

**SIGFRIED GIEDION (2013) *MECHANIZATION  
TAKES A COMMAND: A CONTRIBUTION TO  
ANONYMOUS HISTORY*. MINNEAPOLIS:  
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Bryan E. Norwood

The reissue of Sigfried Giedion's (1888-1968) *Mechanization Takes Command* is a welcome addition to the growing body of architectural history and theory texts available for historiographic reconsideration. When it was first published in 1948, it was reviewed a number of times both within and outside of architectural discourse. Witold Rybczynski's recent retrospective review of the book outlines a schism that marked these earlier appraisals. On the one hand, generally positive reviews from Lewis Mumford, Arnold Hauser, Paul Zucker, and Marshall McLuhan characterized many of the architectural, art historical, and non-academic responses. The reactions of academic historians and sociologists from outside the fields of art and architecture were however less-than-positive, critiquing Giedion's selective, subjectivist, aesthetic, and at moments overly metaphysical interpretations of the objects of industrialization.

The division that characterizes these reactions is not particularly surprising, as Giedion's approach to historical material throughout his entire career tended towards both selective precision and unflinching generalization. These propensities often make his decisions about content and narrative appear arbitrary, especially when lifted out of the context of his intellectual project that, while historically informed, had particular aims for the contemporary practice of architecture. Though originally trained as an engineer, Giedion was also an heir to a bold vein of German art history—a lineage he stakes out in the introduction to *Space, Time and Architecture* (1941)—that developed, in large part, through the influential work of the cultural historian Jacob Burckhardt and the methodical neo-Kantian psychology of the art historian Heinrich Wölfflin (who was Giedion's doctoral advisor). Combining the

influence of these two educational backgrounds in *Mechanization Takes Command*, Giedion paid careful attention to the details of industrial design and engineering (devoting, for example, twenty-five pages to the development of the modern lock) yet followed this kind of focused analysis with grand claims about the epochal relationship of industrialization and art. For example, Giedion saw Taylor and Gilbreth's quantitative scientific management and Joan Miro's abstract expressionism as intertwined because in the modern age 'movement and the symbols of movement become of one flesh with our being' (2013: 51-76, 113).

The Wölfflinian penchant for combining detail with abstraction, the particular with the general, specifics with metaphysics, was crossed with another tendency by Giedion: a presentist approach to the past that the architectural historian Manfredo Tafuri famously characterized as 'operative criticism' (Tafuri, 1980: 141, 151-58). Giedion always wrote history with a purpose for the present, as the concluding sentence of *Mechanization Takes Command* reveals so clearly: 'Every generation has to find a different solution to the same problem: to bridge the abyss between inner and outer reality by re-establishing the dynamic equilibrium that governs their relationships' (2013: 723). The study of the history of mechanization aims to help humans find a balance between themselves and their environment—to re-establish 'man in equipoise' (720). This operative goal is bound up with the need to re-unite 'thinking' and 'feeling' that the nineteenth-century had torn asunder by separating engineering and aesthetic production and that Giedion had laid out as the project of modern architecture ten years earlier in the historical narrative of his 1938 Norton lectures at Harvard, which were developed into *Space, Time and Architecture*. Giedion did actively promote particular approaches to modern architecture through his founding and leadership roles in CIAM (Congrès International d'Architecture Moderne, 1928-1959), but, more importantly, as a historian he attempted to organize the narrative that explained and gave direction to contemporary architectural activity.

The combination of selective attention to technical details with grand claims about the *Zeitgeist* and a proclivity for using history to making poetic recommendations for the present has made Giedion's writing some of the most undeniably influential historical work in twentieth-century architecture schools. However, it has also turned his work into a punching bag for many contemporary architectural historians. Much of the critique has naturally been directed at the

instrumental grand narrative of the architecturally-focused *Space, Time and Architecture*. However, I would like to suggest that *Mechanization Takes Command* can provide a way out of the simplistic narrativ operativity that characterized the earlier, more famous work.

