Greeks…I am not the cause of the new circumstances of our time…” Here again Guimard’s Bergsonian evolutionary strain is apparent; his attitude towards time is governed by adaptation to context, rather than the rejection of history of which he has been accused.

In Guimard’s Métro stations, the city may be understood as an interconnected series of paths of transportation; each of the three types reads as a topological transposition of the others. The first type (A) [Figs. 1, 9, 11, 13] has railings and stalks supporting a simple Métropolitain sign and amber lamps [Fig. 27]; the second (B) [Figs. 5, 12, 15-21] is a glass and cast iron enclosure for a staircase with so-called “dragonfly” glass roof; the third (C) [Figs. 2, 3, 7] are fully-enclosed waiting rooms with seats.

Guimard’s logic for the distribution of different types is clearly hierarchical, but not in a straightforward way based on amount of use; the Tuileries station is a pared-down type B station, whereas some of the busiest stations, such as Champs Élysées or Châtelet, are of the simple A type or simpler variations on the B type. The assignment of the different types and the variations thereupon may have been based on efficiency, such that stations with higher use are less encumbered by large structures. However regardless of his

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22 Ledoux, quoted in Vidler, _Ledoux_, 2006, p. 110.
23 Ibid.
25 Naylor writes of Guimard’s “rejection of the Beaux-Arts traditions…” For reasons outlined above, I am far more hesitant to describe Guimard in terms of rejection or iconoclasm than Naylor seems to be. See Naylor, op. cit., p. 15.
26 Cantacuzino, op. cit., p. 19.
actual system, Guimard’s theory of natural adaptation, and therefore his affinity with Bergson, is manifest in the clear and direct interrelation between the various stations. Guimard achieved this part-to-part correlation through the standardization and modularization of glass and cast iron parts [Fig. 22]. Deleuze’s emphasis on Bergsonian “virtual coexistence” easily fits into this context; any Métro user is able to identify with others through his or her specific location.

Alternatively, each station was also meant to act as a node, each one of which was connected to others through train transport, such that none stood on its own. Bergson discusses this fluctuation between the preference of node or of connection: “there is, on the one hand, a multiplicity of successive states of consciousness, and, on the other hand, a unity which binds them together.” In his comments on this passage, Deleuze very specifically points out that there is not a dialectical or oppositional relationship between the “One” and the “Multiple.” In other words, several successive instances cannot add up to form duration. This part-to-whole relationship suggests the project of Étienne-Jules Marey’s and Eadweard Muybridge’s photographic and cinematographic experiments, wherein temporal succession is constructed as a continuum of moments. However Deleuze argues that one would be mistaken to understand that continuum for actually being continuous, or an example of “duration.” Under this logic, each station represents a singular part in an organic whole, where the whole can not simply be additively comprised of those parts, but the parts must be used and understood on their own.

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28 Ibid. See also Helen Clifford and Eric Turner, “Modern Metal,” op. cit. p. 223: “The castings, hardy and interchangeable, were practical and functional....Each entrance as a whole was completely different, yet all parts had standardized dimensions.” No Type C stations remain; the only remaining Type B stations are at the Port Dauphine and the Place des Abbesses. Information concerning popularity of stations from: http://travel.lovetoknow.com/wiki/Paris_Metro.
29 “Duration...is virtual coexistence: the coexistence of all the levels, all the tensions, all the degrees of contraction and relaxation (détente). Thus, with coexistence, repetition must be reintroduced into duration...” Deleuze, op. cit., p. 60.
31 Deleuze, op. cit., pp. 45-49.
32 Ibid., pp.46-47.
Interestingly, the journalist Boileau glibly remarked, “M. Guimard did not believe it possible to achieve a total unity in a work, whatever its complexity, without designing everything down to the smallest detail.”\textsuperscript{33} [Figs. 25-28, 30-32] At his most ambitious, however, Guimard never seems to discuss the achievement of “unity” in his designs. In fact, unity seems to be either impossible or inevitable in the Bergsonian system; impossible, because a whole is not a simple agglomeration of all of its parts, but inevitable because a whole, no matter how disparate, will always exist. In Bergson, Deleuze reads simultaneity, such that “moments do not succeed…one another, except for a consciousness that keeps them in mind…”\textsuperscript{34} Similarly, Guimard’s architecture allows the coexistence of all the different Métro stations that align with each other and form a whole through their strong formal language, thereby forming the city into a whole. However here another congruency between Guimard and Bergson arises in their common fascination with differentiation, as if generalization is an idea to be overcome. Boileau’s assessment of Guimard that he designed down to the smallest detail is tantamount to Deleuze’s reading of Bergson in which part and whole are not opposites, such that evolution is the continual process of refinement. Deleuze quotes Bergson from \textit{The Creative Mind}: \textquotedblleft What really matters to philosophy is to know \textit{what} unity, \textit{what} multiplicity, \textit{what reality} superior to the abstract one and the abstract multiple is the multiple unity…\textquotedblright;\textsuperscript{35} In Bergson, therefore, locality or particularity of the situation is as important as nationalism is for Guimard, because these are the conditions that dictate exactly how differentiation will occur.