At over 700 pages with just over 500 images, *Mechanization Takes Command* appears at first glance as an encyclopedia of the mechanization of technology, work, and life. With seven sections and a conclusion, the book begins with introductions to the concepts of ‘anonymous history’ and mechanical movement and proceeds thematically through the history of the mechanization of craftwork, agriculture and food production, furniture, household work, and the bathroom. However, many subjects were simply left out, as reviewers pointed out. There is little to no mention of the cinema, air-conditioning, electricity and lighting, military technology, steamships, airplanes, or automobiles. And understood as any other type of history—economic, social, cultural, etc.—*Mechanization Takes Command* comes up short, as it fails to deal with existing scholarship in these fields and at best provides a selective material history related to these domains. Of course, Giedion states at the outset of the book that it is not a global overview, but rather an attempt to reveal a new field of investigation (Giedion, 2013: vi). Perhaps then, as Reyner Banham claimed, error has arisen more in the reception of this book, which has tended toward the view that it exhaustively covers mechanization, than in the book itself (1984: 15). The question then is how exactly to characterize this new field of historical investigation.

The work of architectural historians over the last decades has been marked by a continual struggle with the question of how to incorporate social, material, and cultural history. The American Society of Architectural Historians was founded in 1940 with one of its key aims being to guide architectural history to take more thoroughly into account sociology and in particular intellectual history (Wright, 1990: 34). Likewise, the *Istituto di Storia dell'Architettura* in Venice, where Tafuri took over as chair in 1968, likewise sought to bring the political into the architectural (Leach, 2007: 31). To take one among many recent written examples, George Barnett Johnston's *Drafting Culture: A Social History of Graphic Standards* (2008) looks at the social conditions that underlined the development of architectural office practice in early twentieth-century America. One could list countless other examples

in the later half of the twentieth century, both in institutions and architectural scholarship.

Of course, the goal of an architectural history that takes into account cultural and social conditions had presence well before the mid-twentieth century. Henry Adams's 1905 *Mont-St.-Michel and Chartres* marked a key early attempt to integrate the cultural and social in American architectural historiography, and in the lecture notes of early university-based architectural historians, there is plenty of evidence of a desire to link the history of architecture with the history of the people that built it. In the German historiography familiar to Giedion, Paul Frankl's 1914 *Die Entwicklungsphasen der Neueren Baukunst* (translated as *Principles of Architectural History* in 1968), was organized around four conceptual categories for writing architectural history, the final of which was *purposive intention* (the first three being spatial form, corporeal form, and experiential form). This category, developed in part based on the work of Burckhardt, Wölfflin, and Alois Reigl, aimed to capture architecture as the material manifestation of cultural purpose.

While Giedion's work is certainly related to the contextual concerns of all of these studies, there are particular aspects of the way in which Giedion inflects his project that makes it unique. These aspects, of which I will call out three, are what make *Mechanization Takes Command* particularly useful in considering the purpose and character of the project of architectural history today.

### **A History of That Which Hides Itself**

On a first pass, we could understand Giedion as simply addressing key aspects of contemporary architecture that so often go historically and theoretically unconsidered. From the lock's development into an industrially-produced mechanism integral to the protection of the fortunes involved in large-scale banking and finance in the nineteenth century to the role of the hotel bathroom, and in particular the development of the industrially manufactured tub, in the standardization of the dimensions of the American home bathroom in the twentieth-century, Giedion is writing a history of objects that have tended to play largely tacit roles in the theorization of architecture (2013: 51-76, 628-712). As he writes in the first paragraphs of *Mechanization Takes Command*, 'for the historian there are no banal things' (3), an attitude that echoes the call in *Space, Time and Architecture* for the historian to learn from the

modern artist and ‘have the courage to take small things and raise them to large dimensions’ (Giedion, 1967: 4).

Mechanical operations and mechanically produced objects, so often unassuming and everyday, had been in Giedion’s sight long before the publication of *Mechanization Takes Command*, and indeed before *Space, Time and Architecture*, which focused largely on extraordinary works of architecture rather than the ordinary. Along with several colleagues, Giedion put on an exhibition on the history of the bath at the Zurich Kunstgewerbemuseum in 1935 entitled ‘Das Bad von heute und gestern’ [The Bath of Today and Yesterday], which was expanded to become a substantial section of *Mechanization Takes Command* (Geiser, 2010: 122-125). In 1939, he proposed an exhibition at the Swiss National Exhibition entitled ‘Der Tag des heutigen Menschen’ [The Day of the Modern Human], and later, on the other side of the Atlantic, he proposed a ‘Museum of the American Way of Living’ (142). A written precursor to *Mechanization Takes Command* can also be found in an unfinished multivolume manuscript that Giedion worked on in the mid-1930s entitled ‘Entstehung des Heutigen Menschen’ [The Emergence of the Modern Human]. Essentially a cultural history of industrialization, this manuscript has many thematic similarities to *Mechanization Takes Command*, while drawing mostly on European rather than American historical material (54, 130). In this sense, Giedion’s approach was not out of place with the scholarship of other architectural historians, as Lewis Mumford had published *Technics and Civilization* in 1934, the same year a show conceived by Philip Johnson (with Henry-Russell Hitchcock and Alfred Barr) was put on at MOMA entitled ‘Machine Art’ that showed industrial objects.

However, Giedion’s goal in *Mechanization Takes Command* is not only to write a history of things that has not yet written, but more importantly it is to further make us aware of the self-effacing function of mechanization—the way in which mechanization is able to make itself go unnoticed or, at the very least, unconsidered. This is not a history that fills gaps but a history of a process that has become so intertwined with our life that we have a tendency to naturalize it—it is an unwritten history because what is unwritten obscures itself. And further, it is not only a history of what is obscured but also of how the obscuring occurs.

For example, Giedion describes how in the ‘murder machinery’ of the slaughterhouse the mechanization of death begins to blur the

line between the workings of the machine and the end of biological life as '[d]eath cries and mechanical noises are almost impossible to disentangle' (2013: 240-46). His goal is not to regard this condition sentimentally nor to see mechanization merely in terms of the production of commodities, but to try to expose an essential condition that the mechanization of death brings out, one whose connection to the historical moment he makes overt:

What is truly startling in this mass transition from life to death is the complete neutrality of the act. One does not experience, one does not feel; one merely observes. [. . .] How far the question is justified we do not know, nevertheless it may be asked: Has this neutrality toward death had any further effect upon us? This broader influence does not have to appear in the land that evolved mechanized killing, or even at the time the methods came about. This neutrality toward death may be lodged deep in the roots of our time. It did not bare itself on a large scale until the War, when whole populations, as defenseless as the animals hooked head downwards on the traveling chain, were obliterated with trained neutrality. (246)

The essence of mechanization for Giedion is not merely the encounter of the biological with machined destruction but further the indifference to this destruction that mechanization produces. However, he does not want to reduce the meeting of the mechanical and the biological to the ending of life, as he also considers it in terms of the production of life through processes such as artificial fertilization. The project of *Mechanization Takes Command* is to draw out and distill the essence of a phenomenon that resists discretization.

Mechanization, like other objects, tools and processes, when properly studied can reveal 'fundamental attitudes to the world' (3). In this first sense, then, Giedion is performing what we might characterize as a sort of phenomenology—making present something usually tacitly experienced by saying it. And in doing this, he is attempting to move from minute particulars to abstract essences, to those things that fundamentally shape the conditions in which modern architectural practice takes place. History, on this reading, becomes a tool for teaching us something about our contemporary life by showing the historical development of a condition that wants to hide itself once developed.

## **A History of the Conditions that Have Made Architecture Possible**

A second way to understand the project of *Mechanization Takes Command* is as an attempt to mark out a major shift in architectural epochs, yet with almost no direct reference to contemporary architectural practice. Erwin Panofsky, in *Perspective as Symbolic Form*, argued that the formation of perspective in the Renaissance created a system through which the world could be understood, a system that rationalized the connection between individual perception and the infinite extension of mathematical space. This system has had ramifications central for architectural practice from the fifteenth-century to the present. In *Mechanization Takes Command* Giedion is arguing that the development of mechanization leads to the replacement of perspective with movement as the fundamental symbolic system (112-113).