Not only is there evidence for this in Guimard’s variations on designs for the Paris Métro, but this sensibility can be found in his attitude toward uses of materials. Cantacuzino makes the mistaken assertion with respect to a drawing for a fireplace in the Coilloit House that “one feels

\begin{footnotes}
\footnotetext{32}{Ibid.}
\footnotetext{34}{Deleuze, \textit{op. cit.}, p. 48.}
\footnotetext{35}{Deleuze, \textit{op. cit.}, pp. 44-45.}
\end{footnotes}
that Guimard’s ornament did not arise out of the intrinsic qualities of the material and that a fireplace which was intended to be made in cast iron could equally well have been carved in wood.”36 However, Naylor cites an interview with Guimard conducted in the magazine *Soleil*, in which he discusses this exact issue. Significantly, he makes very specific points concerning the materials he uses, and the possibilities of each based on their natural properties:

> “Au point de vue de l’ornamentation, j’ai pensé qu’il fallait donner aux œuvres décoratives une forme adéquate à la matière qui sert à les faire.” That, he explains, is why the stone is “moulded” [sic] rather than carved with fruit and vegetable forms; that is why the iron is sinuously curved, and why he attempts, when using wood, to demonstrate its branch-like qualities ("les branches d’arbres no sont pas carrées et les angles n’existent point dans la nature").37

He understands each material to have properties in its own right, which must inform its use. The Métro stations’ iron and stone, then, is cast and engraved in ways that he saw as appropriate not just to the specific material, but also to his time. In the magazine *La Construction Moderne*, Guimard wrote, “Why condemn architects for using outmoded decorative devices when component manufacturers can only supply Louis XVI models,”38 displaying his frustration with materials that he saw as poorly adapted to the time.

Furthermore, Viollet-le-Duc’s influence is evident again here, in his charge for the development of an architecture for which iron was an appropriate material. Viollet writes, “we…should try to discover other [forms] that harmonize with the properties of iron.” Guimard seems to have been comfortable with using iron for the forms of his Métro stations, presumably based not only his criterion that iron should be “sinusouly curved,” but also according to Viollet’s discussions of material. Although this is not especially remarkable, Guimard’s pejorative quote above concerning manufacturers sounds almost exactly similar to Viollet: “With

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36 Cantacuzino, op. cit., annotation to Figure 26, p. 29. Repeated in text, p. 30.
37 Naylor, Gillian, op. cit., p. 12. Guimard is quoted from an interview with Louis Schneider from *Soleil*, which she cites as “an undated press-cutting in the files of the Archives de la Société Historique d’Auteuil et de Passy.
our present appliances for iron structure, a decorative effect cannot be obtained except at considerable cost, for our manufactories do not supply us with the elements required for producing it….We have not seriously considered how to make the best use of the material by giving it forms appropriate to its nature.”39 Whether or not Guimard is successful in his attempts at particularity in material is irrelevant (though his use of iron is doubtlessly innovative); it is rather his system of adaptation of materials that allows him to use them specifically in certain ways based on context.

Although Guimard’s use of an adaptive sensibility for relationships in his architecture was not necessarily entirely new, his system was. In other words, Classicism could be understood in similar adaptive terms, such that a specific context would dictate the use of the Corinthian or Ionic system, which would then inform the rest of the design of the building. However what defines Guimard’s importance is his use of the sensibility of his own invented system that was specifically not Classical. Perhaps this, then, describes the evolution of architecture: Guimard forcefully adapted his Classical training to what he understood to be the architecture appropriate not only for his time, but for the specificity of its creation and its use.40

40 “Duration is the continuous progress of the past which gnaws into the future and which swells as it advances.” See Bergson, Creative Evolution, op. cit., p. 4.
Figures

Figure 1 Le Style Guimard no. 2, Self-promotional postcard by Guimard showing the Champs-Élysées Métro Station, station type A

Figure 2 Le Style Guimard no. 17, Bastille Métro Station, variation on station type C
Figure 3 Le Style Guimard no. 18, Etoile Métro station, variation on station type C

Figure 4 Le Style Guimard no. 19, Porte Dauphine Métro Station, variation on station type B
Figure 5 Postcard showing the Maillot Station, variation on station type B

Figure 6 Postcard showing the Maillot Station
Figure 7 Postcard showing the Bastille Station, variation on station type C

Figure 8 Postcard showing the Bastille Station
Figure 9 Postcard showing the Champs-Élysées Station, station type A

Figure 10 Postcard showing the Étoile Station, variation on station type C
Figure 11. Parc Monceau Station, Station Type A
Claude-Nicolas Ledoux’s Parc Monceau Barrière is visible in the background
Figure 13 Île de la Cité Station, station type A
Figure 14 Anthony Vidler’s axonometric comparative drawings showing relationships between Ledoux’s various barrières; the one for Monceau is bordered at the top

Figure 15 Front elevation of type B station
Figure 16 Plan of type B station

Figure 17 Side elevation of type B station
Figure 18 Front elevation of Tuileries variation on type B station

Figure 19 Side elevation of Tuileries station
Figure 20 Plan of variation on type B station

Figure 21 Back elevation of type B station
Figure 22 Parts of one variation on type A station
Figure 25 Detail drawn by Guimard showing sign ironwork

Figure 26 Detail drawn by Guimard showing base of column
Figure 27 Stalk on type A station containing lamp

Figure 28 Variation on type B station with concave roof for water collection
Figure 29 Variation on railings

Figure 30 Ironwork connection detail between column and Métro sign
Figure 31 Iron and stonework detail inside Porte Dauphine station.

Figure 32 Column and roof detail inside Porte Dauphine station.
Works Consulted