What is important for Giedion in this epochal shift is not the mechanization of simple tasks but of ‘complicated crafts’ (5, 38). This is not the mechanization of isolated activity but of whole biological processes. Mechanization supplants what the human hand can do with ‘endless rotation’ (47), a condition visible in shifts in the organization and streamlining of the factory assembly line as well as in the mechanization of domestic tasks. Mechanization magnifies trends that began well before industrialization to ‘the gigantic’ scale (168); it intensifies a quantitative shift to the point that it becomes qualitative.

For Giedion, the questions the shift to an epoch of mechanized movement raises are by no means simple: ‘has movement, the basic concept of our world-image, been transposed, in distorted form, into human destiny?’ (168). That is, have we understood the movement of mechanization as something in itself, or have we failed to think mechanization properly and thus let it become an assumed aspect of all the movement of life? Have the hand and endless rotation become conflated? Indeed, the very question of man’s place in mechanization is up in the air for Giedion:

The assembly line and scientific management can be put to work within quite opposite economic systems. Their implications, like those of mechanization as a whole, are not unilaterally tied to any one system. They reach into depths of a basic human problem—labor—and the historical verdict will depend on how

far one may expect the human being to become part of an automaton. (126)

Mechanization is as much an epistemic problem as it is a material one because '[m]echanization is the outcome of a mechanistic conception of the world' (717). Our technological surroundings are in part a result of the way we have seen the world. The danger of mechanization that goes beyond earlier forms of technology is that it has the potential to totally remold 'life into ways for which a form is as yet lacking' (168). Mechanization has the potential to produce a new way of life. The problem for Giedion then is not mechanization in itself or simply harnessing its productive power, but in shaping our understanding of it. How do we give mechanization form? How can we make an image of it so that we may understand its qualities?

Giedion's concern for finding an image is in part a struggle against nineteenth-century design that failed to do so. Mechanism and form—that is the method of production and its image (which Giedion also links to the split of thinking and feeling)—were pulled apart by 'the ruling taste,' a transitory phenomenon that absorbs the feeling of the masses into aesthetic style without producing any real relationship to productive mechanisms. Mechanization outstripped tools of representation, magnifying the devaluation of traditional symbols that had already begun. The result was an aesthetic of symbols that people desired yet that had no relationship to the conditions of production—a superstructure entirely detached from its base. Symbols, such as the ornamentation of buildings, began to be reproduced mechanically without reconsidering what it symbolized. This problem was compounded by the fact that symbolization in itself was devalued by the mechanization of the symbolic production (345). Thus, to get out of the problem the nineteenth-century generated, not only must we find ways to symbolize the new conditions of mechanization, but also we must further find a way to once again treat symbolization as a meaningful activity. The point is not to have nostalgia for a return to the symbols of a pre-mechanized world but rather, as Reinhold Martin puts it, to force mechanization to 'double back on itself' so that it becomes a tool with which to reestablish an inner-balance of human and world (2003: 20). That is, aesthetic production must find a way to re-present mechanization.

On this second reading Giedion can be understood as tracing the history of mechanization in order not to give a complete account of mechanization but rather to understand how it can form a symbolic



system. This is not a history of mechanization as such, but rather a history of a condition external to architecture in as much as it determines the conditions for the symbolic production of architecture. History is a tool for unmasking conditions of the present so that architectural practice can find new ways to symbolize the present to itself. The operativity of architectural history is thus displaced from directing architectural production (as Giedion seemed to do in *Space, Time and Architecture*) to revealing the conditions that make architectural production possible.

### **A History that Itself Makes Architecture Possible**

This brings us to a third and a final interpretive point. If 1) mechanization is a process that has a tendency to obscure itself and 2) it is a process that we need to find a way to symbolize, a way to give a formal image, then by what methodology can history participate in the revelatory function of symbolization? Giedion's answer comes in the form of *anonymous history*, a practice he defines as an almost biological approach to culture in which we attempt to understand how the present epoch has taken its shape through the interpenetration of many simultaneously occurring tendencies and developments. Like seeing through the insignificance of individual iron filings to the magnet field that organizes them into a larger order, the method of anonymous history is to 'reveal the guiding trends of a period' (Giedion, 2013: 4). Arnold Hauser, in his review of *Mechanization Takes Command* noted that this methodology is marked by the metaphysics of romanticism. He suggests that Giedion's anonymous history is similar to Wölfflin's 'art history without names' (1952: 251-53). That is, anonymous history is a method for treating individuals as the bearers of impersonal tendencies that are greater than them and that have their own trajectories. Anonymous history is merely a way of using the 'folk soul' as the new guise of the anonymous and autonomous *Zeitgeist*. It is idealist art history done with ordinary objects.

In one sense, Hauser is right to suggest that anonymous history purposefully posits trajectories greater and more powerful than the individual. As Giedion writes, '[i]n their aggregate, the humble objects of which we shall speak have shaken our mode of living to its very roots. . . . for, in the anonymous life, the particles accumulate into an explosive force' (2013: 3). Anonymous history is certainly rooted in Giedion's desire to connect the particulars with the general, the transitory with the 'guiding ideas' (4). However, the

connection is not one in which an ideal trend exists and the individual merely supervenes on that independent trend. Rather, the larger trend is the collection of the individuals. Historical life is not an independent absolute, but rather is the movement of the parts. Importantly, while ‘what is essential is the panoramic and simultaneous view’ (11), Giedion never makes a claim that the historian can step outside of their own position in history to get an unpositioned view of the whole. The historian is always a part of the whole that they are trying to grasp. As Giedion writes, ‘[a]ny inquiry today into the rise of our modern way of life must remain incomplete’ (3).

In addition, while Giedion is looking for historical continuity of the present with the past, he tries to avoid a progressive narrative (although his claim that the usage of the term ‘growth,’ as in the subtitle of *Space, Time and Architecture*, is not progressive seems questionable) (2013: 389). He writes in the introduction to *Mechanization Takes Command* that the historian’s ‘role is to put in order in its historical setting what we experience piecemeal from day to day, so that in place of sporadic experience, the continuity of events becomes visible’ (2). However, one of the epochal arguments of *Mechanization Takes Command* is that the modern belief in production ‘as an end in itself’ has replaced the old faith in progress (31). Progress itself is an epochally determined concept. In a theoretical attitude closer to Thomas Kuhn than Hegel, Giedion argues that each moment has its paradigmatic forms of representation, but a progressive relationship between these epochs cannot necessarily be assumed.

Thus, Giedion’s desire is for a historical account that can generalize to the guiding ideas of an epoch and that can construct continuity with the past, yet one that can do this without maintaining a holistic, grand progressive narrative. Giedion’s methodology is hermeneutic, not idealistic. The recursive character of all historical judgments—the influence of the past on the present’s interpretation of the past—is fundamental to Giedion’s work, in *Space, Time and Architecture* just as much as *Mechanization Takes Command*. History, like life, for Giedion is a dynamic process—writing the past is a way of doubling existence back on itself.

The anonymous historical mode of constructing relations of continuity is not through the horizontal lines of sequential time (e.g., histories of styles) but rather through vertical typologies (Giedion, 2013: 10-11). The aim of vertical history is not a universal

history but rather the creation of relationships and constellations in new and manifold ways, an approach we can see similarities to in Michel Foucault's archaeologies. This is a mode of historical writing that is not done for the sake of filling a gap in the literature. Rather it is history written in order to make present something that hides itself in the present—it is a history written in order to reveal the powerful presence of the seemingly absent past. It is a way of struggling with the tendency of the world to conceal itself. This is not a struggle with an end, as the hermeneutical structure of temporality guarantees that one will continually need to represent and symbolize the conditions that burden contemporary architectural practice. This is an activity that is to be done for architecture, so that architecture might find a way to give an image to the world in which it exists.

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